



GPIA 

Gabinete de Prevenção e Investigação de Acidentes
com Aeronaves e de Acidentes Ferroviários

How to strengthen the aircraft accident and incident investigation?



REPÚBLICA
PORTUGUESA

José Figueiredo

Head of Aviation Unit

jose.figueiredo@gpiaaf.gov.pt

International Framework

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. The State in which the aircraft is registered shall be given the opportunity to appoint observers to be present at the inquiry and the State holding the inquiry shall communicate the report and findings in the matter to that State.



**Directive
94/56/CE**



EU 996/2010



**Gabinete de Prevenção e
Investigação de Acidentes com
Aeronaves (1999)**

**Direção-Geral de Aeronáutica
Civil (1946)**

**Direção-Geral de Aviação Civil
(1979)**

**Instituto Nacional de Aviação
Civil (1998)**

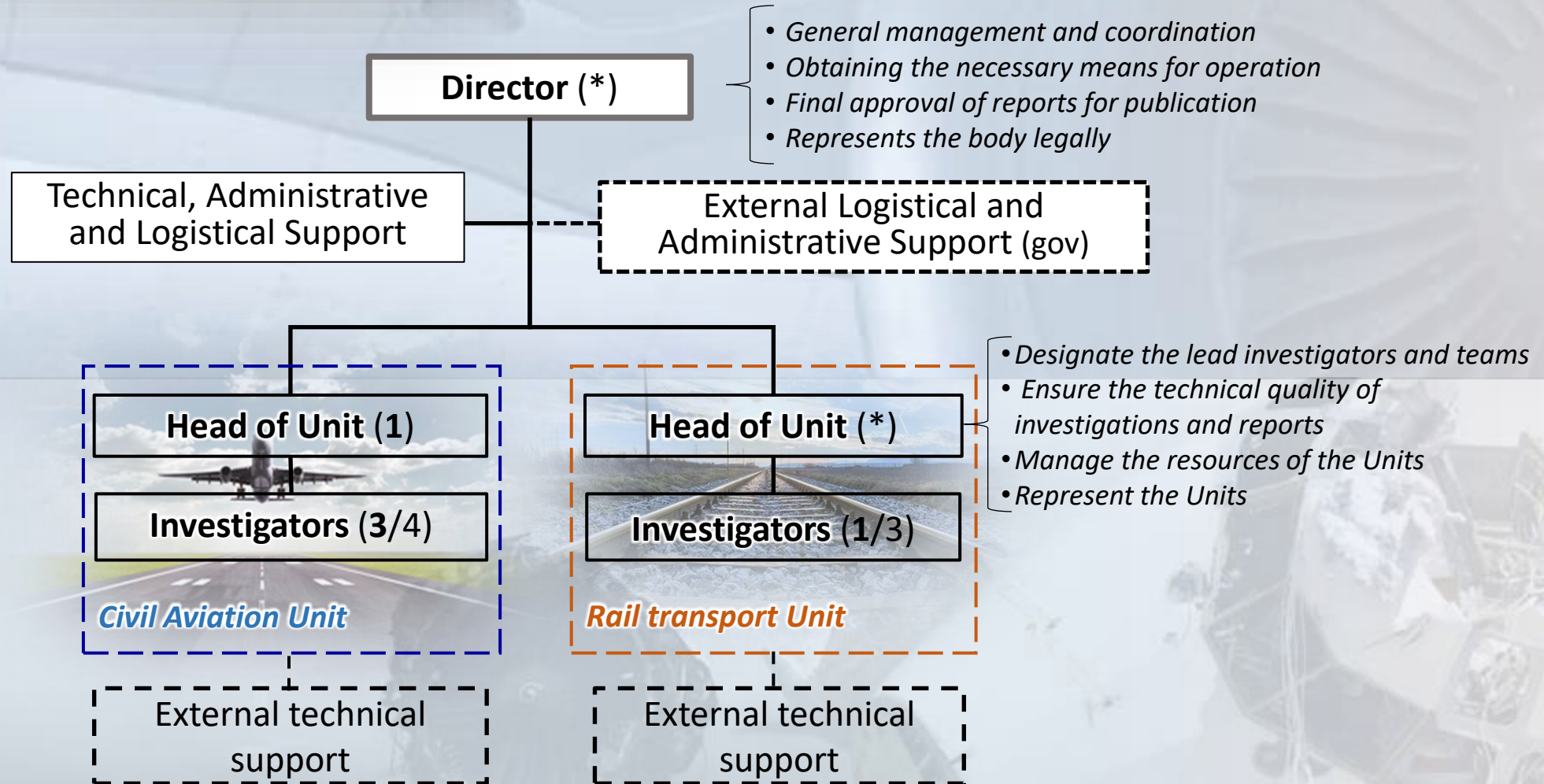


**Chicago
Convention**



**Railway
Investigation
Board (GISAF)**

 **GPIA**
Gabinete de Prevenção e Investigação de Acidentes
com Aeronaves e de Acidentes Ferroviários
(2017)



Total staff: 9/12

GPIAAF Scope



Risk exposure



CAT Fatal accidents in Portugal

CAT **top 10** fatal accidents, since 1943:

date	type	registration	operator	fat.	location
08-FEB-1989	Boeing 707-331B	N7231T	Independent Air	144	near Santa Maria-Azores
19-NOV-1977	Boeing 727-282	CS-TBR	TAP	131	Funchal-Madeira
03-SEP-1976	Lockheed C-130H Hercules	7772	Venezuela AF	68	Terceira-Lajes - Azores
30-MAY-1961	Douglas DC-8-53	PH-DCL	KLM, op.for VIASA	61	Fonte da Telha-Lisbon
21-DEC-1992	DC-10-30CF	PH-MBN	Martinair Holland	56	Faro Airport
28-OCT-1949	Lockheed L-749-79-46 Constellation	F-BAZN	Air France	48	Redondo mountain-Azores
18-DEC-1977	SE-210 Caravelle 10R	HB-ICK	SATA	36	near Funchal-Madeira
11-DEC-1999	British Aerospace ATP	CS-TGM	SATA Air Açores	35	São Jorge - Azores
09-AUG-1954	Lockheed L-749A-79 Constellation	HK-163	Avianca	30	near Terceira-Lajes-Azores
22-FEB-1943	Boeing 314A	NC18603	Pan Am	24	near Lisbon

633

Major Accidents in Portugal:

since 1919

28

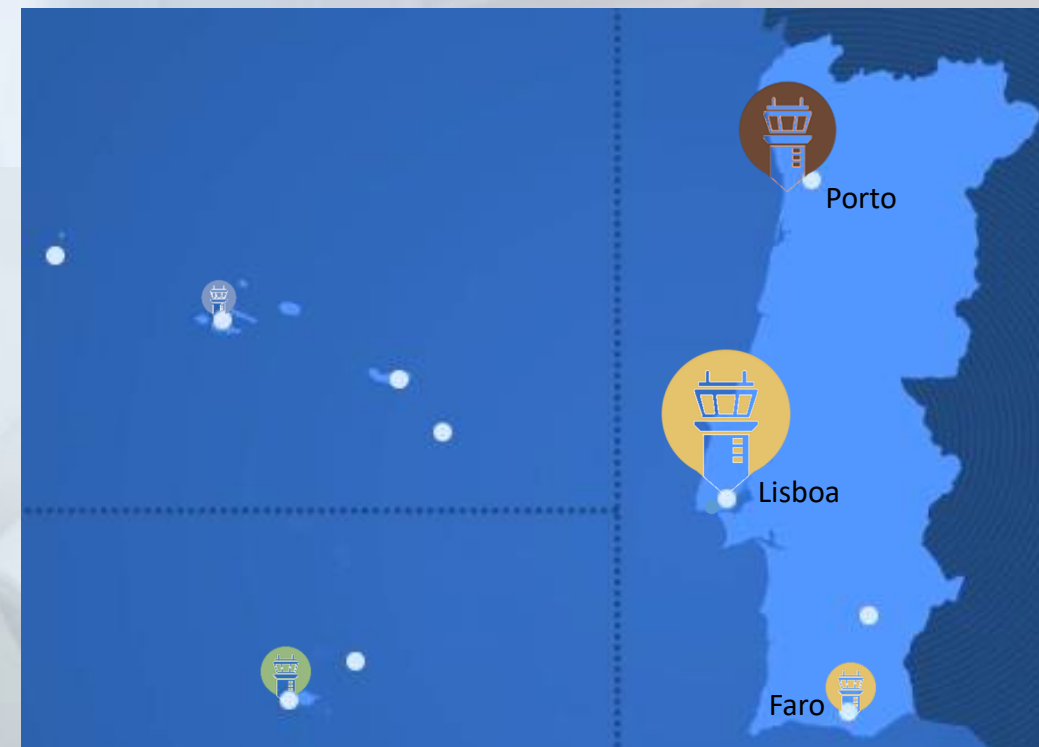
Total CAT Accidents fatalities in Portugal:

since 1919

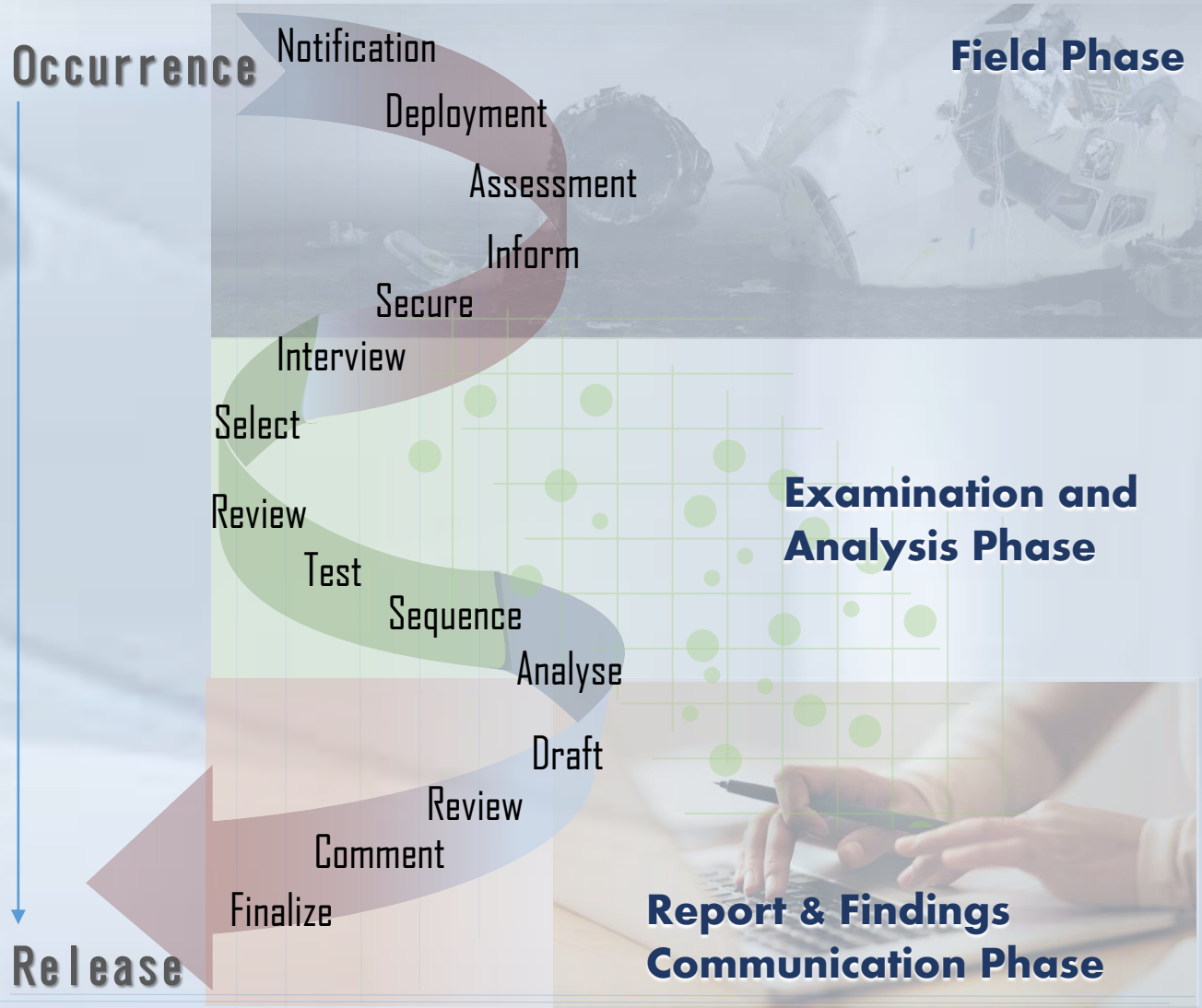
754

Avg. yearly fatalities (since 2014 @ GA&AW)

4



How to strengthen the aircraft accident and incident investigation?



- How to perform an accident investigation with limited resources?



How to perform an accident investigation with limited resources?

ICAO Art. 26. (...) the State in which the accident occurs will institute an inquiry into the circumstances of the accident, (...)



REGULATION (EU) 996/2010 on the investigation and prevention of accidents and incidents in civil aviation.

... the establishment of permanent, independent SIAs in every Member State capable of conducting a full safety investigation, either on its own or through agreements with other safety investigation authorities (Article 4).

Beijing Declaration on Accident Investigation:

3.1: In accordance with the Chicago Convention, commit to either 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 or where appropriate develop a bilateral, sub-regional or regional partnership to support the establishment of accident investigation capabilities to serve the Region, sub-region or State.

Fact: Aircraft, Organizations and Investigation Scope are becoming more and more complex...

Independence does not mean Isolation!

How to perform an accident investigation with limited resources?

(EU) 996/2010 Article 7:

European Network of Civil Aviation Safety Investigation Authorities (ENCASIA)



3. (e) strengthening the investigating capacities of the safety investigation authorities, in particular by developing and managing a framework for sharing resources;

DEVELOPMENT OF ENCASIA MUTUAL SUPPORT SYSTEM (EMSS)

The State of occurrence take the lead and determine the direction of the investigation, thereby maintaining the independence.

- A System Intended for major events,
- Support SIAs to standardize the procedures and use best practices (NIMP),

How to perform an accident investigation with limited resources?



Establish an accreditation system

ENCASIA accreditation system for IIC and group leaders.

The key components of the accreditation system are:

Investigator training

Individuals would need to provide evidence that they have completed the investigator training specified in the ENCASIA training manual.

Experience

suitable combination of training, professional experience (prior to joining SIA), practical safety investigation experience to be appointed as IIC or Group Leader.

ENCASIA training

ENCASIA run training sessions on the EMSS process and key standardised practices.

Accreditation level

Accreditation by levels to reflect the experience;



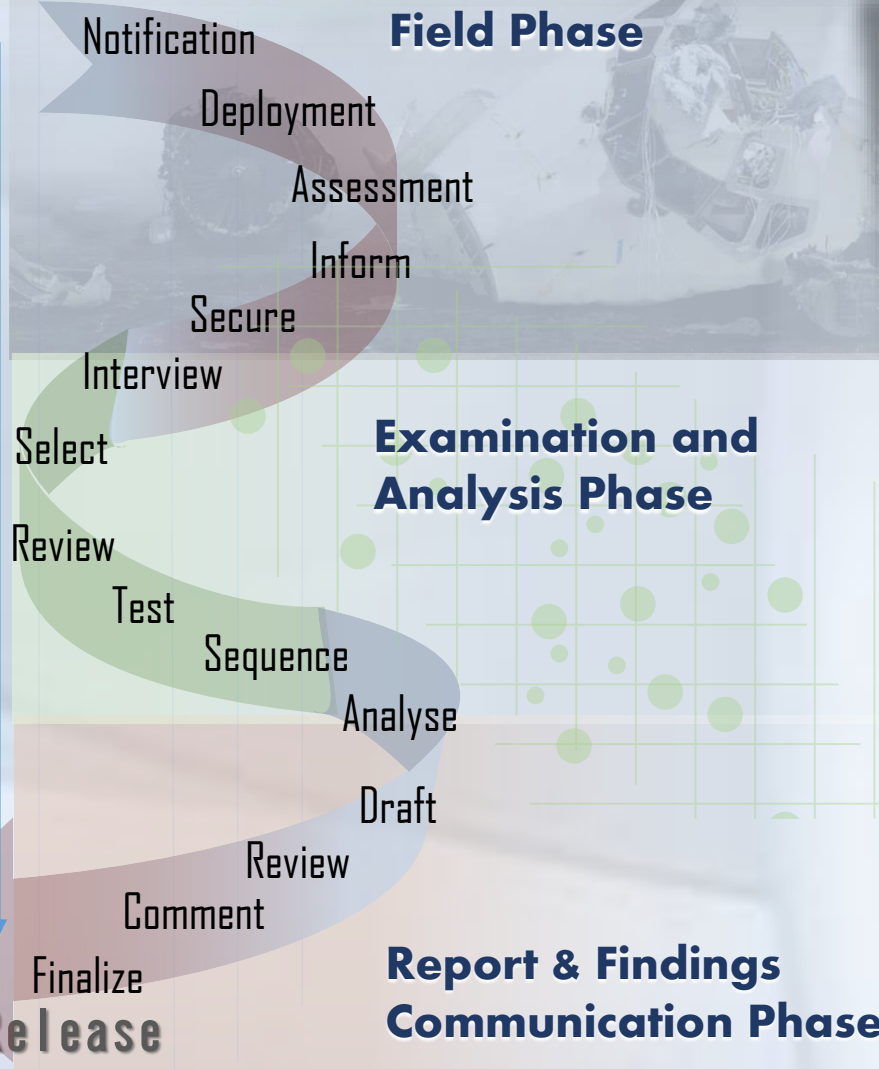
[illegible]

Q3

Qualified for complex surveys- ENCASIA Recognised Trainer

How to perform an accident investigation with limited resources?

Occurrence



National Investigation Management Plan



GPIA 

Gabinete de Prevenção e Investigação de Acidentes
com Aeronaves e de Acidentes Ferroviários

Thank you,

José Figueiredo

Head of Aviation Unit

jose.figueiredo@gpiaaf.gov.pt