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# AIG Turnkey Project Session 4

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September 2022





# Objective

To assist Caribbean and Central American States in the area of **AIG** by:

- a) Building/enhancing national capacity in accident and incident investigation;
- b) Enabling the establishment/consolidation of Investigation Cooperative Mechanisms (ICMs); and
- c) Enabling the future adoption of a RAIO approach



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# Agenda

- ✈ Training Plan
- ✈ Periodic Training Plan
- ✈ Training Implementation Records



# Training Plan

6.125 Has the investigation authority:

- 1) developed periodic training plans detailing and prioritizing the type of training to be provided during the established period; and
- 2) appropriately implemented the Training Plan?

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- 1) developed **periodic** training plans **detailing** and **prioritizing** the type of training to be provided during the established period; and
- 2) appropriately implemented the Training Plan?

## Key elements:

1. Periodic
2. Detailing
3. Prioritizing

6.125 Has the investigation authority:

- 1) developed **periodic** training plans **detailing** and **prioritizing** the type of training to be provided during the established period; and
- 2) appropriately implemented the Training Plan?

## Periodic:

- Ideally for a period of 3 to 5 years
  - . Must be updated annually
- Many States make annual plans
  - . Doesn't favour forecasting

6.125 Has the investigation authority:

- 1) developed **periodic** training plans **detailing** and **prioritizing** the type of training to be provided during the established period; and
- 2) appropriately implemented the Training Plan?

## Detailing:

- Specify the training course/activity
- Include details like duration, local, etc.

6.125 Has the investigation authority:

- 1) developed **periodic** training plans **detailing** and **prioritizing** the type of training to be provided during the established period; and
- 2) appropriately implemented the Training Plan?

## Prioritizing:

- For each training/activity
- The purpose is to know which event to cut in case of contingency
- You may consider have some 10%-20% extra events for replacement





# ICAO references

GM

Doc 9734 Part A, C3

Doc 9962 4.3.2 & App. E

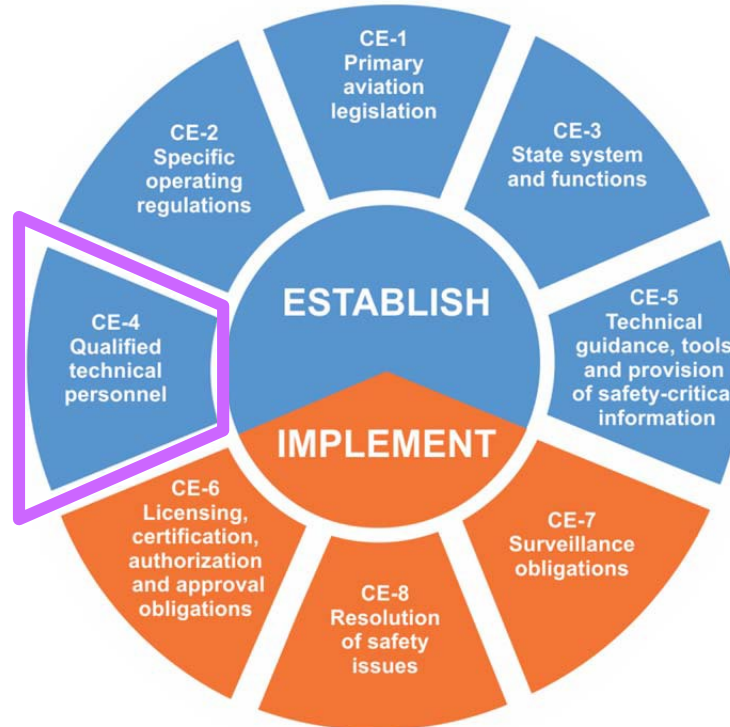
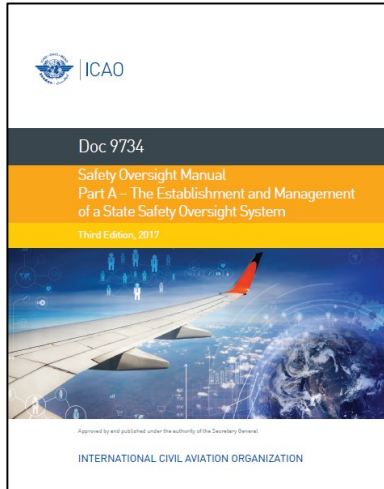
Cir 298

Cir 315

## Chapter 3

### CRITICAL ELEMENTS OF A STATE SAFETY OVERSIGHT SYSTEM

**DOC 9734**  
**(PART A, C3)**





## Chapter 3

### CRITICAL ELEMENTS OF A STATE SAFETY OVERSIGHT SYSTEM

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#### DOC 9734 (PART A, C3)

#### 3.4.2 Training of technical personnel

3.4.2.1 To ensure that technical personnel receive the required training in an effective manner and maintain their competency, a robust training system needs to be established and implemented by the State authorities. This system should be based on a documented training policy established and signed at the management level of the State authorities.





## Chapter 3

### CRITICAL ELEMENTS OF A STATE SAFETY OVERSIGHT SYSTEM

...

#### DOC 9734 (PART A, C3)

#### 3.4.2 Training of technical personnel

3.4.2.2 The training policy should commit to provide all necessary training to all technical personnel in all areas, including initial training (e.g. induction and basic training), on-the-job training (OJT), recurrent training and specialized or advanced training. Furthermore, the training policy should require the establishment of a Training Plan for each technical staff position and training plans for each technical staff member.





## Chapter 3

### CRITICAL ELEMENTS OF A STATE SAFETY OVERSIGHT SYSTEM

...

#### 3.4.2 Training of technical personnel

## DOC 9734 (PART A, C3)

3.4.2.3 The State authorities also need to provide the necessary financial resources and time for their technical personnel to receive the required training.





## Chapter 3

### CRITICAL ELEMENTS OF A STATE SAFETY OVERSIGHT SYSTEM

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**DOC 9734**  
**(PART A, C3)**

#### 3.4.2 Training of technical personnel

3.4.2.4 A **Training Plan should** be developed for each technical staff position. The Training Plan should include all the training required for the incumbent of the position to acquire and maintain the necessary competencies for the position as well as to effectively perform the related safety oversight functions and activities. The required training includes initial training, OJT, recurrent training and all the specialized training necessary for that technical position, with the minimum content for each type of training, as applicable.





## Chapter 3

### CRITICAL ELEMENTS OF A STATE SAFETY OVERSIGHT SYSTEM

...

**DOC 9734**  
**(PART A, C3)**

#### 3.4.2 Training of technical personnel

3.4.2.5 For each technical staff member, a periodic training plan should be developed based on the Training Plan established for the staff member's position. The training plan should detail the type of training to be provided during a specified timeframe as well as the training priorities. As a principle, a staff member can only be authorized to perform safety oversight duties in the area or subject where the staff member has satisfactorily completed the required training and maintains the required competence.





## Chapter 3

### CRITICAL ELEMENTS OF A STATE SAFETY OVERSIGHT SYSTEM

...

#### DOC 9734 (PART A, C3)

#### 3.4.2 Training of technical personnel

3.4.2.6 Training of the State's technical personnel is not limited to strictly professional elements, such as the maintenance of competency and currency. In particular, it is essential that civil aviation **investigators** also be provided with training on subjects such as applicable **CAA/AIA** regulations, **investigators'** skills, knowledge, duties and responsibilities, and **CAA/AIA** procedures for the implementation ~~and enforcement of requirements.~~







## Chapter 3

### CRITICAL ELEMENTS OF A STATE SAFETY OVERSIGHT SYSTEM

...

**DOC 9734**  
**(PART A, C3)**

#### 3.4.2 Training of technical personnel

3.4.2.7 Technical personnel should satisfactorily complete OJT before being assigned to **investigation**-related tasks and responsibilities. OJT should be provided by experienced, senior technical staff in the subject area or task, and should follow a structured process, such as observing, working under supervision, competence assessment and authorization, etc. It is important to ensure that staff are only authorized to perform tasks after having been assessed as qualified. The completion of the OJT, including the competency assessment, should be **properly documented.**





## Chapter 3

### CRITICAL ELEMENTS OF A STATE SAFETY OVERSIGHT SYSTEM

...

**DOC 9734**  
**(PART A, C3)**

#### 3.4.2 Training of technical personnel

3.4.2.8 The State's technical personnel represent the authority and, as such, require the continuing development of knowledge and skills related to their respective responsibilities. This should be accomplished through periodic training and refresher courses in all the disciplines for which the technical personnel are responsible. Participation in seminars and workshops organized by ICAO and international and regional aviation-related organizations can also enable the State's technical personnel to widen their horizons and share experience with experts from other Member States...





## Chapter 3

### CRITICAL ELEMENTS OF A STATE SAFETY OVERSIGHT SYSTEM

...

#### DOC 9734 (PART A, C3)

#### 3.4.2 Training of technical personnel

3.4.2.9 Periodic practical and theoretical specialized (technical) training will enable the State's technical personnel to achieve and maintain a high level of knowledge and expertise and thus undertake their duties and responsibilities in a more effective and efficient manner.





## Chapter 3

### CRITICAL ELEMENTS OF A STATE SAFETY OVERSIGHT SYSTEM

...

#### DOC 9734 (PART A, C3)

#### 3.4.2 Training of technical personnel

3.4.2.10 The State authorities should establish and implement a system for the maintenance of training records for their technical personnel. This includes records of the OJT received, reflecting the various phases of the OJT completed (i.e. observation, performance of tasks under supervision and final assessments) as well as the assessment of competence of the personnel.





## 4.3 INVESTIGATOR TRAINING

### DOC 9962



4.3.2 One means to determine and manage training needs, as well as to monitor and evaluate the training needs and training outcomes of the *[Accident Investigation Authority]* staff, is through the use of an individual development plan (IDP). A template for an IDP is provided in Appendix E, containing the required elements of an investigator's or manager's Training Plan. Based on an individual's job description and his or her background, experience, and training gained in the past, the need for additional training can be determined and monitored with the IDP, which would be completed for each staff member.

*Note.— The items listed in the template IDP are for reference only. Individual items may be added, deleted, or amended to make the IDP directly applicable to any particular staff member.*



## DOC 9962



### Appendix E

#### Individual Development Plan

##### Individual Development Plan — Aircraft Accident Investigator

<b>Investigator name:</b>					
<b>Title (operations/engineering/ATC/survival factors/etc.):</b>					
<b>Grade or position:</b>					
<b>Supervisor name:</b>					
	<i>Source /course</i>	<i>Date obtained</i>	<i>Date of practical experience</i>	<i>Date scheduled for training</i>	<i>Remarks (No. of years, grades, etc.)</i>
<b>Knowledge, skills and experience</b>					
<b>Initial response procedures</b>					
On-call procedures					
Notification of other national authorities and organizations					
Securing of records, recordings and samples					
Accident site jurisdiction and security					
Investigator safety — biological hazard training and equipment					
Investigator safety, including psychological stress familiarization					
Recovery of human remains					
Requests for autopsies					
Family assistance					
<b>Investigation procedures</b>					
Authority and responsibilities					
Size and scope of the investigation					
Investigation management (group chairman and IIC) — on-scene domestic and overseas					
Use of specialists					



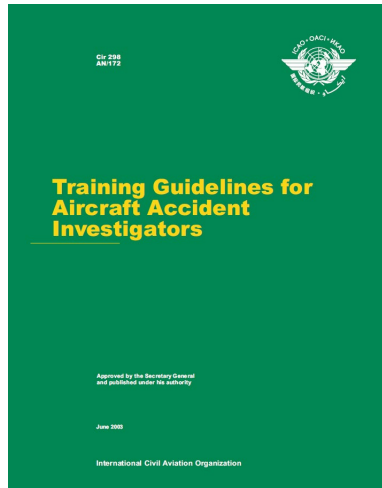
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Training Plan

## Training Guidelines for Aircraft Accident Investigators

CIR 298



The circular discusses the experience and employment background required for training as an aircraft accident investigator. It also outlines the progressive training that is considered necessary to qualify a person for the various investigation roles, including appointment as the investigator-in-charge of an investigation into a major accident involving a large transport category aircraft. ICAO acknowledges that training guidelines are evolutionary in nature and may need to be updated periodically

We'll exam the Circular in detail



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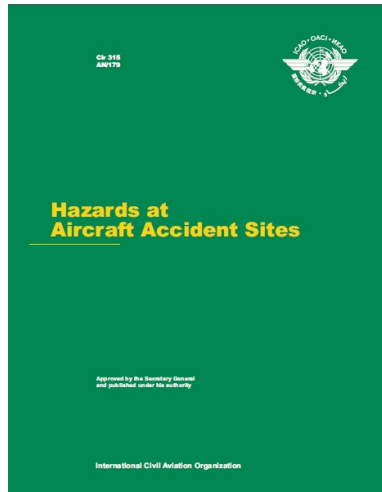
Training Plan

## Chapter 5 Health and safety training

CIR 315

### 5.1 GENERAL

5.1.1 It is acknowledged that many Contracting States will have health and safety training and competency standards that are determined by their own specific legislation for the risks existing within their borders. The aim of this chapter is to identify common training objectives and standards for aircraft accident investigators and support personnel that are recognized and accepted by Contracting States. This will ensure that the health and safety of investigation teams are appropriately supported, and that the entry to the accident site and facilities is not restricted for occupational safety reasons.







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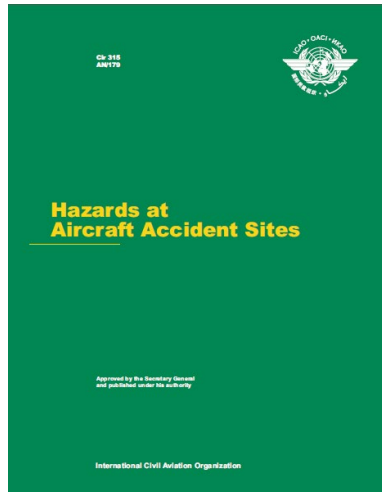
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## Chapter 5 Health and safety training

CIR 315

### 5.1 GENERAL

5.1.2 The following is recommended as a basis for the minimum syllabus for training courses. Contracting States should review the syllabus to determine whether they wish to add further content to meet the specific needs of their operations. Additional guidance material is provided in Circular 298, *Training Guidelines for Aircraft Accident Investigators*.





# Conditionalities of a Training Plan

- ✈ How to build a Training Plan? Consider:
  - ✈ Background experience of each trainee

**Individual Development Plan — Aircraft Accident Investigator**

**Investigator name:**  
**Title (operations/engineering/ATC/survival factors/etc.):**  
**Grade or position:**  
**Supervisor name:**

Knowledge, skills and experience	Source /course	Date obtained	Date of practical experience	Date scheduled for training	Remarks (No. of years, grades, etc.)
<b>Initial response procedures</b>					
On-call procedures					
Notification of other national authorities and organizations					
Securing of records, recordings and samples					
Accident site jurisdiction and security					
Investigator safety — biological hazard training and equipment					
Investigator safety, including psychological stress familiarization					
Recovery of human remains					
Requests for autopsies					
Family assistance					

<b>Investigation procedures</b>					
Authority and responsibilities					
Size and scope of the investigation					
Investigation management (group chairman and IIC) — on-scene domestic and overseas					
Use of specialists					
Parties to the investigation, accredited representatives, advisers and observers					
Dealing with news media					
Specialty procedures (operations, engineering, human factors, etc.)					

**Investigator name:**  
**Title (operations/engineering/ATC/survival factors/etc.):**  
**Grade or position:**  
**Supervisor name:**

Knowledge, skills and experience	Source /course	Date obtained
<b>Report writing</b>		
Internal and external correspondence		
Specialist field notes and factual reports		
Specialist analysis report		
Safety recommendations		
Final Reports		
Technical papers		
Speeches		

<b>Seminar and meeting attendance</b>		
International Society of Air Safety Investigators (ISASI)		
Flight Safety Foundation (FSF)		
Seminars related to technical specialty		
ICAO working groups		
Regional working groups		
Other		

<b>Basic, advanced or specialty courses attended and certificates — after being hired</b>		
Name of course or institution	Dates	Remarks (certificates, etc.)
<b>Recurrent training</b>		
Name of course or institution	Dates	Remarks (certificates, etc.)
<b>On-the-job-training (OJT) (minimum of two cases)</b>		
Identification of accidents	Dates	Remarks
OJT — domestic accident		
OJT — domestic accident		
<b>Participation as an observer (OJT) at investigations conducted by other States</b>		
Identification of accidents	Dates	Remarks



# Conditionalities of a Training Plan

- ✈ How to build a Training Plan? Consider:
  - ✈ Background experience of each trainee
  - ✈ Budget available
  - ✈ Training programme
  - ✈ Organization's needs assessment



# Conditionalities of a Training Plan

- ✈ How to build a Training Plan? Consider:
  - ✈ Period – 3 to 5 years
  - ✈ Recurrence training



# Framework of the Training Plan

- ✈ There is no “standard” structure
- ✈ Use the template of your organization (if exists)
- ✈ Remember that the Plan must be approved by the relevant authority (\$\$\$)



# Framework of the Training Plan

- ✈ Consider that some important elements must be there:
  - ✈ Name of trainee
  - ✈ Name of course/activity
  - ✈ Priority
  - ✈ Period and duration

# EXAMPLE OF TRAINING PLAN



## Civil Aviation Authority of Coronaland

	AIG TRAINING PLAN 2023-2025																																																																			
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC																																
Taylor Kilroy	FAMIL	OJT-1				SPC-ECS										BASIC	OJT-2	OJT-2	OJT-2	OJT-2	OJT-2	OJT-2																																														
Madison O'Maharity				ADVIC	OJT-4	OJT-4	OJT-4	OJT-4	OJT-4									OJT-3	OJT-3	OJT-3	OJT-3	OJT-3	RECUR																																													
Harper MacGuire						RECUR												OJT-5	OJT-5	OJT-5	OJT-5	OJT-5	RECUR																																													
Arden Winblad						RECUR												OJT-5	OJT-5	OJT-5	OJT-5	OJT-5	RECUR																																													
Cove Thomas				BASIC	OJT-2	OJT-2	OJT-2	OJT-2	OJT-2	OJT-2	OJT-2	OJT-2																																																								
Isaac Doyle																																																																				
Evan May																																																																				
Taylor Dixon																																																																				
Bradley Allen																																																																				
Leon Fletcher																																																																				
Lee Phillips																																																																				
Kylen Mays																																																																				
Aidan Schroeder																																																																				
Neymar Christian																																																																				
Carmyn Chandier																																																																				
Timber Carr																																																																				
Stefan Henriksson																																																																				

Coronaland City, *23 Sep. 2022*

Chief Administrative Department





# EXERCISE 3

## ✈ Building a Training Plan

- ✈ Build the Training Plan (2023 to 2025) for Coronaland, considering the following inputs:
  - ✈ Characteristics of the aviation system – explanatory text
  - ✈ Extracts of the Training Programme – list of courses/activities
  - ✈ Background experience of HR – list of personnel with background experience

# EXERCISE 3

## CHARACTERISTICS OF THE CORONALAND'S AVIATION SYSTEM

Coronaland has in tourism one of the most important sources of revenue, with aviation playing a significant role in this business. In addition, Coronaland is a hub for the region, receiving many flights in connexion to other destinations. Corona Airways is the only airline with international schedule routes, with daily services to Miami, Houston, Mexico City and Panama City.

In terms of number, the Coronaland International Airport receives an average of 50 international flights daily.

In regards to safety, in the current year, 3 accidents, 4 serious incidents and 158 incidents have been registered by the Accident Investigation Section of the CAA. Throughout the last 4 years, more than 500 received notifications have been processed, among which, 5 came from Accident Investigation Authorities from other States.

Due to the importance of aviation in the economical context of Coronaland, the budget allocated for the CAA in the last 5 years has been commensurate with the increasing level of activities. From the total budget of the CAA, a total of USD 180,000 has been assign to support training. Historically, around 5% of the training budget has been granted to AIG.

It is worth to mention that there will be elections in the State this year, and there is a concern that some contingency may be imposed, affecting the approved budget of the CAA.

# EXERCISE 3

## WORKLOAD OF THE AIG SECTION

	INVESTIGATIONS			
	ACCID	SINCID	INCID	Accredited Representative
2022	3	4	1	2
2021	1	1	0	0
2020	0	1	0	0
2019	5	9	2	3

	NOTIFICATIONS		
	Received within Coronaland	Issued to other States/ICAO	Received from other States
2022	165	7	2
2021	92	2	0
2020	64	1	0
2019	221	14	3

# EXERCISE 3

## STRUCTURE OF HR IN THE AIG SECTION

POSITION	FUNCTIONS AND RESPONSIBILITIES	MINIMUM BACKGROUND EXPERIENCE
Chief Investigator	Head of the Unit	Investigator Senior
Investigator-Master	All related to investigations (no limit)	Successful completion of OJT-5
Investigator-Senior	IIC of non-fatal accidents in Commercial and all accidents in all other operations	Successful completion of OJT-3
Investigator-Junior	IIC of non-fatal accidents and all serious incidents in GA	Successful completion of OJT-2
Administrative Assistant	Technical support administrative tasks associated with the investigation processes and other in accordance with the qualifications obtained from specialized courses (e.g.ECCAIRS)	Successful completion of Basic Investigation Course + OJT-1
Support Staff	Technical support in accordance with the qualifications obtained from specialized courses (e.g.ECCAIRS)	Successful completion of specialized courses

# EXERCISE 3

## BACKGROUND EXPERIENCE OF HR

	Name	Qualification
1	Taylor Kilroy	Not qualified
2	Madison O'Moriarty	3-Investigator-Senior
3	Harper MacGuire	4-Investigator-Junior, Accredited Representative B
4	Arden Winblad	2-Group Leader, Accredited Representative A
5	Cove Thomas	5-Adviser/Specialist
6	Timber Carr	4-Investigator-Junior, Accredited Representative B
7	Stefan Henriksson	Not qualified

# EXERCISE 3

## EXTRACT FROM THE CORONALAND'S TRAINING PROGRAMME

	COURSE/ACTIVITY	QUALIFICATION AFTER CONCLUSION	DURATION (Hrs)	COST (USD per seat)
1	Familiarization	-	40	0
2	OJT1	Support staff 1 (Notifications) Adviser/Specialist	N/A	N/A
3	Basic investigation course	-	160	8,000
4	OJT2	Investigator-Junior (GA and incidents) Accredited Representative B	N/A	N/A
5	Experience + OJT3	Investigator-Senior (team member, IIC non-major)	N/A	N/A
6	Advanced investigation course	-	40	2,000
7	OJT4	Accredited Representative A Group Leader	N/A	N/A
8	Experience + OJT5	Investigator-Master	N/A	N/A
9	Specialized courses	-	TBD	TBD
10	Specialized course - ECCAIRS	Support staff 2 (ECCAIRS)	40	2,000
11	Recurrent training	No change in qualification	24	1,200



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THANK YOU