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ICAO WORKSHOP ON PROTECTION OF SAFETY INFORMATION

Mexico City, Mexico
4 – 6 December 2017





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MEET THE ICAO TEAM

Marcus Costa:

Chief, Accident Investigation Section, Air Navigation Bureau

Philip Dawson:

Consultant, Safety Management Programme, Air Navigation Bureau

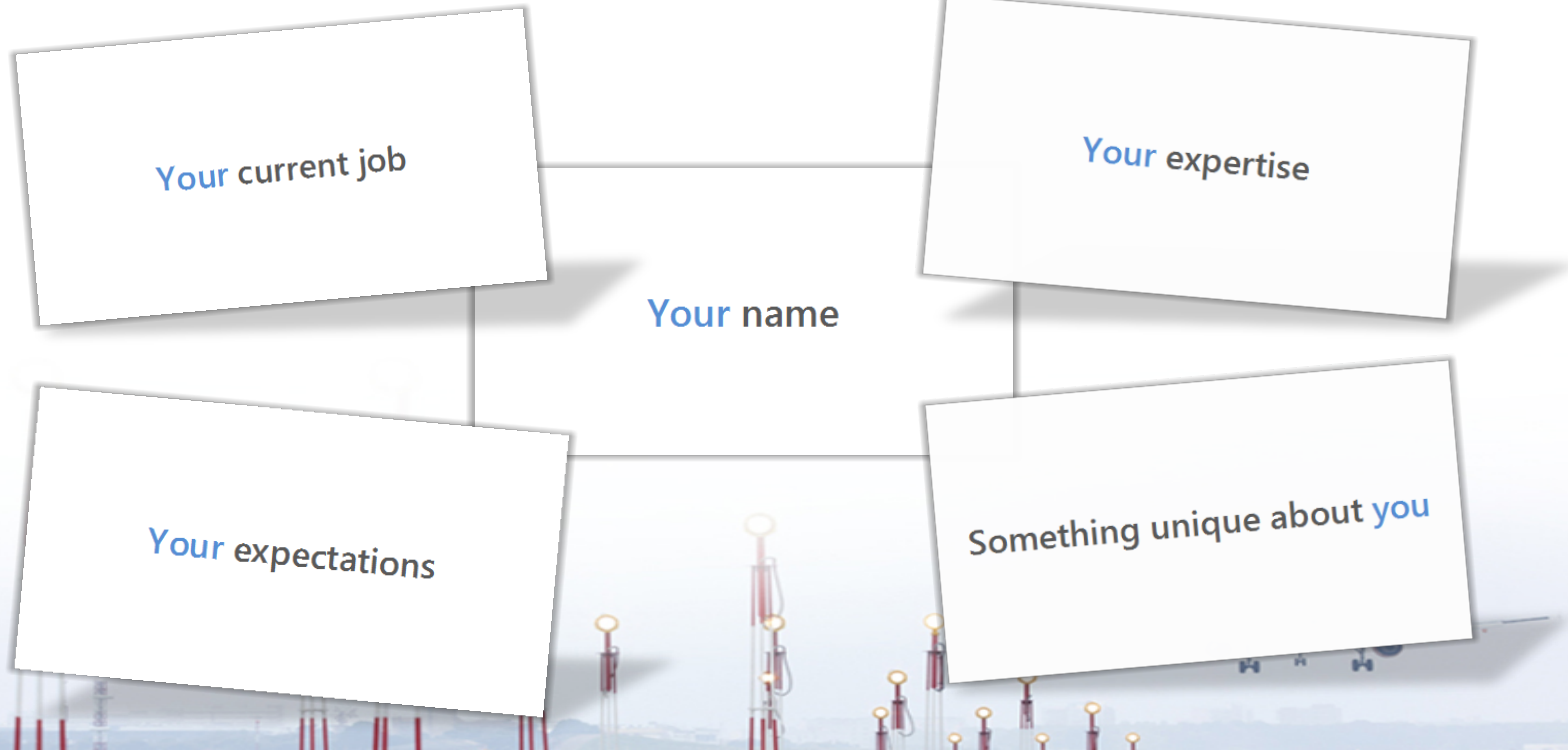


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PARTICIPANT INTRODUCTION





STRUCTURE

DAY 1

Opening and Introductions

Session 1
General, fundamentals of the investigation

Session 2
Independence of Accident Investigation Authorities

Session 3
Introducing the new SARPs on the protection of investigation records

DAY 2

Session 4
Introducing the new Appendix

Session 5
Interaction of A13 with A6 and A19

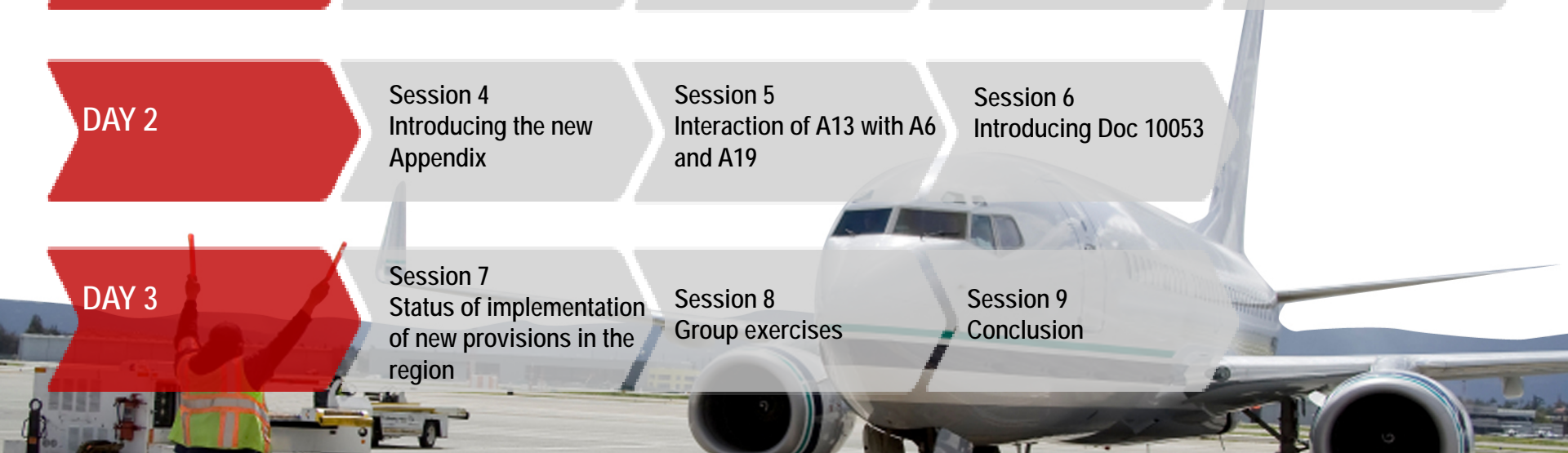
Session 6
Introducing Doc 10053

DAY 3

Session 7
Status of implementation of new provisions in the region

Session 8
Group exercises

Session 9
Conclusion





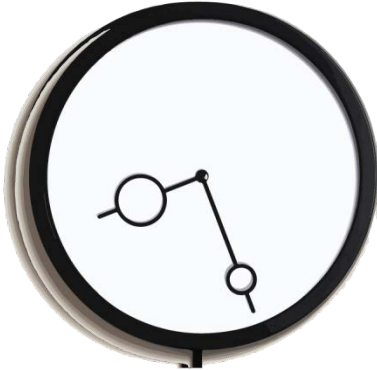
GROUND RULES

- Punctuality
- Active participation
- Phones on mute
- Keep an open mind





HOUSEKEEPING AND ADMINISTRATIVE INFORMATION



Begin 9h45



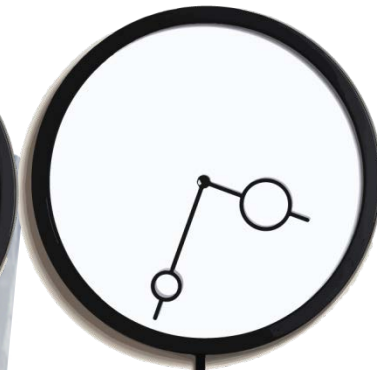
Pause 10h30



Lunch 12h30-13h30



Pause 15h00



End 16h00

Begin 9h00

Pause 10h30

Lunch 12h30-14h00

Pause 15h00

End 17h00

Begin 9h00

Pause 10h30

Lunch 12h30-14h00

Pause 15h00

End 17h00

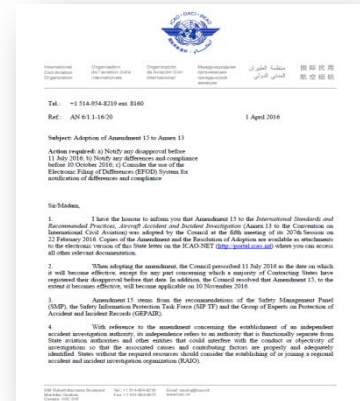




OBJECTIVES

Objective 1:

Have a better understanding of the recent amendment to Annex 13. The amendment addresses the independence of investigations and the protection of investigation records.

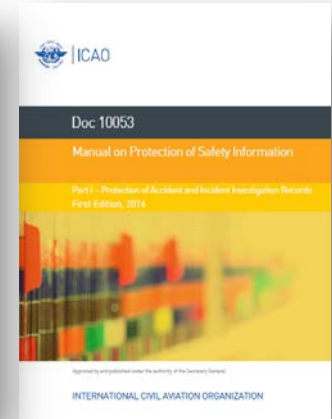




OBJECTIVES

Objective 2:

To present the tools available to assist States in the implementation of Amendment 15 to Annex 13.

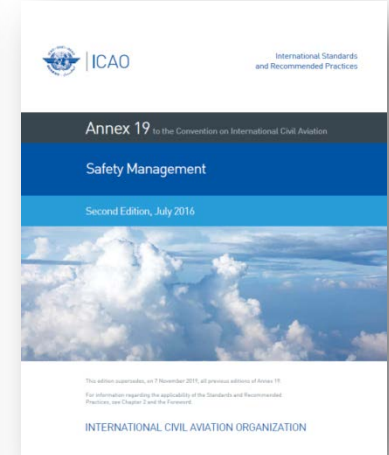
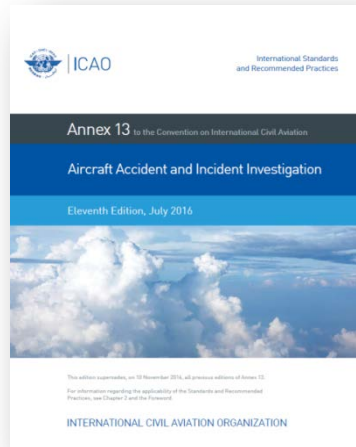




OBJECTIVES

Objective 3:

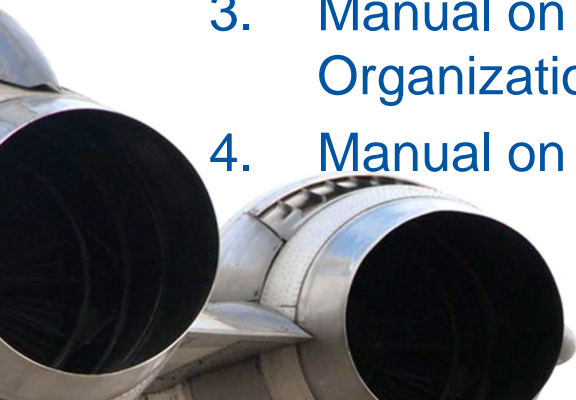
Overview of recent amendments to Annexes 6 and 19 and their interaction with Annex 13.





GUIDANCE MATERIAL AND RESOURCES

1. Manual of Aircraft Accident and Incident Investigation, Part I - Organization and planning (Doc 9756)
2. Manual on Accident and Incident Investigation Policies and Procedures (Doc 9962)
3. Manual on Regional Accident and Incident Investigation Organization (Doc 9946)
4. Manual on the Protection of Safety Information (Doc 10053)





GUIDANCE MATERIAL AND RESOURCES

5. Model Aircraft Accident and Incident Investigation (AIG) Act,
(<http://www.icao.int/safety/Implementation/Pages/Resources.aspx>)
6. Model Aircraft Accident and Incident Investigation (AIG) Regulations
(<http://www.icao.int/safety/Implementation/Pages/Resources.aspx>)
7. Various national laws, regulations and policies, and list of decisions of States Competent Authority
(<http://www.icao.int/safety/airnavigation/AIG/Pages/Database.aspx>)





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Introducing the new SARPs on the protection of investigation records

Fundamentals of investigations

1. Objective of Investigations
2. Main investigation responsibilities





The International Civil Aviation Organization

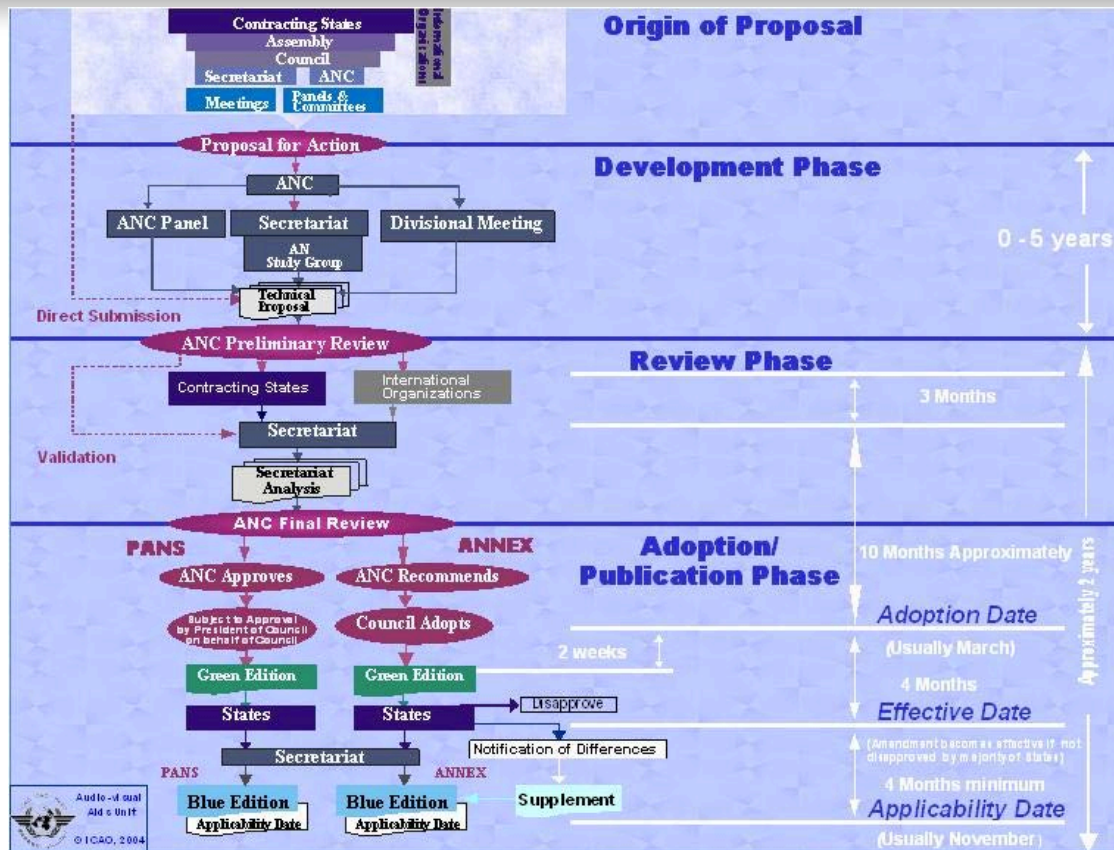
UN specialized agency, established by States in 1944 to manage the administration and governance of the Convention on International Civil Aviation (Chicago Convention).

Article 44 of the **Chicago Convention** of 1944 stipulates that the overall objective of ICAO is to “ensure the safe and orderly growth of international civil aviation throughout the world”.

ICAO works with the Convention’s 191 Member States and industry groups to reach consensus on international civil aviation Standards and Recommended Practices (**SARPs**) and policies in support of a safe, efficient, secure, economically sustainable and environmentally responsible civil aviation sector.



DEVELOPMENT OF AN ICAO STANDARD





What is the difference between the terms ‘adopted’, ‘effective’ and ‘applicable’, as regards ICAO Standards and Recommended Practices?

Adoption date: This is the actual date that the amendment is adopted by the ICAO Council’s 36 Member States.

Effective date: The date by which States must advise ICAO if they do not approve the amendment. If more than 50 per cent of States indicate disapproval, the amendment does not become effective (but this has not yet happened in the over 70 years that ICAO has been supporting global civil aviation)

Applicability date: By this date States should be applying the amendment unless they have notified ICAO of differences between their regulations and the ICAO Standards in the amendment. The deadline to notify differences is one month before the applicability date.



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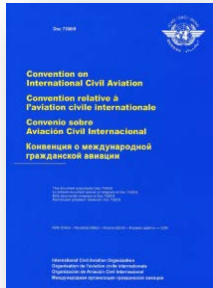


Convention on International Civil Aviation ARTICLE 26. Investigation of accidents

In the event of an accident to an aircraft of a contracting State occurring in the territory of another contracting State, and involving death or serious injury, or indicating serious technical defect in the aircraft or air navigation facilities, the State in which the accident occurs will institute an inquiry into the circumstances of the accident, in accordance, so far as its laws permit, with the procedure which may be recommended by the International Civil Aviation Organization.

Need legislation to meet this obligation.

Model act and regulations available as examples of such legislation





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Annex 13 - Aircraft Accident and Incident Investigation

Chapter 1 - Definition of the Investigation

A process 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.

Additional consideration:

Besides immediate and underlying systemic causes and/or contributing factors, investigations could reveal hazards or deficiencies within the aviation system not directly connected to the causes/contributing factors.



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Annex 13 - Aircraft Accident and Incident Investigation

Chapter 3 - Objective of the Investigation

3.1 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.

3.3 to 3.5 refer to protection of evidence, custody and removal of aircraft.



Accident Investigation Authority

- Be strictly **objective** and totally **impartial** and perceived to be so.
- Established to withstand political or other interferences or pressures.
- **Independent AIA** or separate from **CAA**.



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Annex 13 - Aircraft Accident and Incident Investigation

Data and information

Data and information generated or obtained during investigation.

Safeguarding investigation records becomes critical to ensure:

- Unrestricted access to evidence;
- Allowing preventative actions to be taken.



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Annex 13 - Aircraft Accident and Incident Investigation

Chapter 5 - Investigation

- State of Occurrence shall institute an investigation, but may delegate the investigation to another State or Regional accident and incident investigation organization by mutual agreement.
- Accident or serious incident in non-contracting State not intending to investigate: State of Registry/Operator/ Design/Manufacturer.
- Accidents or serious incidents when location cannot definitely be established as being in territory of a State?



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Annex 13 - Aircraft Accident and Incident Investigation

Chapter 5 - Investigation

- **State** conducting the investigation responsible for appointing the investigator-in-charge.
- **Access** to wreckage and other records.
- **Read-out** of flight recorders without delay.
- **Coordination** between IIC and judicial authorities



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Annex 13 - Aircraft Accident and Incident Investigation

Chapter 5 -- Investigation participation

States of Registry/Operator/Design/Manufacturer entitled to appoint **accredited representative**.

Not release information without **consent of IIC**.

State with special interest in accident by virtue of **fatalities** or serious injuries to citizens appoint expert.



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Annex 13 - Aircraft Accident and Incident Investigation

Chapter 5 -- Investigation delegation

State of Occurrence may delegate the investigation to another State or regional accident and incident investigation organisation.

Delegate the whole or any part of the conduct of the investigation.



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Annex 13 - Aircraft Accident and Incident Investigation

Chapter 6 - Final Report

The Final Report constitutes the official conclusions of the accident or incident investigation.

It is the foundation for initiating safety actions to prevent further accidents or incidents with similar causes/contributing factors.

Contains safety recommendations so that appropriate preventive measures can be taken.



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Questions ?





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Independence of Accident Investigation Authorities

Amendment 15 to Annex 13

- Definition
- Functional independence of AIAs
- Guidance material
- Regional Accident and Incident Investigation Organizations



Independence of Accident Investigation Authorities



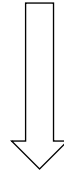
Stakeholders





ICAO USOAP audits

6.005 : Does the legislation provide for the independence of the accident investigation authority in charge of conducting aircraft accident and serious incident investigations?

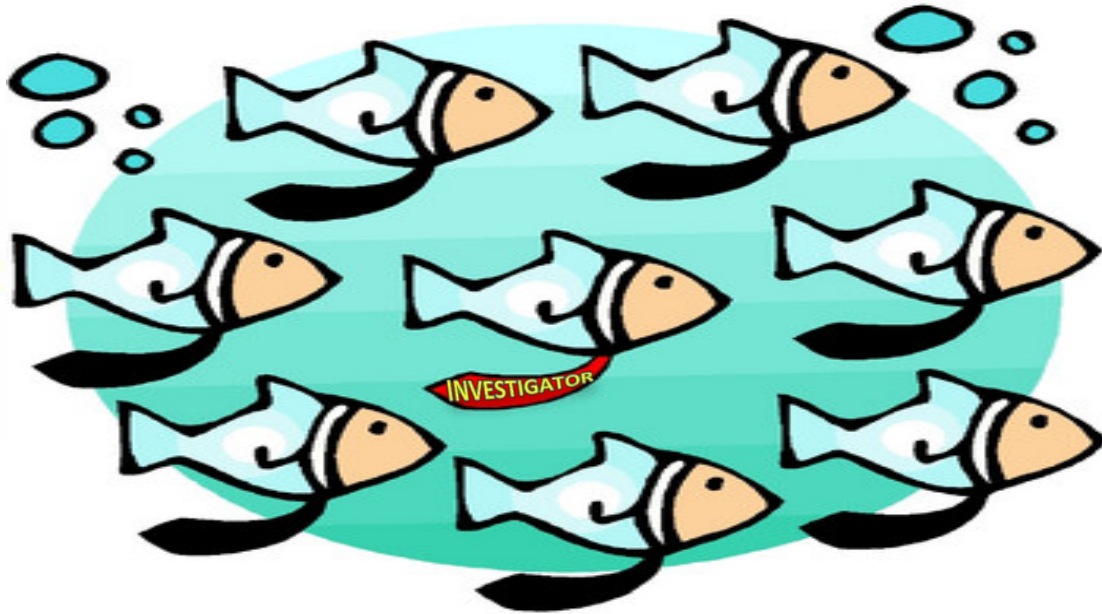


EI 47.28% (ICAO Member States)

EI 19.05% (NACC Region)



Independence \neq Isolation





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CHAPTER 1. DEFINITIONS

Accident investigation authority. The authority designated by a State as responsible for aircraft accident and incident investigations within the context of this Annex.

CHAPTER 3. GENERAL

INDEPENDENCE OF INVESTIGATIONS

3.2 A State shall establish an accident investigation authority that is independent from State aviation authorities and other entities that could interfere with the conduct or objectivity of an investigation.

Note.— Guidance on the independence of an accident investigation authority is contained in the Manual of Aircraft Accident and Incident Investigation, *Part I — Organization and Planning (Doc 9756)* and the Manual on Accident and Incident Investigation Policies and Procedures (*Doc 9962*).



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Functional independence of AIA will:

- Avoid real or perceived conflict of interest, enhancing the credibility of investigations.
- Improve ability to properly identify causes and contributing factors to the occurrence, along with associated safety recommendations.





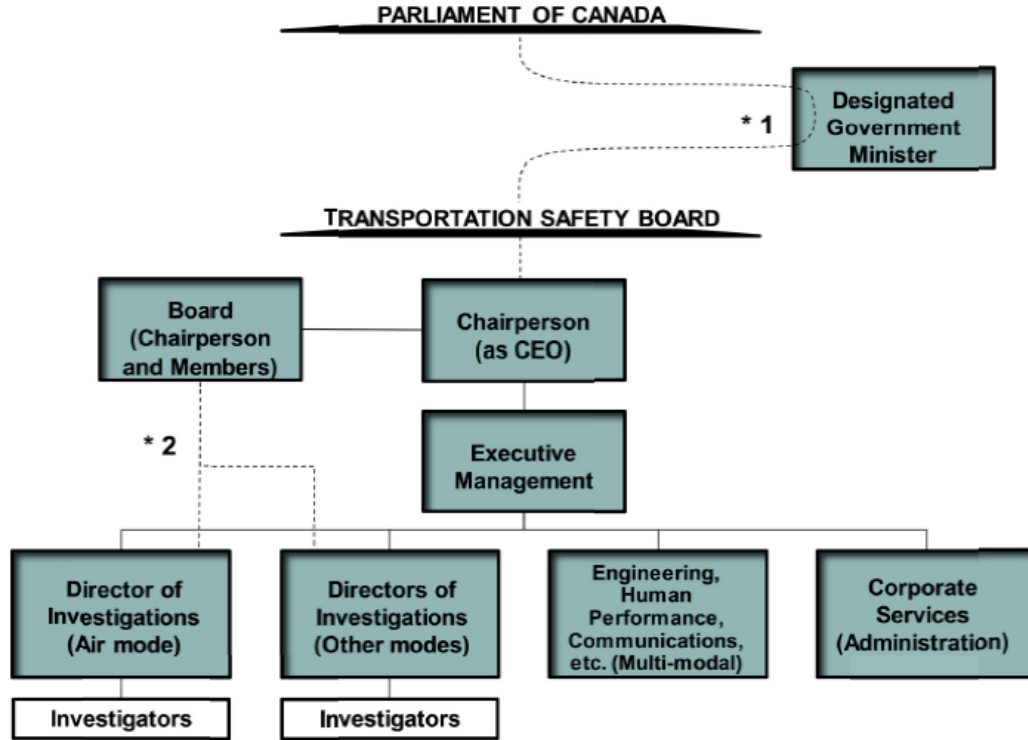
Establishment of independent AIA

Independence refers to an accident investigation authority that is functionally separate from State aviation authorities and other entities that could interfere with the conduct or objectivity of investigations so that the associated causes and contributing factors are properly and adequately identified.



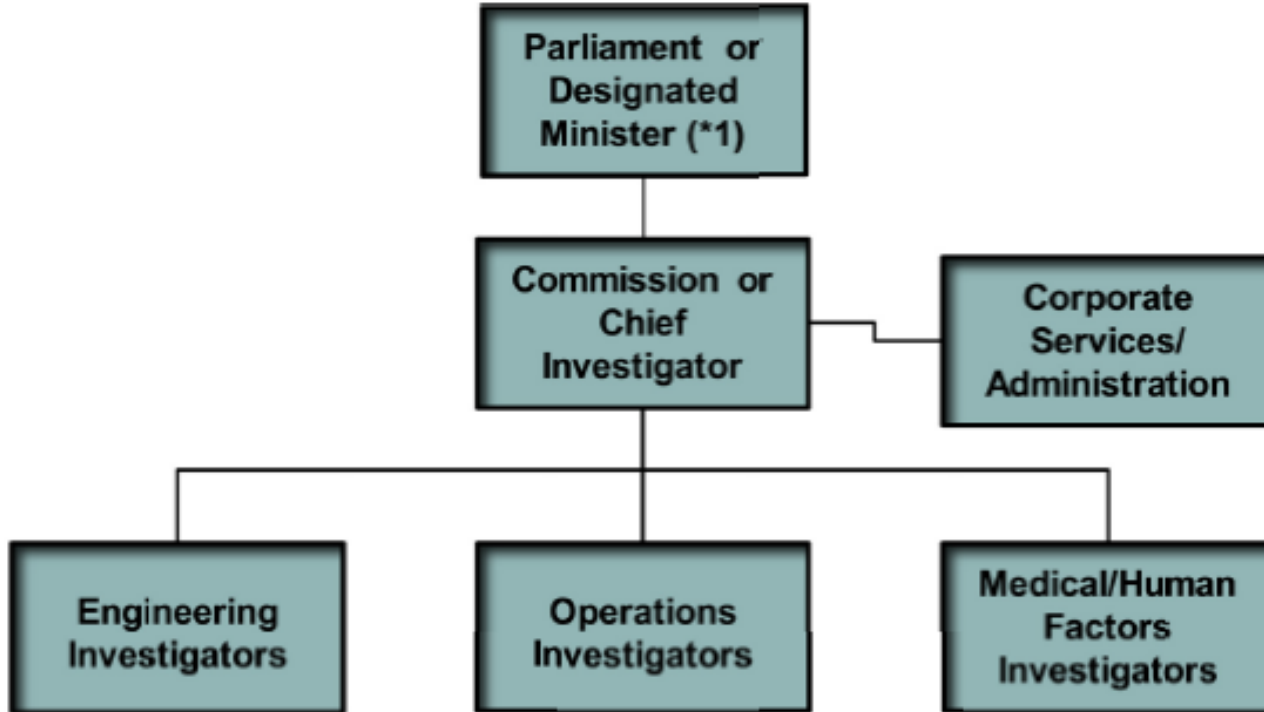


Independent AIA structure





Independent AIA structure





Structures for investigation - low aviation activity

In some States there might be a need for the **accident investigation commission** to be composed of members seconded from the civil aviation authority. It is essential that such a commission report directly to a ministerial level of government so that the findings and safety recommendations of the investigation are not diluted during passage through regular administrative channels.

* This is not an ideal arrangement.



AIA Basics

Rights and responsibilities of AIA defined in appropriate legislation:

Immediate and unrestricted access to evidence.

Investigations subject to not only technical investigations, also judicial and administrative.



AIA Basics

- Legal framework include provisions for appropriate use and protection of investigation records.
- Records in Annex 13, 5.12.
- Determination of competent authority of State.
- Records in Final Report only pertinent to analysis.
- Expectations of families of accident victims and media - in some cases compensations



Accident and incident reports

- Final Report includes:
 - Record of relevant facts;
 - Analysis of relevant facts;
 - Conclusions in form of findings, causes and/or contributing factors; and
 - Safety recommendations.
- Annex 13, chapter 6 provides for procedures related to Final Reports.
- Final reports publicly available --- specifically analysis not use as evidence in courts.
- Reference Annex 13, Appendix 2 for actions to foster independence of investigations.



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Regional Investigation Systems



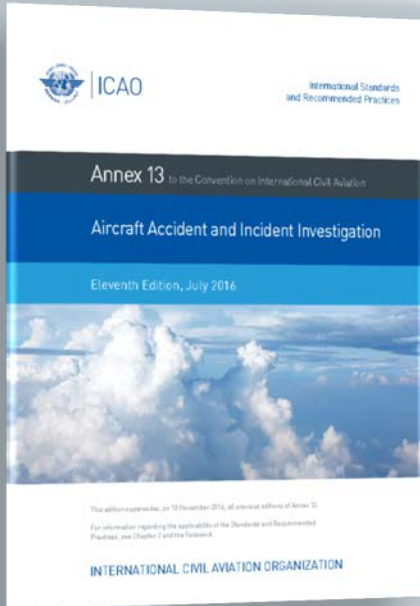


ICAO USOAP audits

Audit findings indicate that many States have not been able to implement an effective accident and incident investigation system. The findings have been associated, in general, with a lack of resources, both human and financial.



Annex 13



5.1 The State of Occurrence shall institute an investigation into the circumstances of the accident and be responsible for the conduct of the investigation, but it may delegate the whole or any part of the conducting of such investigation to another State or a regional accident and incident investigation organization by mutual arrangement and consent. In any event, the State of Occurrence shall use every means to facilitate the investigation.

5.1.2 The State of Occurrence shall institute an investigation into the circumstances of a serious incident when the aircraft is of a maximum mass of over 2 250 kg. Such a State may delegate the whole or any part of the conducting of such investigation to another State or a regional accident and incident investigation organization by mutual arrangement and consent. In any event the State of Occurrence shall use every means to facilitate the investigation.



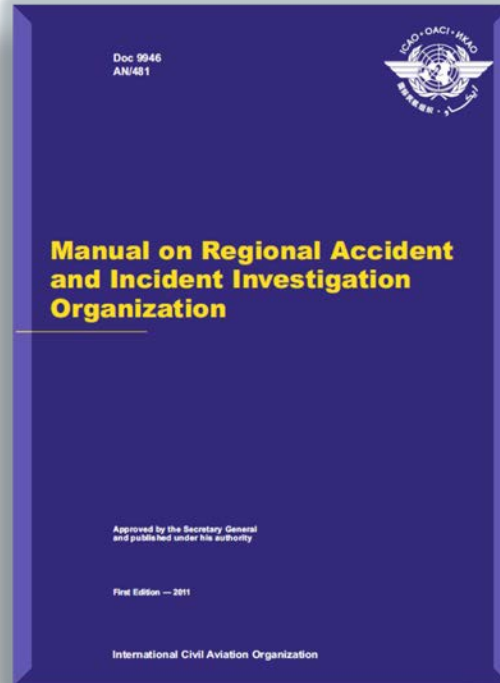
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Regional Accident and Incident Investigation Organization





“Cooperation” does NOT mean that governments would give up their sovereignty or responsibilities. Regional arrangement is an effective and efficient means for States to achieve the desired level of accident and incident investigation.



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- R A I O -

ADVANTAGES

- **Eliminate duplication of efforts**
- **Achieve economies of scale**
- **Investigators in the region gain experience quicker**
- **Help achieve independence of investigations.**



Establishment of an RAIO



- ▶ **Memorandum of Understanding (MOU)**
Memorandum of Cooperation (MOC)
- ▶ **Define organizational and operational procedures, policies of RAIO agreed upon by Member States.**
- ▶ **RAIO should have regulations, as per ICAO SARPs, for the conduct of investigations.**
- ▶ **RAIO should have a system for amending its regulations and procedures consistent with amendments to Annex 13.**



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Appendix 1

MODEL AGREEMENT FOR THE ESTABLISHMENT AND MANAGEMENT OF AN RAIO



20 Articles



Appendix 1

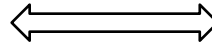
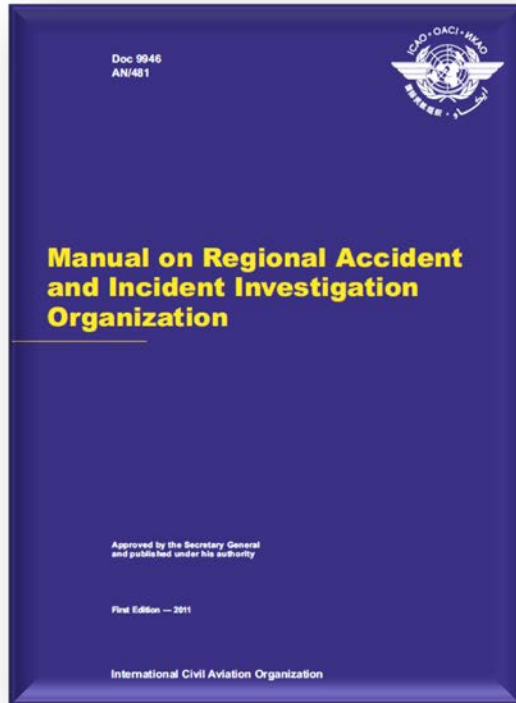
Article 3

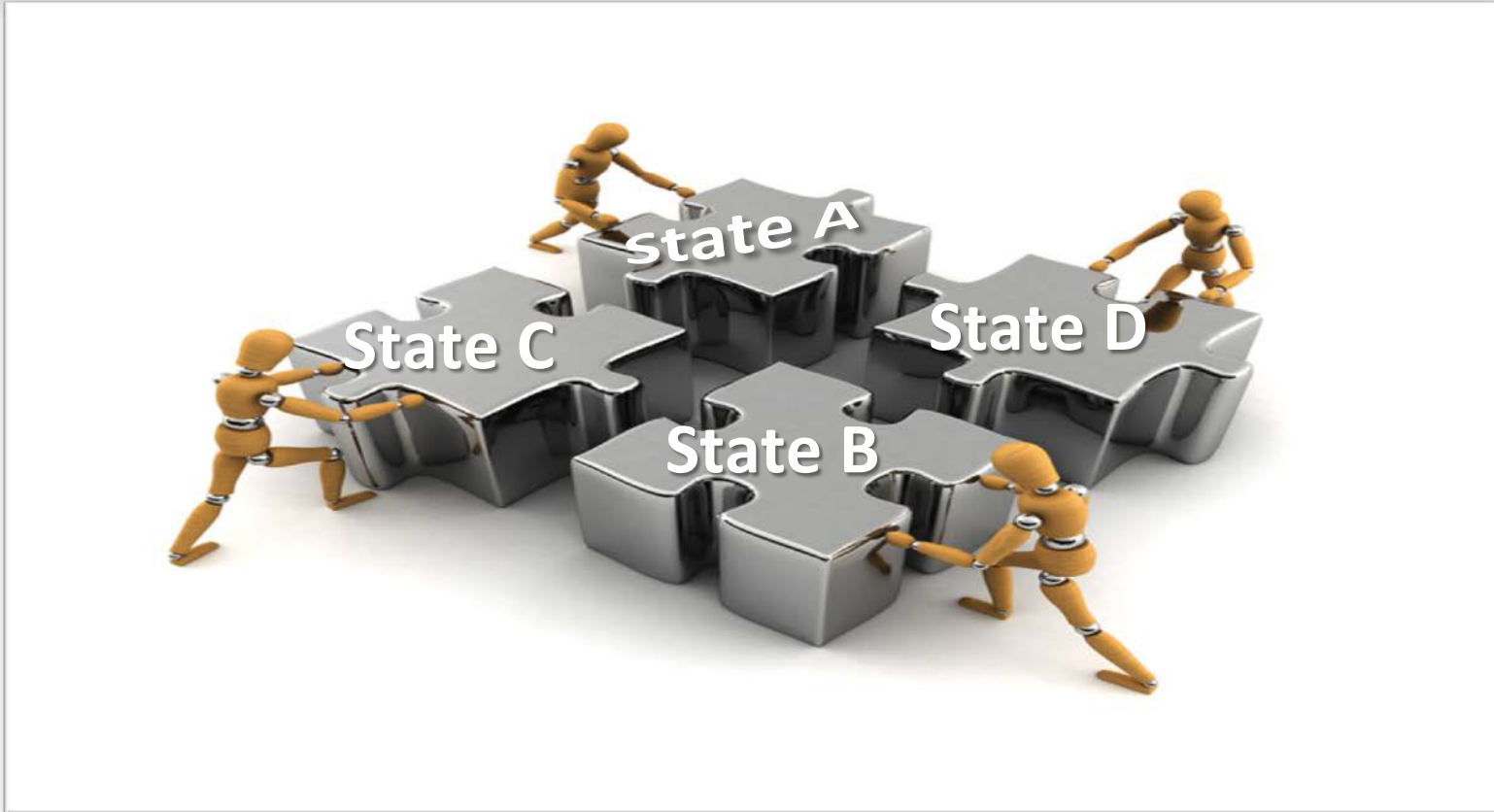
Establishment

The Member States hereby establish the [*Name of RAIO*] as a independent accident and incident investigation organization reporting to the Member States.



Regional Accident and Incident Investigation Organization







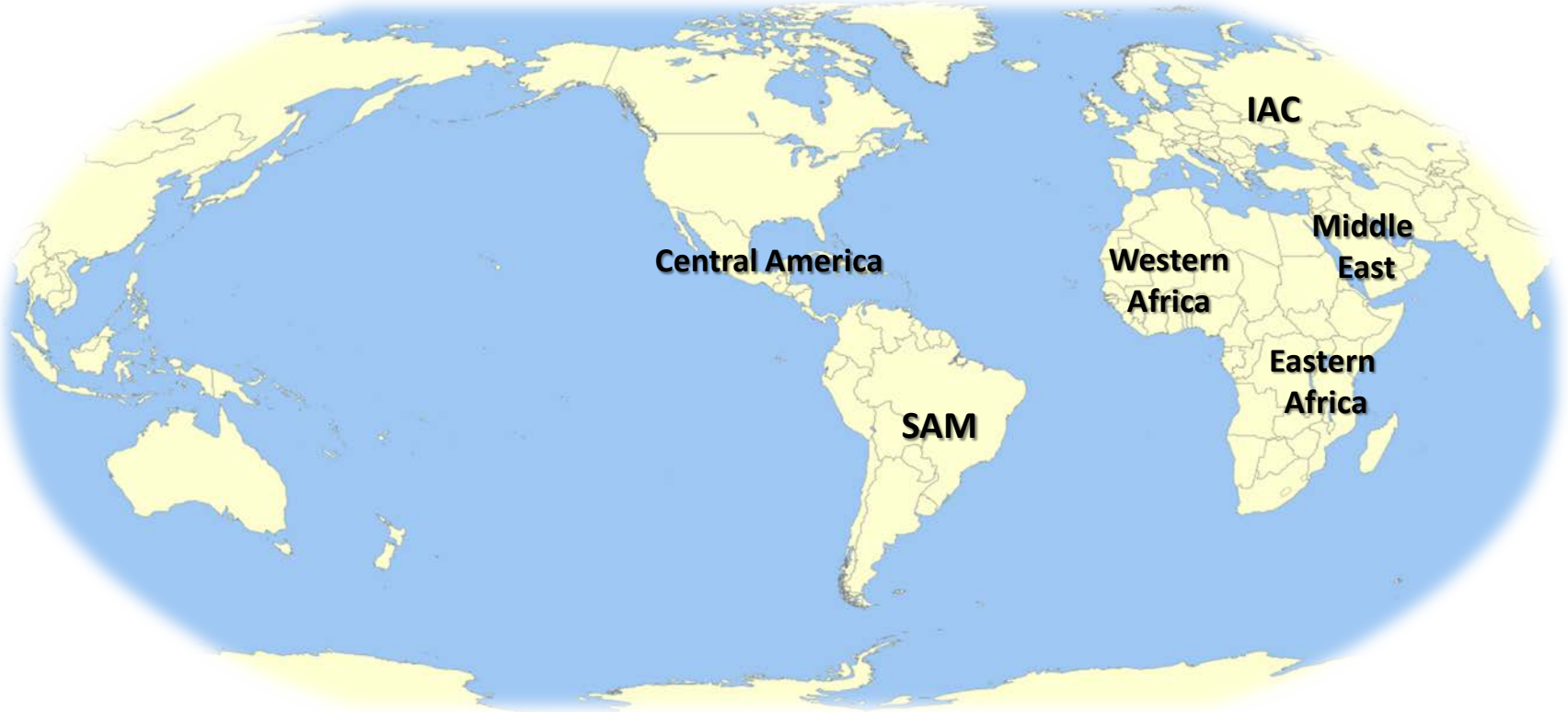
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Regional Investigation Systems





RAIO

MOU/MOC

The agreement establishing the RAIO must be registered with ICAO, as per Art. 83 of the Convention.



AIG Regional Cooperation Mechanism

(June 2015)



**Argentina, Bolivia, Brazil, Colombia, Chile,
Ecuador, Guyana, Panama, Paraguay, Peru,
Surinam, Uruguay, Venezuela**





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Questions ?





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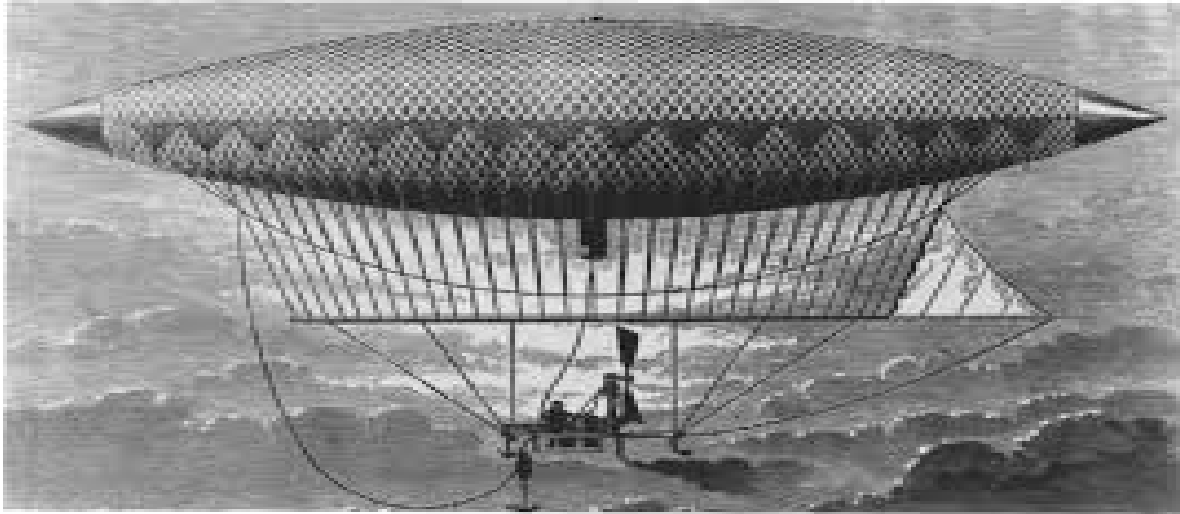
Session 3

Introducing the new SARPs on the protection of investigation records





Hot Air Balloon Crash of 1852



Criminal sanctions against the pilot who caused the accident

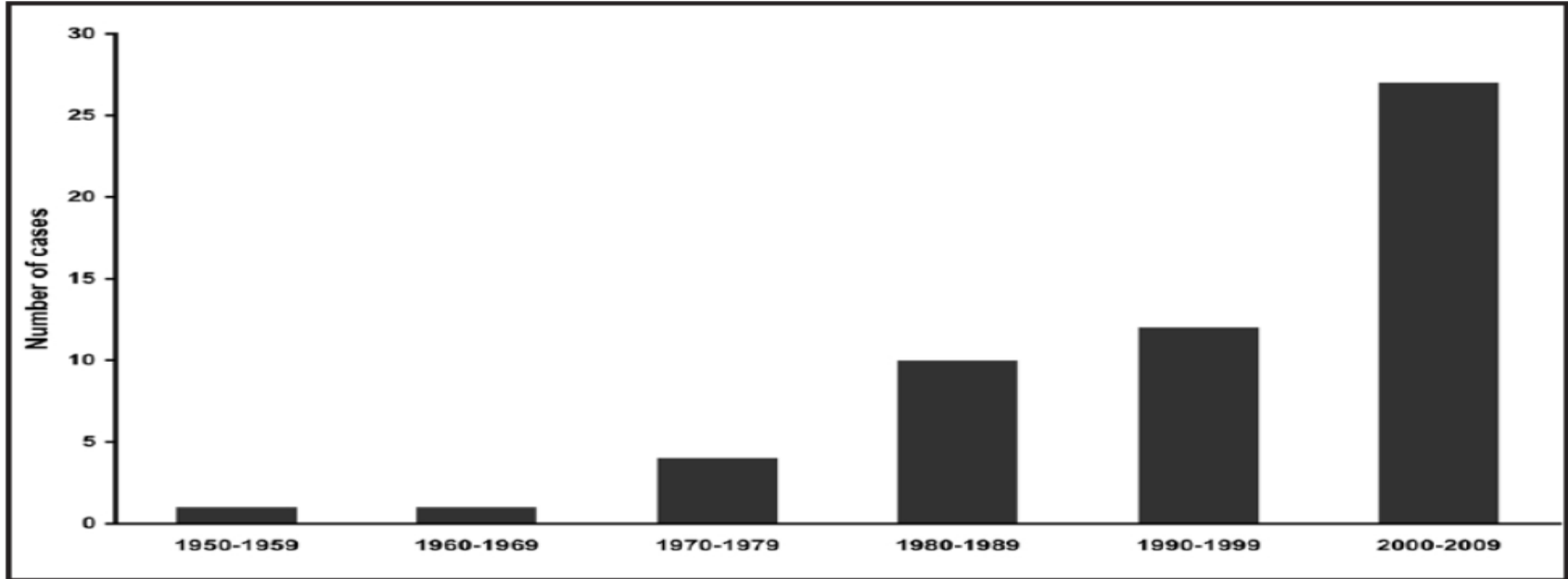


Figure 1: Number of worldwide cases of criminalizing human acts in aviation accidents and incidents per decade since 1950.

Source: Dr. Michaelides-Mateou



Previous Annex 13 framework

- ❑ Standard 5.12 – Non-disclosure of records
- ❑ Attachment E – *Legal guidance for the protection of information from safety data collection and processing systems*





Investigation environment has changed significantly

❑ Multiple parties with competing interests and agendas

- Expectations from victims' families
- Media presence, including social media
- Public's expectations as concerned citizens and travellers
- More legal proceedings (criminal, compensation)
- Complexity of the aircraft and aviation systems
- Increasing globalization of aviation





Consideration by ICAO



2007

The 36th Session of the Assembly

2008

2010

2013

The Technical Commission referred the matter of possible inconsistencies between para. 5.12 and Attachment E to the AIG Divisional Meeting.

Assembly Resolution A 36-8 further instructed:

- States to adjust their laws, regulations and policies to comply with para 5.12, in consideration of the legal guidance in Attachment E; and
- the Council to provide a progress report to Assembly 37 on this matter



2007

2008

2010

2013

Accident Investigation and Prevention (AIG) Divisional Meeting

- Acknowledged that further work on the protection of safety information was necessary to resolve issues raised; and
- recommended that ICAO undertake a study with the aim of reviewing and facilitating the implementation of paragraph 5.12 and Attachment E to Annex 13.





HLSC 2010 (R 2/4) and 37th Session of the Assembly (A37-2)

- ✓ Establishment of the multidisciplinary **Safety Information Protection Task Force (SIPTF)**

2008

2010

2013

SIPTF Terms of Reference:

To deliver products and outputs that may include recommendations for new or enhanced provisions and guidance material to assure an appropriate level of protection for:

- ✓ **safety data and information, other than accident/incident records**
- ✓ **certain accident and incident records**

May 2011 to Jan 2013 - **SIPTF** met 4 times, delivered recommendations



Preliminary SIPTF Recommendations

- ❑ R 3/1: Recommended new/modified provisions to **Annex 13, Non-disclosure of records** to facilitate implementation
- ❑ R 4/3: Recommended new provisions to **Annex 6** to enhance the protection of flight recorder recordings
- ❑ **Attachment E to Annex 13** be further analyzed by a group of experts, including SIPTF participants, under the AIG Section





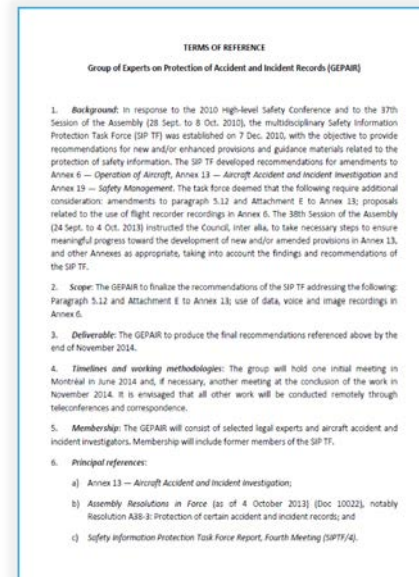
38th Session of the Assembly (A38-3)

- ✓ Establishment of the GEPAIR

Terms of reference, to finalize recommendations on

- ❑ Standard 5.12 in Annex 13;
- ❑ Attachment E in Annex 13; and
- ❑ flight recorder recordings
- ❑ Added:

- Non-disclosure of CVR & AIR recordings to the public
- development of the guidance material





GPAIR composition and meetings

Balanced composition and representation

- 4 accident investigators
- 4 aviation law experts
- Chaired & supported by the ICAO Secretariat

Meetings

- GPAIR/1 June in Montréal
- GPAIR/2 September in Paris
- GPAIR/3 November in Montréal
- Several teleconferences and correspondence



GEPAIR Objectives

- ✓ Focus the scope of the records protected under Annex 13
- ✓ Improve States' ability to implement Annex 13 protections
- ✓ Give States more practical means to protect records in the custody of the investigation
- ✓ Introduce new provisions to support States in the administration of the “balancing test” by the competent authority
- ✓ Enhance provisions on the non-disclosure of CVRs and AIRs to the public





GEPAIR Considerations

- ❑ Accommodating different legal systems
 - ❑ Common law versus Civil law
- ❑ Different circumstances require different rules on protection
- ❑ Diverging implementation of 5.12
- ❑ Recognizing that full protection is counterproductive
- ❑ Aiming for the appropriate and achievable level of protection
- ❑ Finding a balance between the objectives of the investigation and other public interests



Stakeholders affected

- Accident investigation authorities
- Judicial authorities and law enforcement
- Aviation professionals and service providers
- Travelling public



Objectives of protection of accident and incident records

- ✓ Ensuring the availability of essential information
- ✓ Accident prevention
- ✓ Improvement of aviation safety



Investigation environment in absence of protections





“ ...proceedings to determine culpability for a specific aviation incident or accident impacts the few people concerned, such as the pilot and flight crew ... [whereas the prevention of] aviation incident or accident from occurring affects all of the persons carried on the relevant aircraft, if not the aviation public more generally...”

- Samantha Sharif, aviation law expert



Protection of investigation records is not about:

- ❖ preventing the administration of justice
- ❖ Interested parties' access to information
- ❖ The public's right to know



How will my State benefit from new provisions?

- ✓ Active involvement of operational personnel
- ✓ Building a positive safety culture
- ✓ New tools for protecting the independence of the investigation
- ✓ Increase and maintain access to essential information
- ✓ Prevention of future accidents and incidents
- ✓ Improvement of aviation safety





Overview of Amendment 15

- Protection is a responsibility of the accident investigation authority

5.4 The accident investigation authority shall have independence in the conduct of the investigation and have unrestricted authority...:

a) ...;

b) the protection of certain accident and incident investigation records in accordance with 5.12;

...



Overview of Amendment 15...

Paragraph 5.12

- “Non-disclosure of records” replaced with “Protection of accident and incident investigation records”
- Term “appropriate authority of the administration of justice” replaced by “competent authority”

~~Non-disclosure of records~~ Protection of accident and incident investigation records

5.12 The State conducting the investigation of an accident or incident shall not make the following records available for purposes other than accident or incident investigation, unless the ~~appropriate authority for the administration of justice in~~ competent authority designated by that State determines, in accordance with national laws and subject to Appendix 2 and 5.12.5, that their disclosure or use outweighs the likely adverse domestic and international impact such action may have on that or any future investigations:



Overview of Amendment 15...

What records are subject to protection under paragraph 5.12?

- d) cockpit voice recordings and airborne image recordings and any transcripts from such recordings;
- b) records in the custody or control of the accident investigation authority being:
 - a) all statements taken from persons by the accident investigation authority in the course of their investigation;
 - b) all communications between persons having been involved in the operation of the aircraft;
 - c) medical or private information regarding persons involved in the accident or incident;
 - e) recordings and ~~transcriptions~~ transcripts of recordings from air traffic control units;
 - f) ~~cockpit airborne image recordings and any part or transcripts from such recordings; and~~
 - g) analysis of and opinions expressed in the analysis of about information, including flight recorder information, made by the accident investigation authority and accredited representatives in relation to the accident or incident; and
- 6) the draft Final Report of an accident or incident investigation.



Overview of Amendment 15...

States are encouraged to extend protection to other records

5.12.1 Recommendation.— *States should determine whether any other records obtained or generated by the accident investigation authority, as a part of an accident or incident investigation, need to be protected in the same way as the records listed in 5.12.*

What other records might your State consider protecting?





CASE STUDY

Law enforcement requests your AIA to release:

- Statements from pilot it has collected, and
- Film footage of the flight made by cameras installed on the aeroplane

You initially refuse the request based on Std. 5.12. The Police have applied to the Court for the disclosure of these records.

What will the Court decide?



Shoreham airshow crash of 2015, UK

Sussex Police applied for the disclosure of:

- Statements from pilot collected by AAIB
 - Protected!
- Footage of the flight taken by cameras installed inside the aircraft
 - Released...





Overview of Amendment 15...

Direct requests for records to the “original source”

5.12.4 States shall ensure that requests for records in the custody or control of the accident investigation authority are directed to the original source of the information, where available.

What is the purpose of this Standard?

- Preserve the independence of the investigation;
- Prevent or limit the potential for the investigation to become associated with blame or liability proceedings
- Prevent investigation from becoming a convenient source of information for other investigations



Case study

Accident Investigation Board (AIB) received a request from a journalist to provide information on medical records of a pilot or to direct his request to a medical doctor. AIB refused to direct the request to the doctor since the State regulations provide confidentiality to the original source. The journalist argued that AIB has to direct to the original source.

Is AIB bound to direct the journalist to the pilot's doctor, pursuant to paragraph 5.12.4?



Overview of Amendment 15...

Only retain copies of records...

5.12.4.1 Recommendation.— *The accident investigation authority should retain, where possible, only copies of records obtained in the course of an investigation.*





Overview of Amendment 15...

Non disclosure of CVR and AIR content to the public

5.12.5 States shall take measures to ensure that audio content of cockpit voice recordings as well as image and audio content of airborne image recordings are not disclosed to the public.

How can this be achieved?

- a) national laws, regulations and policies; or
- b) authoritative safeguards, such as protective orders, closed proceedings or in-camera review; or
- c) technical means, such as encrypting or overwriting, before returning the cockpit voice recorders or airborne image recorders to the owners.



CASE STUDY

After an investigation, the Accident Investigation Authority (AIB) decided to return the CVR to its owner. Some of the AIB employees wanted to erase the CVR content before returning it to its owner to ensure the highest level of protection. Others argued that erasing the CVRs may be considered tampering with evidence, which could be considered an obstruction of justice.

What can the AIB do to ensure non-disclosure of the CVR content to the public?



Overview of Amendment 15

Non-disclosure of draft Final reports to the public

- highly sensitive and use can be misleading
- “factual causation” is different than “legal causation”
- details are subject to change
- primary evidence can be obtained from the original source

5.12.6 States issuing or receiving a draft Final Report shall take measures to ensure that it is not disclosed to the public.



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QUESTIONS?