



# Technical Training Needs in the NAM/CAR Regions

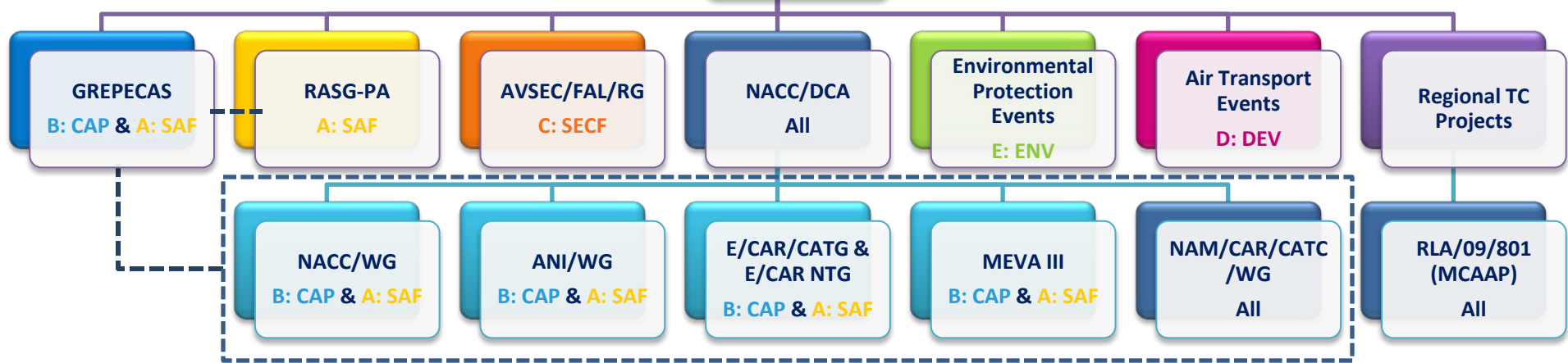
**Presented by the Secretariat**





# ICAO NACC Regional Office Technical Programme Workflow By Strategic Objective

- A: SAF** — Safety
- B: CAP** — Capacity & Efficiency
- C: SECF** — Security & Facilitation
- D: DEV** — Economic Sustainability
- E: ENV** — Environment



**GREPECAS** — CAR/SAM Regional Planning and Implementation Group  
**RASG-PA** — Regional Aviation Safety Group- Pan America  
**AVSEC/FAL/RG** — Aviation Security and Facilitation Regional Group  
**NACC/DCA** — North American, Central American and Caribbean Directors of Civil Aviation  
**NACC/WG** — North American, Central American and Caribbean Working Group Meeting  
**Project RLA/09/801** — Multi-Regional Civil Aviation Assistance Programme (MCAAP)

**ANI/WG** — NAM/CAR Air Navigation Implementation Working Group Meeting  
**E/CAR/CATG** — Eastern Caribbean Civil Aviation Technical Group  
**E/CAR/NTG** — Eastern Caribbean Network Technical Group  
**MEVA III** — Improvements to the ATS Voice Link  
**NAM/CAR/CATC/WG** — NAM/CAR Civil Aviation Training Centres Working Group



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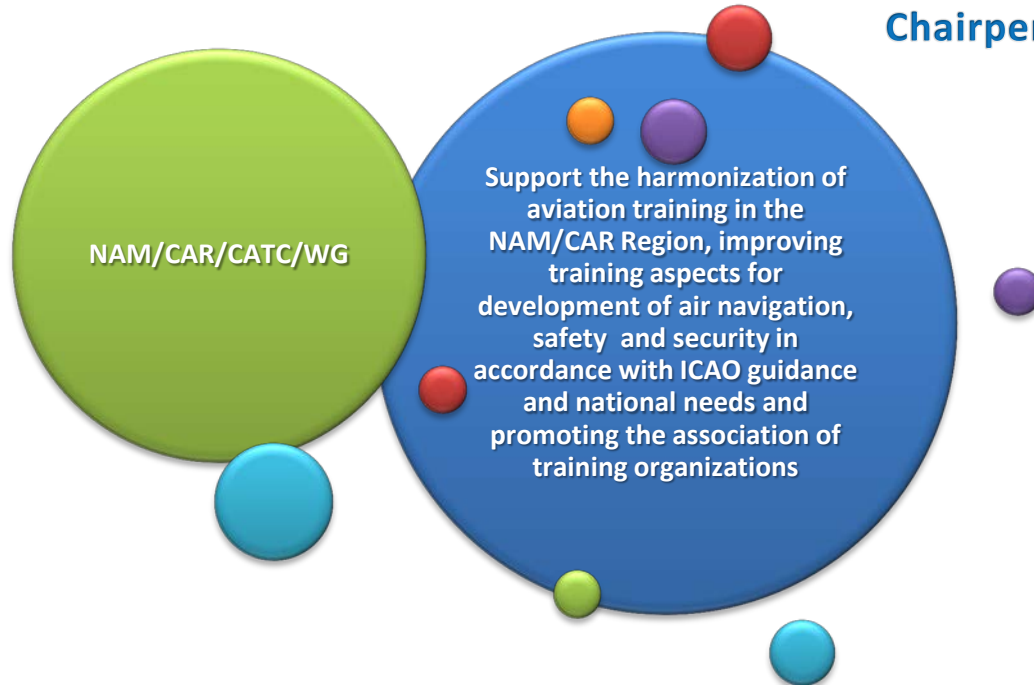
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UNITING AVIATION



# NAM/CAR Civil Aviation Training Centres Working Group (NAM/CAR/CATC/WG)

Chairperson: Dominican Republic





# NAM/CAR Aviation Security Regional Training Centres

NAM/CAR  
ASTCs

Support the harmonization of civil aviation security training in the NAM/CAR Region, improving training aspects for development of aviation security in accordance with ICAO guidance and national needs and developing compliance of ICAO Standards and Recommended Practices and enhancing national security systems

- Trinidad and Tobago
- CIIASA Mexico
- ESAC Dominican Republic
- TSA on hold



# Air Navigation Services (ANS)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
<b>GASP</b>	Regional syllabus for: 1. ANS Inspectors specialized in the air navigation fields. 2. MET Inspectors 3. Recurrent training	1.1 Training of inspectors specialized in the different air navigation services fields. 2.1 Training of MET inspectors 3.1 Recurrent training courses, including on the job training.	



# Aerodromes and Ground Aids (AGA)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
Aerodrome Certification	Procedures for air navigation services – Aerodromes PANS-AGA	Train Civil Aviation Authorities inspectors and airport operators on procedures to apply for initial aerodrome certification and permanent surveillance of aerodrome safety and on aerodromes compatibility studies, especially when it is not possible to fully comply with Annex 14, Vol I SARPs.	Course to be held in the first quarter of 2019



# Aeronautical Information Management (AIM)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
<b>The Global Air Traffic Management Operational Concept, developed by the level of technology available at the time, was endorsed by AN-Conf./11.</b>	Quality management System and Quality control	The training of AIM personnel is adapted to the new requirements on skill and competencies introduced by the transition to AIM. Quality management measures are re-enforced to ensure the required level of quality of the aeronautical information products	Urgent to provide the QMS course to AIM Staff



# Aeronautical Information Management (AIM)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
<b>The Global Air Traffic Management Operational Concept, developed by the level of technology available at the time, was endorsed by AN-Conf./11.</b>	eAIP - Provision of the electronic and digital data required by the ATM components	The training will be conducted to serve to digital ANS users community requirements, ATM as a priority	In this course must be included the electronic Aeronautical Charts and AMDB (Aerodrome mapping database) themes





# Aeronautical Information Management (AIM)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
<p>The Global Air Traffic Management Operational Concept, developed by the level of technology available at the time, was endorsed by AN-Conf./11.</p>	<p>AIXM – Ver. 5.1 Aeronautical Information Exchange Model</p>	<p>Defining the semantics of the aeronautical information to be managed and interchange in terms of digital data structures is essential for data interoperability</p>	<p>The use of the Internet as a communication media is, for example, one important bottom-up driver in the definition of the model. The use of well-established, geographic information standards also applied in non-aeronautical domains is another important technological choice</p>



# Aeronautical Information Management (AIM)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
<b>The Global Air Traffic Management Operational Concept, developed by the level of technology available at the time, was endorsed by AN-Conf./11.</b>	Aeronautical Digital relational databases (DB) and the use of geographic information systems (GIS)	The material that will be provided under AIXM will provide guidance to validate the DB design (metadata) for facilitating the data exchange	The establishment and maintenance of a database where digital aeronautical data from a State is basic to produce current and future AIM digital and electronic products and services



# Aeronautical Information Management (AIM)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
The Global Air Traffic Management Operational Concept, developed by the level of technology available at the time, was endorsed by AN-Conf./11.	PANS AIM And new ICAO Doc 8126 (Vol. I, II, III and IV)	Split of data origination requirements from data publication requirements. Introduction of the Aeronautical Data Catalogue (Metadata). New terminology, etc.	PANS-AIM provides a detailed description of the AIM functions, products and services and outlines the data origination requirements and the procedures according to which data shall be collected and transmitted to the AIM in accordance with accuracy, resolution and integrity classification requirements



# Air Traffic Management (ATM)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
RPBANIP RPO 1 Task G	PBN Training Programme	Train regulators and ANSP on approval and implementation of PBN procedures, including phraseology.	



# Air Traffic Management (ATM)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
RPBANIP RPO 3 Tasks B, D, G,	Advanced ATFM Training Programme	Train ANSP and airports on the establishment of ATS systems and aerodromes capacity, develop methods to predict operations demand, develop operational procedures manuals for traffic flow management.	



# Air Traffic Management (ATM)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
Doc 9734	ATM/SAR Inspector Course	Train regulators on monitoring ATM/SAR services provision.	



# Air Traffic Management (ATM)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
Annex 19	SMS Inspector/Auditor Course	Train regulators and ANSP on SMS monitoring for air traffic services providers.	



# Air Traffic Management (ATM)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
Annex 19	Operational Risk Management Course	Train regulators and ANSP on the establishment of processes for operational risk management for air traffic service providers.	





# Aeronautical Meteorology (MET)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
GANP	<ol style="list-style-type: none"><li>1. Space meteorology.</li><li>2. IWXXM exchange model.</li></ol>	<ol style="list-style-type: none"><li>1. Influence on air operations</li><li>2. Operative products</li><li>3. Information dissemination</li><li>4. Global and regional inter-operability</li><li>5. Data, information and services model.</li><li>6. Products format</li><li>7. Exchange mechanism</li></ol>	



# Search and Rescue (SAR)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
RPBANIP RPO 9 Task e	SAR training programme	Train SAR Regulators and service providers on ICAO guidance for the establishment and operation of SAR services	RPBANIP RPO 9 Task e



# Aviation Security (AVSEC)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
Annex 17	Cybersecurity or computing security for information, communication and technology critical systems	The objective of the course should focus on training those responsible for decision making to address cybersecurity incident or accident cases, including their ICT specialists.	Centres should develop, as a minimum, awareness workshops on this issue and decision-making courses for personnel, including government entities related with civil aviation.



# Aviation Security (AVSEC)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
Annex 17	Analysis of suspicious behaviour	The objective should focus on preparing supervisors and security personnel to analyse potential suspicious behaviour of those using commercial air transport and those visiting airports land sides.	Should consider the development of workshops or courses on this issue, supporting themselves on specialists from other government entities dedicated to criminal surveillance, among others.



| ICAO

SECURITY & FACILITATION

NO COUNTRY LEFT BEHIND



## Aviation Security (AVSEC)

- ✈ Training centres should consider formalizing agreements with CIIASA in order to take advantage of the different courses and workshops that have already been developed for different aviation areas related with aviation security (AVSEC)



# Environment (ENV)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
GANP A-39	<ol style="list-style-type: none"><li>1. National Plan for CO<sub>2</sub> emission reduction.</li><li>2. Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).</li></ol>	<ol style="list-style-type: none"><li>1. Formulation and implementation of the national plans for CO<sub>2</sub> emission reduction.</li><li>2. Mitigation measures</li><li>3. ICAO Toolkit for Environment protection</li><li>4. Monitoring, Reporting and Checking.</li><li>5. Domestic regulation</li></ol>	



# Flight Safety (FS)

Mandate or Performance Requirement	Subjects of the course to be offered	Description of the training need	Comments
<b>GASP</b>	Safety Management Implementation	This course will assist participants to understand the relevance of Annex 19 – Safety Management - to the Convention on International Civil Aviation and how to implement a State Safety Programme – SSP and/or a Safety Management System – SMS as required	2019



# ICAO GLOBAL AVIATION TRAINING



**THANK YOU!**