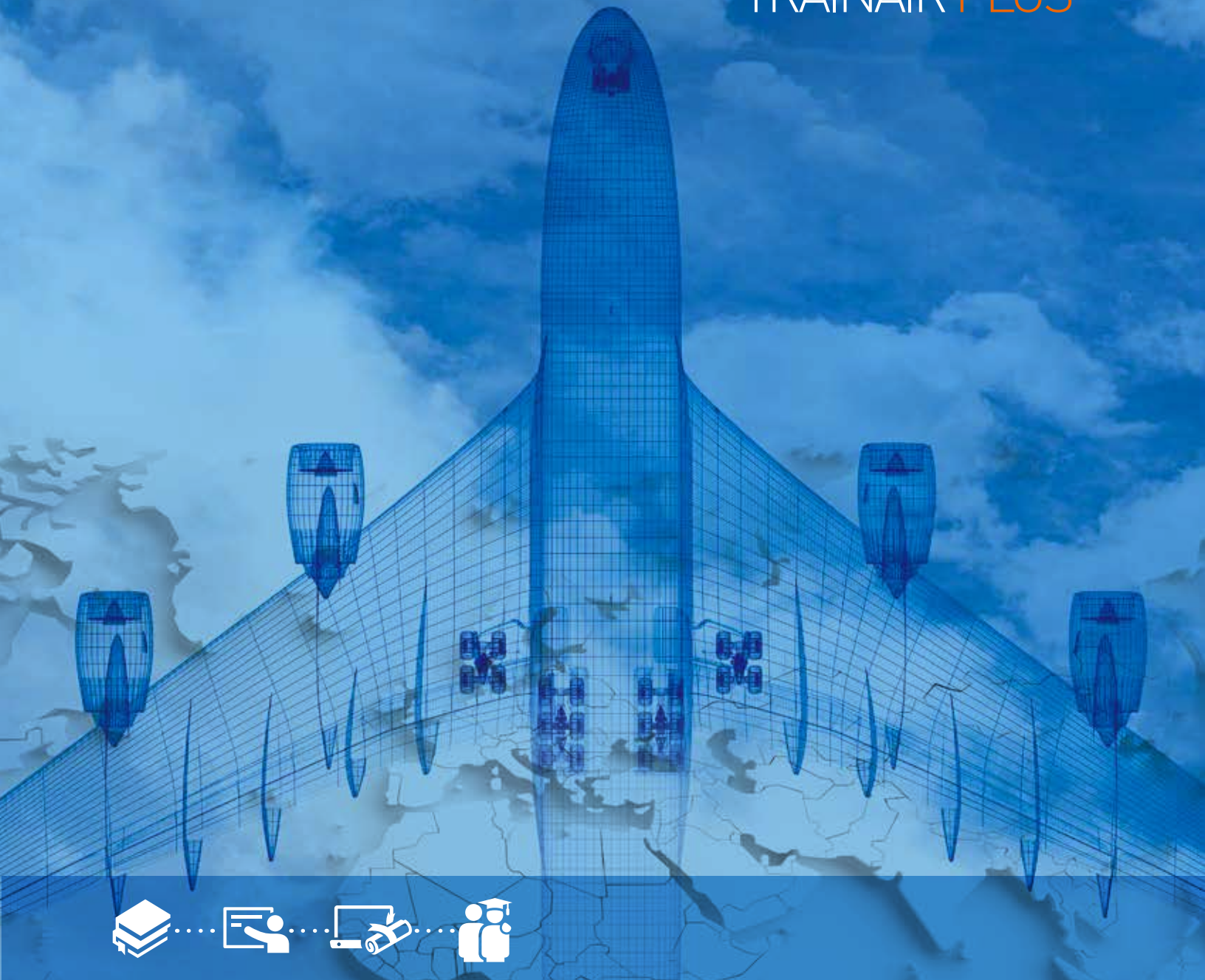




ICAO

GLOBAL AVIATION TRAINING TRAINAIR PLUS™



2017 STATISTICAL ABSTRACT





ICAO

GLOBAL AVIATION TRAINING
2017 Statistical Abstract

v1 // 2018

GLOBAL AVIATION TRAINING

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INTRODUCTION

The Global Aviation Training (GAT) Office was established on 1 January 2014 to coordinate ICAO's aviation training activities with the objective of supporting human resources capacity-building of Member States. Its mandate is to ensure States have access to a pool of qualified and competent personnel to operate, manage and maintain the current and future air transport systems in the areas of safety, air navigation capacity and efficiency, security and facilitation, economic development of air transport, and environmental protection.

The 2017 Statistical Abstract of the GAT Office provides a holistic and detailed outlook on global and regional training undertaken in 2017. It provides an overview of the number of trainees who have successfully completed ICAO-recognized courses in the following ICAO regions: **Asia and Pacific (APAC), North American, Central American and Caribbean (NACC), South American (SAM) Eastern and Southern African (ESAF), Western and Central African (WACAF), European and North Atlantic (EUR/NAT), and Middle East (MID).**

Since the GAT Office's inception, more than 150 ICAO-recognized training packages have been developed and integrated into the ICAO training portfolio for global delivery. In 2017 alone, over 3500 trainees enrolled in classroom and online courses in the eight training categories listed in this Abstract. These courses were either delivered on ICAO or TRAINAIR PLUS Programme (TPP) Members' premises.

This is the first Statistical Abstract of the GAT Office to be presented. A yearly abstract will be published and shared with TPP Members and the aviation community.

GLOBAL OUTLOOK

AERODROMES

AIR NAVIGATION SERVICES

AIR TRANSPORT

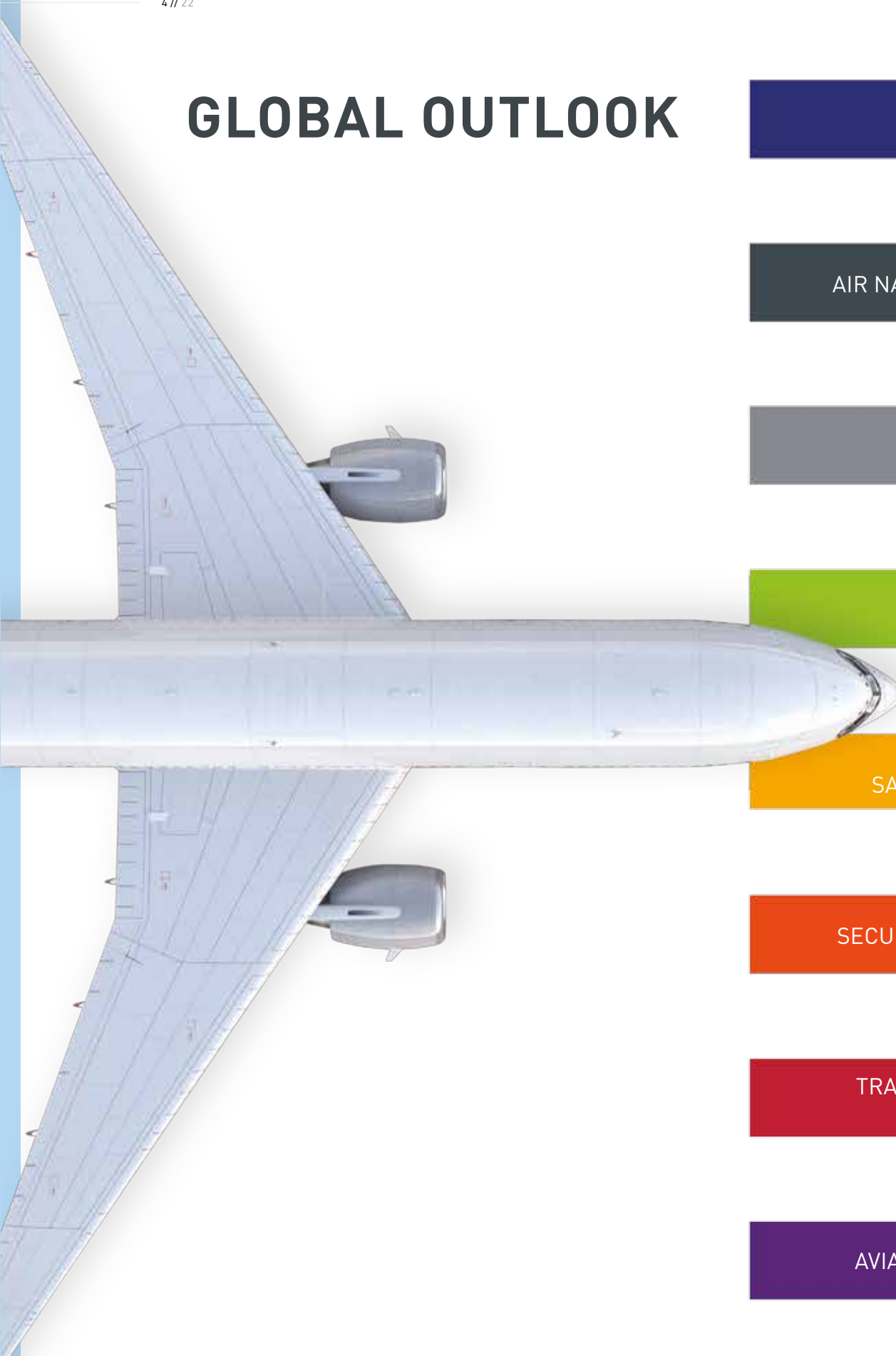
ENVIRONMENT

FLIGHT SAFETY &
SAFETY MANAGEMENT

SECURITY & FACILITATION

TRAINING COMPETENCY
DEVELOPMENT

AVIATION MANAGEMENT



SUBJECT AREAS		TRAINEES (CLASSROOM)	TRAINEES (ONLINE)	TOTAL
1	Aerodromes	810	-	810
2	Air Navigation Services	457	118	575
3	Air Transport	85	11	96
4	Environment	28	-	28
5	Flight Safety & Safety Management	619	287	906
6	Security & Facilitation	37	-	37
7	Training Competency Development	645	250	895
8	Aviation Management	185	-	185
TOTAL		2866	666	3532

REGIONAL TRAINING STATISTICS

for ICAO Member States

📍 ICAO Headquarters (HQ)
Montréal, Canada

ICAO REGIONAL OFFICES:

📍 APAC
Asia and Pacific
Bangkok, Thailand

📍 NACC
**North American, Central
American and Caribbean**
Chapultepec Morales, Mexico

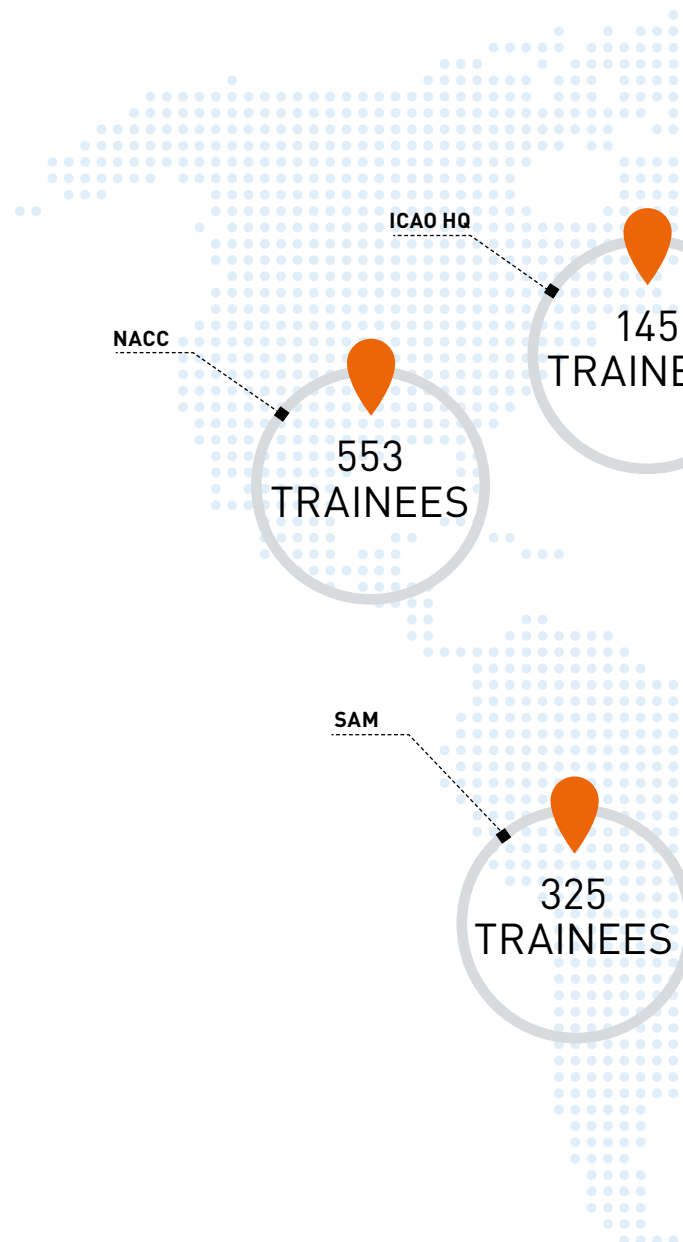
📍 SAM
South American
Lima, Peru

📍 ESAF
**Eastern and Southern African
Western & Central Africa**
Nairobi, Kenya

📍 WACAF
Western and Central African
Dakar, Senegal

📍 EUR/NAT
European and North Atlantic
Neuilly-Sur-Seine, France

📍 MID
Middle East
Cairo, Egypt



GENDER DISTRIBUTION*



22%

WOMEN

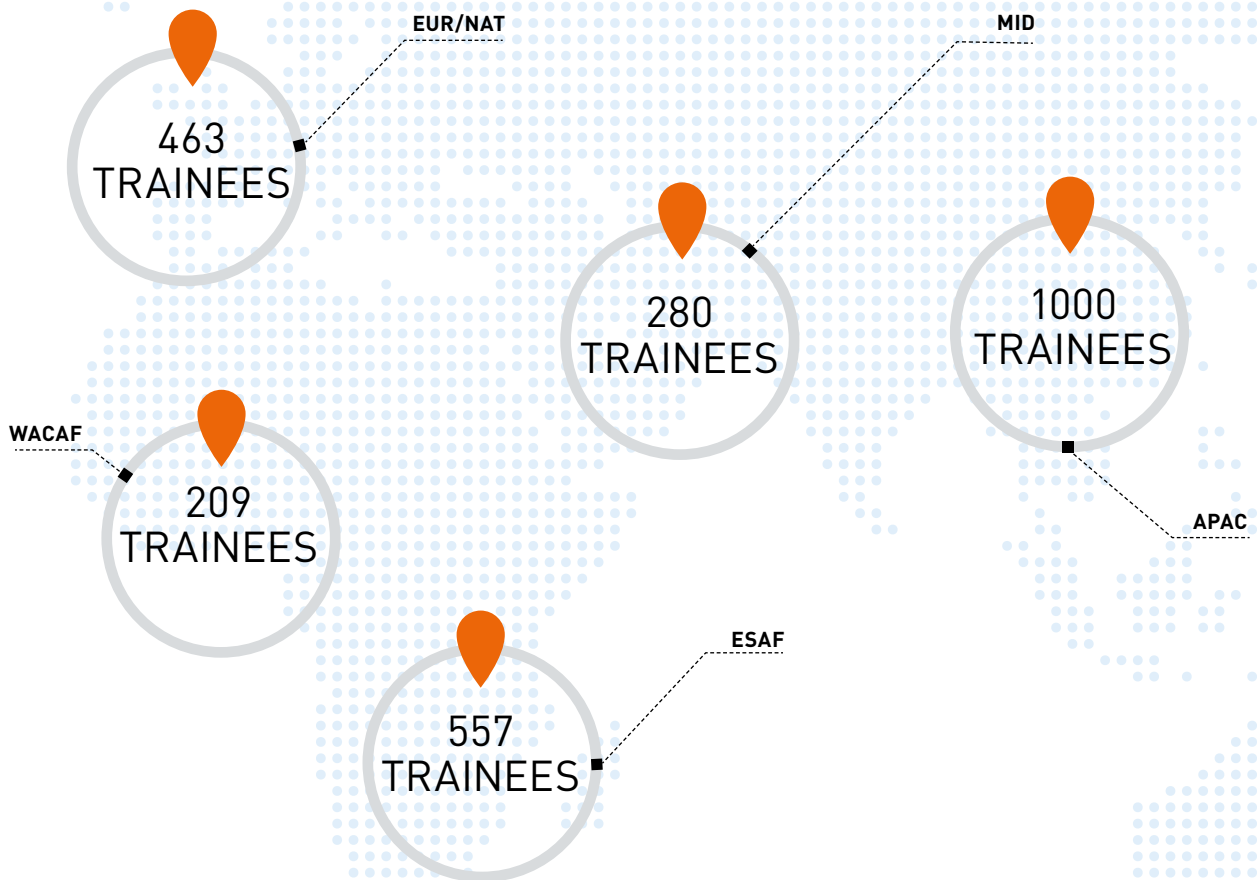


78%

MEN

+ 3500
trainees worldwide

* Approximate data collected on a voluntary basis.
Gender identification will be required for all 2018 registrations.





2017 COURSE DEVELOPMENT STATISTICS

2017 COURSE DEVELOPMENT STATISTICS

ICAO's course portfolio consists of training packages developed by ICAO or TPP Members. Each training package contains required instructional materials for trainees and instructors. To standardize aviation training and ensure its quality, all ICAO-

recognized training packages are developed in accordance with ICAO's *Training Development Guide, Competency-based Training Methodology* (Doc 9941).

NUMBER OF COURSES DEVELOPED IN 2017 BY SUBJECT AREA AND PER REGION*

Subject Areas	ICAO	APAC	MID	NACC	SAM	EUR/ NAT	ESAF	WACAF	Total
Aerodromes		5	1	1			1		8
Air Navigation Services				1			3		4
Air Transport / Air Law	1			1				1	3
Environment					1				1
Flight Safety & Safety Management	3	4	1		3		1		12
Security & Facilitation		1	2	1	1				5
Training Competency Development	1								1
TOTAL	5	10	4	4	5	/	5	1	34

* Training packages developed by ICAO or by TRAINAIR PLUS Members located across all ICAO Regions.

ASSESSMENTS AND RECOGNITION OF TRAINING

2017



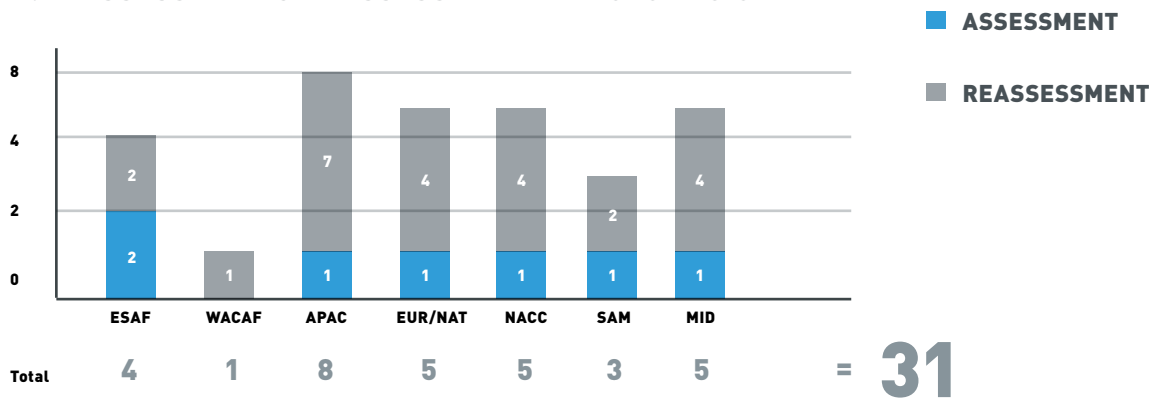
ASSESSMENTS AND RECOGNITION OF TRAINING ORGANIZATIONS

The GAT Office regularly conducts assessments of training organizations to analyze their capability to be recognized as TPP Members and maintain their membership criteria. Assessments provide a clear and independent view of a training organization's operations and highlights critical areas requiring improvements to management and civil aviation authorities (CAAs). Assessments cover eight critical areas of a training organization's operations: organization, training

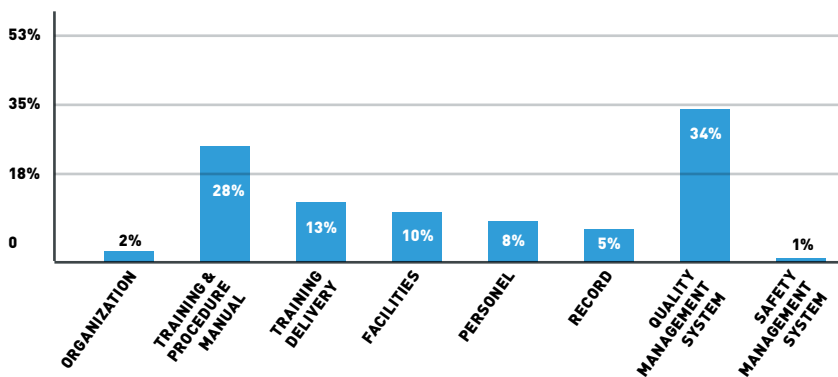
and procedures manual, training programmes and training delivery, facilities, personnel, records, quality system, and safety management, if applicable.

In 2017, the GAT Office conducted a total of 30 assessments: 7 initial assessments of potential TPP Members and 23 reassessments of existing TPP Members. All TPP Members are reassessed every 3 years.

2017 ASSESSMENT & REASSESSMENT PER ICAO REGION



DISTRIBUTION OF FINDINGS PER CRITICAL AREA



GLOBAL ANNUAL STATISTICAL ABSTRACT

A tabulation of total trainees enrolled in classroom or online courses, categorized by region and per subject area.

NUMBER OF COURSE DELIVERIES PER REGION

REGIONS	ICAO HQ	APAC	MID	NACC	SAM	EUR/NAT	ESAF	WACAF	Total
Total	11	73	19	35	25	50	35	14	262



AERODROMES


COURSE TITLE	NUMBER OF									
	TRAINEES	APAC	MID	NACC	SAM	EUR/NAT	ESAF	WACAF	ICAO HQ	Total
1. ACI Aerodrome Certification	41	12	51			41			11	156
2. ACI User Charges	25								28	53
3. ACI Management of Airport Security									13	13
4. Aerodrome Inspection	40						16	16		72
5. Aerodrome Safety Management Incorporating PANS-Aerodromes	8									8
6. Airport Commercial Planning							32			32
7. Airport Customer Service Quality Management	62									62
8. Airport Emergency Procedures							24			24
9. Airport Passenger Boarding Bridge (PBB) Operations	11									11
10. Conducting Apron Regulatory Safety Inspections		12								12
11. Control of the Authenticity and Validity of Travel Documents at Airport Borders - Level 1							37			37
12. Coordinación y supervisión del proceso de manejo de combustibles de aviación				25						25
13. Curso de operador de vehículos ARFF				9						9
14. Départ au Casque								8		8
15. Emergency Tabletop Exercises Management	16									16
16. Establishment of an Aerodrome Manual	24									24
17. Ground Handling for Narrow and Wide Body Aircrafts						11				11
18. Locating a Ground Fault in an Airfield Lighting Series Circuit	7									7
19. Lutte Contre Les Feux Mineurs d'Avion								24		24
20. Manejo de Combustibles de Aviación				53	16					69
21. Operation of Airport Rescue & Firefighting Vehicle-Rosenbauer Panther	10									10
22. Ramp Safety Awareness	12									12
23. Runway Incursion Prevention					13					13
24. Wildlife & Habitat Management at Aerodromes - Control & Reduction (Part One)						102				102
Total	256	24	138	29	154	109	48	52	810	

AIR NAVIGATION SERVICES

COURSE TITLE	NUMBER OF									
	TRAINEES	APAC	MID	NACC	SAM	EUR/NAT	ESAF	WACAF	ICAO HQ	Total
1. Aerodrome CNS Engineering Course	44									44
2. Aeronautical Information Management (AIM) Specialist	6									6
3. Aeronautical Internet Protocol Network (AIPN) Maintenance	35									35
4. Aeronautical Search and Rescue Operations	14									14
5. Air Navigation Aids Technicians ATC Procedures Basic Indoctrination				7						7
6. Air Navigation Services AIS Inspector							10			10
7. Air Navigation Services ATM Inspector			6				16			22
8. Air Navigation Services CNS Inspector							1			1
9. Air Navigation Services MET Inspector							2			2
10. Air Traffic Controller Competence Assessor Course						61				61
11. Air Traffic Services Supervisor			5							5
12. Application of Integrated Database within Design of Flight Procedures and Charts						2				2
13. ATC Facility Chief			6							6
14. Basic Meteorology Course for Air Traffic Controller	24									24
15. Curso Especialista en Cartografía Aeronáutica/AIS				14						14
16. Curso Operador de Búsqueda, Salvamento y Rescate - SAR (Básico)					15					15
17. Gestion Automatizada de Planes de Vuelo				34	14					48
18. Handling Emergencies and Unexpected Events in Terminal and En-Route Airspace	12									12
19. Información y Cartografía Aeronáutica				5	19					24
20. Inicial ATC Aeródromo				24						24
21. Manejo de Mensajería ATS Normalizada Asociada al Plan de Vuelo OACI					24					24
22. Operation and Maintenance of Mode S Surveillance System Equipment						6				6
23. Performance-based Navigation (PBN) E-Learning Courses	28	13	29	13	22	13				118
24. Prevention of Miscommunication in ATC Radio Telephony	10									10
25. Spécialiste en Maintenance des Stations VSAT Aeronautiques								8		8
26. Thales DVOR Maintenance Course	13									13
27. Unstable Approaches in Air Traffic Control	10									10
28. VHF (OTE) Tx/Rx Maintenance Course	10									10
Total	206	30	113	85	91	42	8	/	575	



AIR TRANSPORT

COURSE TITLE	NUMBER OF TRAINEES	APAC	MID	NACC	SAM	EUR/NAT	ESAF	WACAF	ICAO HQ	Total
 1. Air Transport Courses	4	1	2	2	2					11
2. Airport First-aids Exercises Supervisor	10									10
3. CFM56-5B Engine Run-up	6									6
4. Gerencia en mantenimiento aeronáutico			8	19						27
5. Gestion efficace du Processus Lettres OACI aux États						7				7
6. International Air Law Course									21	21
7. Pintura Aeronáutica - PAINTAIR				6						6
8. Travel Documents						8				8
Total	20	1	10	27	17	/	/	21	96	




ENVIRONMENT

COURSE TITLE	NUMBER OF TRAINEES	APAC	MID	NACC	SAM	EUR/NAT	ESAF	WACAF	ICAO HQ	Total
1. Leadership in Energy and Environmental Design and Operation of Airport	28									28
Total	28	/	/	/	/	/	/	/	/	28



= ONLINE COURSE

FLIGHT SAFETY & SAFETY MANAGEMENT

COURSE TITLE	NUMBER OF									
	TRAINEES	APAC	MID	NACC	SAM	EUR/NAT	ESAF	WACAF	ICAO HQ	Total
1. "Safety Occurrence Reporting and Analysis" –SORaA-						7				7
2. Dangerous Goods Part 1 – Using the Technical Instructions for the Safe Transport of Dangerous Goods by Air						13	16			29
3. ECCAIRS - European Co-ordination Centre for Accident and Incident Reporting Systems (ECCAIRS) End User Course	8						38			46
4. ECCAIRS - European Co-ordination Centre for Accident and Incident Reporting Systems (ECCAIRS) Technical Course	5						20			25
5. IAASM-SAA Postgraduate Certificate in Aviation Medicine for Medical Examiners and Assessors	19									19
6. ICAO Government Safety Inspector Airworthiness – Air Operator and Approved Maintenance Organization Certification (GSI-AIR-18701)	6			13			28	17		64
7. ICAO Government Safety Inspector Operations – Air Operator Certification Course (GSI-OPS-18700)				10			29	28		67
8. ICAO Government Safety Inspector Personnel Licensing Course (GSI-PEL-18710)	10						30	17		57
9. Investigación de Accidentes e Incidentes de Aviación Civil					12					12
 10. Personnel Licensing (PEL) System Part 1 [E-Learning]	37									37
11. Personnel Licensing System Course (Part 2)	37									37
12. Procedimientos avanzados en la investigación de campo de accidentes aéreos					15					15
13. Radio Telephony Communication for Airside Safety Operators			17							17
14. Safety Management for Practitioners Course	34			34	21	19	70	15	15	208
15. State Aviation Inspector on Training Organizations						3				3
16. TIBA Safety Procedures (Uncontrolled Operations)			13							13
 17. Online Safety Management Course	14	16	45	9	18	13	8			123
 18. Universal Safety Oversight Audit Programme (USOAP) Computer-Based Training (CBT)	18	2	32	18	13	38	6			127
Total	188	48	134	75	73	282	91	15		906




= ONLINE COURSE

SECURITY & FACILITATION

COURSE TITLE	NUMBER OF TRAINEES	APAC	MID	NACC	SAM	EUR/NAT	ESAF	WACAF	ICAO HQ	Total
	1. Catering Security			16						
2. Cross Cultural Awareness skills for Immigration officers			21							21
Total		/	37	/	/	/	/	/	/	37

TRAINING COMPETENCY DEVELOPMENT

COURSE TITLE	NUMBER OF TRAINEES	APAC	MID	NACC	SAM	EUR/NAT	ESAF	WACAF	ICAO HQ	Total
	1. On-the-Job Training Instructor				23					
2. Training Instructors Course (TIC) Part 2 Classroom		81	29	31	23	30	57	22		273
 3. Training Instructors Course (TIC) Part 1 Online		78	49	36	19	16	52			250
4. Training Developers Course (TDC)		78	27	8	51	53	15	26	16	274
5. Post Training Evaluation Course				11	12					23
6. Training Managers Course (TMC)		12				22			7	41
7. Validating Competency-based Training					4				7	11
Total		249	105	109	109	121	124	48	30	895

AVIATION MANAGEMENT






COURSE TITLE	NUMBER OF TRAINEES	APAC	MID	NACC	SAM	EUR/NAT	ESAF	WACAF	ICAO HQ	Total
	1. Airport Management Professional Accreditation Programme (AMPAP)		53	35	49		7		14	
2. Management Certificate in Civil Aviation									27	27
Total		53	35	49	/	7	/	14	27	185

THE TRAINAIR PLUS™ PROGRAMME NETWORK

ICAO's Cooperative Training Network

Share and benefit from Standardized Training Packages and industry best practices with ICAO's expanding global base of aviation training partners.




97 MEMBERS AND PARTNERS OF THE TRAINAIR PLUS™ PROGRAMME:

-  Corporate Partners
-  Regional Training Centres of Excellence (RTCE)
-  Full Members
-  Associate Members
-  New Status

CORPORATE PARTNERS (4)

















- Concordia University - John Molson School of Business 
- Federal Aviation Administration Flight Standards Training Division AFS-500 
- International Air Transport Association (IATA) 
- University of Waterloo 

NORTH AMERICA CENTRAL AMERICA THE CARIBBEAN (11)

- BARBADOS
The Barbados Civil Aviation Training Centre  
- CANADA
The ASI Institute, A Division of Aviation Strategies International 
- CUBA
Centro de Adiestramiento de la Aviación (CAA) 
- DOMINICAN REPUBLIC
Academia Superior de Ciencias Aeronáuticas (ASCA) 
- EL SALVADOR
Instituto Centroamericano de Capacitación Aeronáutica (ICCAE) de COCESNA 
- JAMAICA
Civil Aviation Authority Training Institute (CAATI) 
- MEXICO
Centro Internacional de Instrucción de Aeropuertos y Servicios Auxiliares. Ingeniero Roberto Kobeh González 
- TRINIDAD AND TOBAGO
Trinidad and Tobago Civil Aviation Authority Civil Aviation Training Centre 
- UNITED STATES
Delex Systems, Inc. 
- Federal Aviation Administration (FAA) Academy 

The Washington Consulting Group (WCG), Inc.
The Technical Training Group 

SOUTH AMERICA (12)

- ARGENTINA
Centro de Instrucción, Perfeccionamiento y Experimentación (CIPE) 
- BOLIVIA
Instituto Nacional de Aviación Civil (INAC) 
- BRAZIL
Centro de Treinamento da Agencia Nacional de Aviação Civil (ANAC) 
- CHILE
Escuela Técnica Aeronáutica  
- COLOMBIA
Centro de Estudios de Ciencias Aeronáuticas - CEA 
- Corporación Educativa Indoamericana (CEI) 
- ECUADOR
Escuela Técnica de Aviación Civil (ETAC) 
- PARAGUAY
Instituto Nacional de Aeronáutica Civil (INAC) 
- PERU
Centro de Instrucción de Aviación Civil (CIAC) de CORPAC 
- SURINAME
Polytechnic College Suriname  
- URUGUAY
Instituto de Adiestramiento Aeronáutico - DINACIA 
- VENEZUELA
Instituto Universitario de Aeronáutica Civil (IUAC) 
- EUROPE (16)
- BELGIUM
Wallonie Aerotraining Network (WAN) 
- FRANCE
CAMAS International 



Français de Formation des
Pompiers d'Aéroport (C2FPA) ●

Ecole Nationale de l'Aviation Civile
(ENAC) ●

GERMANY
Star Wings Aviation Training Centre
GmbH ●

ITALY
ENAV Academy ●

KAZAKHSTAN
Professional Training Center RSE
"Kazaeronavigatsia" ●

LUXEMBOURG
EUROCONTROL Institute of
Air Navigation Services ●

NETHERLANDS
Joint Aviation Authorities Training
Organisation
(JAA TO) ●

RUSSIAN FEDERATION
Institute of Air Navigation (IAN) ●

Domodedovo Training LLC ●

SPAIN
Servicios y Estudios para la
Navegación Aérea y la Seguridad
Aeronáutica (SENASA) ●

SWEDEN
Entry Point North AB Nordic
ATS Academy ●

TURKEY
Turkish Aviation Academy ●

UNITED KINGDOM
International Fire Training Centre
(IFTC) Serco ●

NATS Training Services ●

AFRICA (20)

ALGERIA
Établissement National de la
Navigation Aérienne (CQRENA)
● +

ANGOLA
Enana-EP/ Centro Aeronáutico de
Instrução ● +

BOTSWANA
IAS Aviation Academy ●

CAMEROON
Ecole Régionale de Sécurité
Incendie (ERSI) ●

EGYPT
Egyptair Training Academy ●

Egyptian Aviation Academy
(EAA) ●

ETHIOPIA
Ethiopian Aviation Academy
(EAA) ●

Ethiopian Civil Aviation Training
Centre (ECATC) ●

KENYA
East African School of Aviation
(EASA) ●

MAURITIUS
Airports of Mauritius Co Ltd.
Aviation Training Centre ● +

MOROCCO
Académie Internationale
Mohamed VI de l'Aviation Civile
(AIAC) ●

Loumed Cabin Crew Training
Center (LCCTC) ● +

NIGER
Ecole Africaine de la Météorologie
et de l'Aviation Civile (EAMAC) ●

NIGERIA
Flying School and Air Traffic
Services & Communications
School of the Nigerian College of
Aviation Technology (NCAT) ● +

SENEGAL
Ecole Régionale de la Navigation
Aérienne et Management
(ERNAM) ●

SOUTH AFRICA
Air Traffic and Navigation
Services (ATNS) –
Aviation Training Academy ●

SUDAN
Sudan Academy for Aviation
Sciences and Technology
(SUDAFAST) ●

TANZANIA
Civil Aviation Training Centre
(CATC) ●

TUNISIA
Académie Tuniso-Française de
Formation en Sûreté de l'Aviation
Civile (AFSAC) ●

ZAMBIA
Zambia Air Services Training
Institute (ZASTI) ● +

MIDDLE EAST (9)

IRAN (ISLAMIC REPUBLIC OF)
Civil Aviation Technology College
(CATC) ●

JORDAN
Queen Noor Civil Aviation
Technical College (QNCATC) ●

KUWAIT
Australian College of Kuwait (ACK) ●

LEBANON
Middle East Airlines
Training Center ●

OMAN
Oman Airports Management
Company Learning & Development
Center ●

QATAR
Qatar Aeronautical College
(QAC) ●

SAUDI ARABIA
Saudi Academy of Civil Aviation
(SACA) ●

UNITED ARAB EMIRATES
GALANS Training Centre ●

Gulf Center for Aviation
Studies (GCAS) ●

ASIA/PACIFIC (25)

AUSTRALIA
ASSET Aviation Institute ●

BANGLADESH
Civil Aviation Training
Centre (CATC) ●

CHINA
Capital Airports
Management Academy ●

Civil Aviation University of China
(CAUC) ●

Hong Kong International Aviation
Academy (HKIAA) ● +

INDIA
Airports Authority Rescue and Fire
Fighting Services Training Centre ●

Civil Aviation Training College
Allahabad ●

Fire Service Training Center (FSTC) ●

GMR Aviation Academy ●

Indian Aviation Academy (IAA) ●

INDONESIA
Air Transportation Human
Resources Development Centre
(ATHRDC) ●

Indonesia Civil Aviation Institute
Sekolah Tinggi Penerbangan
Indonesia ●

JAPAN
Aeronautical Safety College
(ASC) ●

MALAYSIA
Malaysia Aviation Academy (MAVA) ●

MONGOLIA
Training Centre of the Mongolia
Civil Aviation Authority
(TCMAA) ● +

NEPAL
Civil Aviation Academy of
Nepal (CAAN) ●

NEW ZEALAND
Airways New Zealand
Training Centre ●

PAKISTAN
Civil Aviation Training
Institute (CATI) ● +

PHILIPPINES
Civil Aviation Training Center
Civil Aviation Authority ●

REPUBLIC OF KOREA
Civil Aviation Training Centre of
Korea Airports Corporation (KAC) ●

Incheon Airport Aviation
Academy (IAAA) ●

SINGAPORE
Singapore Aviation Academy (SAA) ●

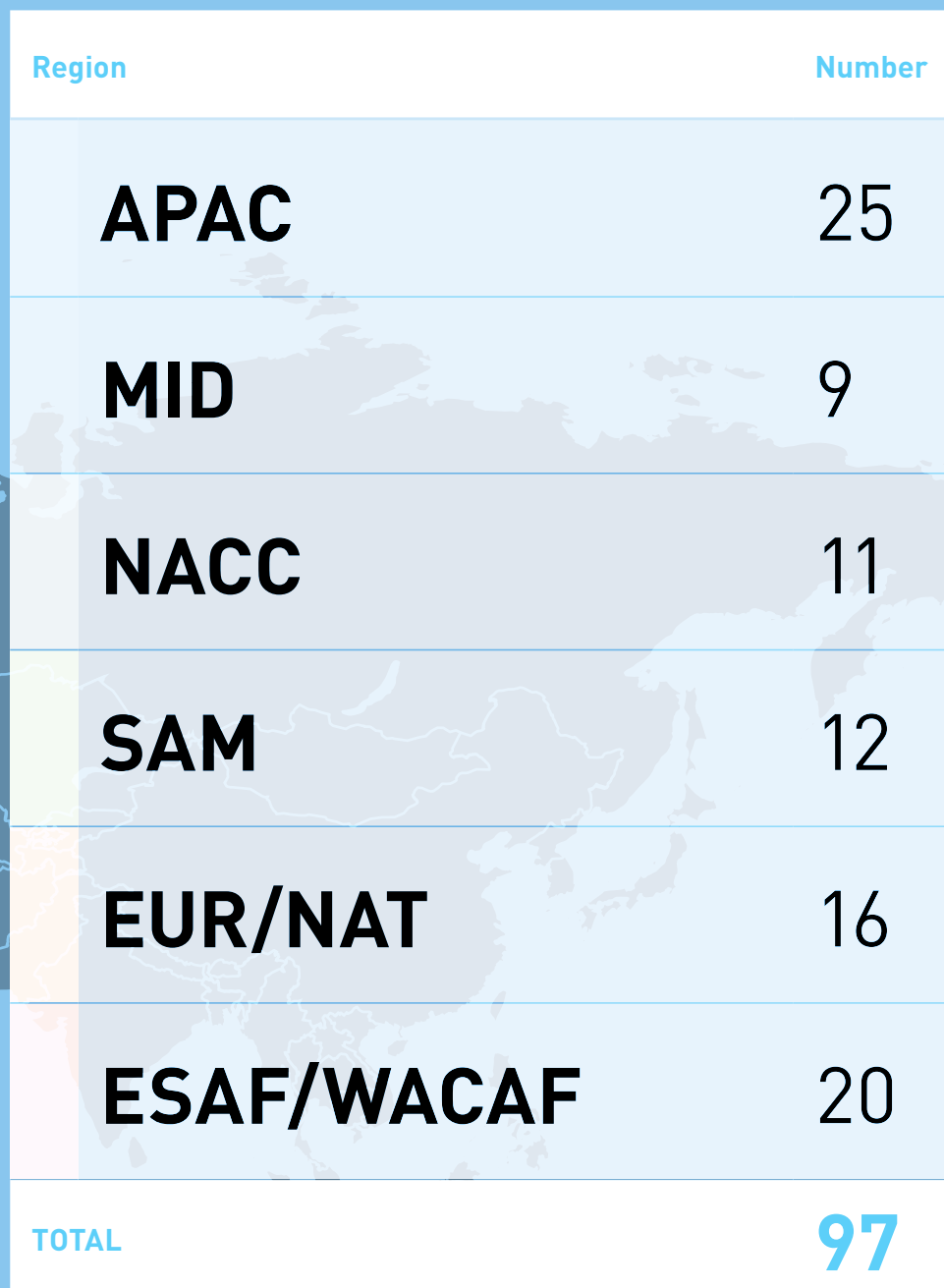
SRI LANKA
Civil Aviation Training Centre (CATC) ●

Sri Lankan Aviation College ●

THAILAND
Civil Aviation Training Centre (CATC) ●

THE TRAINAIR PLUS™ PROGRAMME NETWORK

REGIONAL DISTRIBUTION



Region	Number
APAC	25
MID	9
NACC	11
SAM	12
EUR/NAT	16
ESAF/WACAF	20
TOTAL	97



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CONTACT

**International Civil Aviation
Organization**

**Global Aviation Training Office
TRAINAIR PLUS Programme**

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