Advisory Circular

GUIDANCE ON TRAINING AND COMPETENCY REQUIREMENTS OF AERODROME OPERATIONAL AND MAINTENANCE PERSONNEL

AC AGA–TCR–01–2024

(First Issue)

Advisory Circulars (AC) are intended to provide recommendations and guidance, illustrate a means-but not necessarily the only means of complying with regulatory requirements, or to explain certain regulatory requirements by providing interpretative and explanatory materials.

CAAP will generally accept that when the provisions of an Advisory Circular have been met, compliance with the relevant regulatory obligations has been satisfied.

Where an AC is referred to in a "Note" within regulatory documentation, the AC remains as a guidance material.

ACs should always be read in conjunction with the referenced regulations.

I.   PURPOSE

This Advisory Circular (AC AGA-TCR-01-2024) is issued to provide guidance and information related to the importance of developing and implementing a training program for the competency of Aerodrome operational and maintenance personnel.

II.   APPLICATION

AC AGA-TCR-01-2024 is applicable to all airport operators in the Philippines to ensure that aerodrome operational and maintenance personnel are trained and capable of performing their duties in an efficient and effective manner.

III.   RELATED RULES

This AC relates specifically to the requirements of CAR-Aerodromes under 2.2.093 - Competence of operational and maintenance personnel and under 2.2.115 -   Training of aerodrome personnel. Manual of Standards for Aerodromes under Chapter 3 Section 3.1.4.2 supplements these requirements through the implementation of a training program for the competency requirement of aerodrome operational and maintenance personnel.

IV.   REFERENCES

Civil Aviation Regulations for Aerodromes

Manual of Standards for Aerodromes

Civil Aviation Regulations Safety Management

Manual of Standards for Aeronautical Information Services

ICAO Annex 14 Vol. I - Aerodrome Design and Operations

ICAO Annex 15 — Aeronautical Information Services

ICAO Annex 19 - Safety Management

ICAO DOC 9859 - Safety Management Manual

ICAO DOC 9774 - Manual on Certification of Aerodromes

ICAO DOC 9137 - Airport Services Manual
    Part 1—   Rescue and Fire Fighting
    Part 2—   Pavement Surface Conditions
    Part 3—   Wildlife Hazard Management
    Part 5—   Removal of Disabled Aircraft

Part 6— Control of Obstacles
Part 7— Airport Emergency Planning
Part 8— Airport Operational Services
Part 9— Airport Maintenance Practices

ICAO DOC 9157 - Aerodrome Design Manual
Part 1— Runways
Part 2— Taxiways, Aprons and Holding Bays
Part 3— Pavements
Part 4— Visual Aids

ICAO DOC 9184 - Airport Planning Manual
Part 1— Master Planning
Part 2— Land Use and Environmental Control

ICAO DOC 9870 - Manual on Prevention of Runway Incursion

ICAO DOC 9365 - Manual of all Weather Operations

ICAO DOC 9476 - Manual of Surface Movement Guidance and Control Systems (SMGCS)

ICAO DOC 9674 - World Geodetic System — 1984 (WGS-84) Manual

ICAO DOC 9981 - PANS Aerodromes

ASIA/PACIFIC Regional Guidance on Aerodrome Operations Personnel Competency Requirement Framework Version 1.0 – December 2020

Other Publications

ACI Apron Safety Handbook

ACI Runway Safety Handbook

ACI Wildlife Hazard Management Handbook

ACI Managing Operations During Construction Handbook

V.   **ACKNOWLEDGEMENT**

*Note 1: Guidance on competency and training of aerodrome rescue and
firefighting personnel is available in AC AGA-RFFS-TCR-01-2024.*

*Note 2: Guidance on foreign object debris (FOD) training, wildlife hazard
management training and framework for an airside vehicle driver training
programme is available in PANS-Aerodrome (ICAO Document 9981).*

VI.   **COPIES OF THIS AC**

AC AGA-TCR-01-2024 is available and can be downloaded at the official
website of CAAP at www.caap.gov.ph. A printed copy of this AC can be
requested from the Regulatory Safety Standards Division (RSSD) of the
Aerodrome and Air Navigation Safety Oversight Office (AANSOO), Civil
Aviation Authority of the Philippines, located at MIA Road corner, Ninoy
Aquino Avenue, Pasay City, Metro Manila, 1300 with Tel. No.: (02) 8246
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AC AGA-TCR-01-2024
GUIDANCE ON TRAINING AND COMPETENCY REQUIREMENTS OF AERODROME OPERATIONAL AND MAINTENANCE PERSONNEL

FOREWORD

Pursuant to the overarching mandate to uphold safety and efficiency within the realm of aviation operations and in adherence to the regulatory edicts as provided by the Civil Aviation Authority of the Philippines (CAAP) and as prescribed by the International Civil Aviation Organization (ICAO), this Advisory Circular (hereinafter referred to as AC AGA-TCR-01-2024) is issued with the objective of providing Aerodrome Operators with comprehensive guidance on the development of a training program for the competency requirements of personnel involved in multifarious aerodrome maintenance and operations. It also aims to ensure that an adequate number of competent personnel are employed or engaged to perform all activities that impact the safety of operations at the aerodrome.

AC AGA-TCR-01-2024 outlines the training program and competency assessment of personnel involved in aerodrome and maintenance and operations, including a systematic procedure of record-keeping to ensure its availability and accessibility. It also explains the criteria and necessary inclusions for implementing a training program at the aerodrome, enabling Aerodrome Operators to establish comprehensive training framework.

Additionally, this AC provides guidance on the frequency for the review and assessment of the training program to ensure its continued effectiveness and relevance in catering to the current and evolving needs of the Philippine Aviation Sector.

It is incumbent upon the stakeholders within the aviation sector to recognize the immutable principle that the safety and efficacy of aviation operations are inextricably linked to the proficiency and competence of the personnel who execute operational and maintenance duties. In recognition of this cardinal principle, this AC has been developed to serve as a guidance, setting forth the minimum benchmarks of training and competency that Aerodrome Operational and Maintenance Personnel must attain and perpetually maintain.

Furthermore, it is imperative to underscore that this advisory circular is not to be construed as a substitute for, nor does it supersede any existing laws, regulations, or mandates. Rather, it should be interpreted as a supplementary instrument designed to enhance the understanding and implementation of the aforesaid statutory requirements. Operational and Maintenance Personnel, and the entities responsible for their employment and continuous professional development, are encouraged to integrate the principles and practices outlined in this AC for optimal operational safety and efficiency.

Lastly, AC AGA-TCR-01-2024 is dynamic in nature, reflective of the fluidity of the aviation domain. It is subject to periodic revisions and updates, which will be duly effected to encapsulate advancements in the aviation industry, shifts in operational paradigms, and the evolution of regulatory landscapes.

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CHAPTER 1. DEFINITIONS AND ACRONYMS

1.1   Definitions

Terms that have specific meaning within this AC are defined below.

Aerodrome. A defined area on land or water (including any buildings, installations, and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

Aeronautical Information Publication (AIP) – A publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation.

Movement area - That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the maneuvering area and the apron(s).

NOTAM – A notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.

On the Job Training. An essential phase in a training programme to reinforce the formal training.

Performance (Human Performance). Human Capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.

Training Program. Refers to a structured and organized plan developed by aerodrome operators in ensuring that their operations and maintenance personnel possess the knowledge and competencies required to perform the job roles efficiently. It encompasses a range of activities, including verifying theoretical knowledge and practical application, setting clear and achievable training objectives, monitoring progress, and maintaining accurate records. It entails theoretical, practical, and on-the-job training, as well as competency testing and recurrent training to demonstrate proficiency.

1.2   Acronyms

The acronyms and abbreviations used in this AC are listed below.

Acronym	Description
AANSOO	Aerodrome and Air Navigation Safety Oversight Office
AC	Advisory Circular

ADP	Airside Driver Permit
AGA	Aerodrome Ground Aids
AIP	Aeronautical Information Publication
AIS	Aeronautical Information Service
ANSP	Air Navigation Services Provider
AOPC	Aerodrome Operations Personnel Competency
ARFFS	Aerodrome Rescue and Fire Fighting Services
ATS	Air Traffic Service
AVP	Airside Vehicle Permit
CAA	Civil Aviation Authority
CAAP	Civil Aviation Authority of the Philippines
FOD	Foreign Object Debris
GSE	Ground Support Equipment
ICAO	International Civil Aviation Organization
LVO	Low Visibility Operations
MOS	Manual of Standards
NAVAIDs	Navigational Aids
NOTAM	Notice to Airman
OJT	On-The-Job Training
OLS	Obstacle Limitation Surfaces
PANS	Procedure for Air Navigation Services
RSSD	Regulatory Safety Standards Division
SARPs	Standards and Recommended Practices
SMS	Safety Management System
TCR	Training and Competency Requirements
WGS-84	World Geodetic System — 1984
WHMP	Wildlife Hazard Management Programme
WIP	Works In Progress

CHAPTER 2. TRAINING SCHEME

2.1   Manual of Standards for Aerodromes under Chapter 3, *Section 3.1.4.2 - Aerodrome operational staff and competency* - requires an operator of an aerodrome to ensure that an adequate number of competent personnel are employed or engaged to perform all activities in areas that affect the safety of operations at the aerodrome, including:

a)   Runway surface conditions assessment and reporting;
b)   Aerodrome movement area maintenance;
c)   Inspection of the movement area;
d)   Works In Progress on the airside;
e)   Foreign Object Debris (FOD);
f)   Wildlife Hazard Management;
g)   Apron safety;
h)   Runway Safety and;
i)   Aerodrome driver permit scheme and vehicle/equipment safety requirement.

2.2   Aerodrome operators shall be responsible for ensuring their staff are adequately trained for each task they are required to carry out. The details of the training will vary depending on the person's experience and background and the complexity of the required task.

2.3   The aerodrome operator must establish a training program to train, assess and maintain the competency of personnel involved in the maintenance and operations of the aerodrome.

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CHAPTER 3. AERODROME OPERATIONS PERSONNEL

3.1 Aerodrome operations personnel may be categorized into four levels of seniority in the organizational hierarchy. However, it depends on size and complexity of operations at a particular aerodrome. At smaller aerodromes, there may be only one or two categories/hierarchy of aerodrome personnel.

a) Accountable Executive;
b) Head of Aerodrome Operation/Maintenance (Technical Services);

Note – This refers to the senior managerial personnel overseeing the aerodrome operation / maintenance (technical services) matters that may have a different title.

c) Managers/Supervisors; and
d) Officers/Technicians.

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CHAPTER 4. TRAINING PROGRAM

4.1   A training program is a structured and organized plan developed by aerodrome operators in ensuring that their operations and maintenance personnel possess the knowledge and competencies required to perform the job efficiently.

4.2   The training program should:

a) identify the appropriate information, skills, and training for personnel to competently perform their work;
b) consider the aerodrome's infrastructure and operations (including the procedures in the aerodrome manual);
c) include training requirements that identify the task/responsibility and the required performance standards;
d) describe and specify the training frequency for each technical subject; and
e) include training records that track the training progress.

4.3   The operator should review the training program annually or whenever there is a change in regulation or after any accident, incident, or serious occurrence, to ensure that they remain relevant. Any shortfalls identified during the review or process should be addressed by making relevant changes to the training program and updating the training material.

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CHAPTER 5. STRUCTURE OF A TRAINING PROGRAM

5.1   The training program specifically defines the training requirements necessary to enable the operational and maintenance personnel in meeting the minimum qualifications. The training program should provide for different levels of training, minimally as follows:

a)   **Initial training**

Initial training is basically the first level of training that must be provided to personnel to accomplish the required tasks. The aerodrome operator should provide or must ensure that the initial training has been provided before they are assigned to carry out the required tasks independently.

b)   **Recurrent training**

Recurrent training should be provided to the personnel on a regular basis. The aerodrome operator should also consider factors that will trigger the need to conduct recurrent training, for example, when there is a change in key procedures. The operator should determine an appropriate interval for recurrent training to be conducted. Generally, the intervals should be at most 5 years from the initial training.

c)   **Refresher training**

Refresher training, including theoretical and practical aspects, should be provided for personnel who have:

i.   not perform any of their assigned tasks for a significant period of time;
ii.   been involved in an occurrence in which training-related issues have been identified as a contributing factor; or
iii.   been assessed to be less than competent.

Note: In such cases, the operator should consider putting in mechanisms to restrict the person(s) from performing a task until refresher training has been successfully completed.

5.2   The operator may provide training through the following methods:

a)   theoretical and knowledge-based instruction
b)   practical demonstration
c)   mentoring (on-the-job (OJT) training)

d) task simulation

5.3 Each level of training may encompass theoretical and practical OJT training as appropriate.

5.4 The operator should ensure that all training is conducted by trainer(s) with relevant knowledge and experience in the subject matter. The Curriculum Vitae (CVs) of the trainer(s) should be maintained.

Note.— Training for other activities, not contained in this document, may be carried out depending on the needs identified by the aerodrome operator.

CHAPTER 6. ASSESSMENT

6.1   The purpose of assessment is to ensure that the trained personnel are competent to carry out the required tasks. The operator should document the policy and procedures for competency assessment. An assessment should be included after training.

6.2   Competency can be assessed in various ways, such as the following:

a) Written and practical assessments;
b) Case study discussions; or
c) Formal qualification through specialized courses.

6.3   The operator should consider the factors required to conduct a re-assessment of competency, for example, when there is a significant change to the aerodrome's infrastructure, operating procedures, or aerodrome regulations.

6.4   The competency assessment should be conducted by a competent assessor. The assessor should observe the person's performance through practical observations and any associated engagements and compare the observations against the relevant training requirements.

6.5   The assessor should possess the relevant experience in the area of competency being assessed and/ or comparable qualifications.

6.6   For a team or section to be recognized as competent, periodical audits or checks (at least every 5 years) should be carried out and recorded. All shortfalls should be addressed by reviewing and updating the training material, refresher training or the frequency of refresher training. Similarly, after any accident, incident or serious occurrence, it may be prudent to review training to ensure it remains appropriate.

*Note 1:- **Appendix 2A-2I** provides a sample of Competency Matrices related to nine aerodrome operational functional areas specified in 1.1. Competency requirements of the Safety Manager's functions can be found in Chapter 9 of Safety Management Manual (ICAO Document 9859).*

*Note 2:- The following definitions may be used to determine the level of competency of the aerodrome operations personnel in the matrices provided in **Appendices 1 and 2**:*

*a) **Basic** - Possess basic fundamental knowledge and general awareness of the subject to comprehend the works and processes involved.*

Generally, applicable to management levels that oversee the operations. Basic level of competency maybe achieved attending a relevant course.

b) *__Intermediate__ - Possess technical skills and practical working knowledge of the subject that are required to execute the works competently under supervision. Generally, applicable to operational personnel or project officers who are responsible to perform the duties and are involved in planning/implementation of the system. Intermediate level of competency maybe achieved attending a relevant course and after having certain periods of practical experiences, as determined by the appropriate authority, on the relevant field or on-the-job trainings.*

c) *__Advanced__ - Possess advanced and in-depth knowledge to be able to provide training and expert opinion/advice on the subject. Generally, applicable to specialist who is well versed with the subject with hands-on experiences and specialised trainings. Advanced level of competency maybe achieved attending a specialized course and after having certain periods of practical experiences, as determined by the appropriate authority, on the relevant field.*

CHAPTER 7. TRAINING RECORDS

7.1   The aerodrome operator should implement a systematic way of record keeping which provides for the storage, accessibility, and retention of staff training information.

7.2   The training folders and records for each staff member should be reviewed regularly to verify that each staff member has received the required training, as well as to identify and track future training requirements.

7.3   The training records must be kept for twelve (12) months after the last day of employment of the personnel by the operator, and these records include minimally the following:

a)   name of the staff assessed;
b)   dates of training and/ or competency assessment;
c)   methodology of the assessment;
d)   performance evaluation of the person being assessed; and,
e)   name and signature of the assessor.

7.4   The training records should be maintained and updated regularly to:

a)   indicate the most current training completed;
b)   ensure legibility throughout their retention period; and,
c)   be made readily accessible and available.

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AERODROME OPERATIONS PERSONNEL COMPETENCY REQUIREMENTS

APPENDIX 1
Table A1-0: AOPC Matrix - Accountable Executive

Aerodrome Operations Personnel	Competency areas (knowledge, skills and attitudes)	Required Competency Level (Basic/ Intermediate/ Advanced)	Training Areas	Required Type of Training (Initial, OJT, Refresher, Recurrent, Specialised)	Requirement of Competency Test
Accountable Executive	National Legislation and regulations/requirements including the need for aerodrome certification. ICAO References: • ICAO Annexes 14 and 19 • ICAO Doc 9774 – Manual on Certification of Aerodromes • ICAO Doc 9981 – PANS Aerodromes	Basic	A. National aerodrome regulations B. ICAO Annex 14 requirements on aerodrome certification C. ICAO Annex 19 requirements on SMS	A. Initial training B. Recurrent training (when significant amendment/changes applied)	No
	Aerodrome operations and safety management system	Basic	Aerodrome/SMS manuals	A. Initial training	No

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APPENDIX 2

A) Table A2 - 1: AOPC Matrix - Runway Surface Conditions Assessment and Reporting

Aerodrome Operations Personnel	Competency areas (knowledge, skills and attitudes)	Required Competency Level (Basic/ Intermediate/ Advanced)	Training Areas	Required Type of Training (Initial, OJT, Refresher, Recurrent, Specialised)	Requirement of Competency Test
Head of Aerodrome Operation	National Legislation and regulations / requirements, including aerodrome certification process.	Basic	National aerodrome regulations	A. Initial training B. Recurrent training (when significant amendment/ changes applied)	No
	Aerodrome operations and safety management system	Basic	A. Relevant parts of aerodrome/SMS manuals B. Airside Safety and Operations	A. Initial training B. Recurrent training	No
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	No
	Job related requirements:	Basic	Runway Condition Reporting	A. Initial training B. Recurrent training	No

	National and international requirements and best practices on:
	
	a. Runway pavement characteristics with different types of distress on runway pavement
	
	b. Runway friction evaluation and assessment
	
	c. Runway surface conditions assessment
	
	References:
	
	   • ICAO Annexes 14 and 19
	   • ICAO Doc 9981- PANS Aerodromes
	   • ICAO Doc 9137 - Airport Services Manual, Part 2 - Pavement Surface condition.
	   • ICAO Doc 9157- Aerodrome Design Manual, Part 3 – Pavements
	   • ICAO Doc 9859 - Safety
				C. Refresher training as required	

	Management Manual				
Managers/ Supervisors	a. National Legislation and regulations / requirements, including aerodrome certification process b. NOTAM/ SNOWTAM c. AIP	Basic	a. National aerodrome regulations; b. NOTAM/SNOWTAM c. AIP	A. Initial training B. Recurrent training C. Refresher training as required D. Specialized training	Yes
	<u>Aerodrome operations and Safety management system, covering:</u> a. Identification of safety Hazards b. Risk assessment and Mitigation c. Accident/Incident Investigation d. Safety/Audits Inspections	Intermediate	Relevant parts of aerodrome/SMS manuals	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	Yes

	Job related requirements:	Advanced	a. Aerodrome Pavement Maintenance	A. Initial training	Yes
	a. Pavement characteristics			B. Recurrent training	
	b. Evaluation of pavements and identification of types of distress		b. Friction measurement training provided by friction testing equipment manufacturer	C. Refresher training if required	
	c. Correct use of equipment as required for friction testing and other assessments			D. Specialized training as required	
	d. Friction assessment, evaluation and reporting methodology		c. Runway Condition Reporting		
	e. Procedures for reporting runway surface conditions		d. Airside Safety and Operations		
	f. Radiotelephone		e. Runway Incursion Awareness and Prevention		
	g. Runway incursion				
	h. FOD management		f. Radiotelephone phraseology		
	References: • ICAO Annexes 14 and 19 • ICAO Doc 9981- PANS Aerodromes				

	• ICAO Doc 9859 - Safety Management Manual • ICAO Doc 9137 - Airport Services Manual, Part 2 - Pavement Surface condition. • ICAO Doc 9157 - Aerodrome Design Manual, Part 3 – Pavements (relevant Chapters only)				
Officers/ Technicians	a. National Legislation and regulations / requirements including aerodrome compliance to regulations (applicable parts/chapters only) b. NOTAM/ SNOWTAM c. AIP	Basic	a. National aerodrome regulations b. NOTAM/SNOWTAM c. AIP	A. Initial training B. Recurrent training C. Refresher training if required	Yes
	Aerodrome operations (applicable parts/chapters) and safety management system, covering: a. Identification of safety Hazards b. Safety reporting –	Intermediate	a. Relevant parts of aerodrome/SMS manuals	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes

	mandatory, voluntary and confidential reports on hazard and risk management				
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes
	Job related requirements: a. Pavement characteristics b. Evaluation of pavements and identification of types of distress c. Correct use of equipment as required for friction testing d. Friction assessment, evaluation and reporting methodology e. Procedures for reporting runway surface conditions f. Radiotelephone g. Runway incursion	Intermediate	a. Aerodrome Pavement Maintenance b. Friction measurement training provided by friction testing equipment manufacturer c. Runway Condition Reporting d. Airside Safety and Operations e. Runway Incursion Awareness and Prevention f. Radiotelephone phraseology	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes

	h. FOD management References: • ICAO Annex 14 (applicable chapters only) • ICAO Doc 9981-PANS-Aerodromes (applicable parts/chapters only) • ICAO Doc 9137 - Airport Services Manual, Part 2 - Pavement Surface condition			

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B) Table A2-2 Matrix - Aerodrome Movement Area Maintenance

Aerodrome Operations Personnel	Competency areas (knowledge, skills and attitudes)	Required Competency Level (Basic/ Intermediate/ Advanced)	Training Areas	Required Type of Training (Initial, OJT, Refresher, Recurrent, Specialised)	Requirement of Competency Check
Head of Aerodrome Maintenance (Technical Services)	National Legislation and regulations / requirements, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training (when significant amendment/changes applied)	No
	Aerodrome operations and safety management system	Basic	Relevant parts of aerodrome/ SMS manuals	A. Initial training B. Recurrent training	No
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	No

	Job related requirements: National and International requirements and best practices on: a. Aerodrome pavement management system b. Runway surface conditions assessment c. Obstacle limitation Surfaces d. Maintenance Management Aerodrome visual aids	Basic	Understanding ICAO Annex 14 and PANS-Aerodromes	A. Initial training B. Recurrent training C. Refresher training as required	No
	References: • ICAO Annexes 14 and 19 • ICAO Doc 9981 - PANS Aerodromes • ICAO Doc 9137 - Airport Services Manual, Part 2 – Pavements • ICAO Doc 9859 - Safety Management Manual				
Managers/ Supervisors	a. National Legislation	Basic	a. National aerodrome regulations;	A. Initial training	Yes

	and regulations / requirements, including aerodrome certification process b. NOTAM c. AIP		b. NOTAM c. AIP	B. Recurrent training C. Refresher training as required D. Specialized training	
	Aerodrome operations and Safety management system covering: a. Identification of safety Hazards b. Risk assessment and Mitigation c. Accident/incident investigation d. Safety/Audits Inspections e. Occupational health and safety	Intermediate	Relevant parts of Aerodrome/SMS manuals	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	Yes

	Job related requirements:	Advanced				Yes
	a. Developing SOP b. Preventive maintenance of visual aids and paved and non-paved movement areas c. Runway Incursion d. Radiotelephone e. Maintenance Management f. Removal of runway contaminants (e.g. rubber, fuel etc.) g. Providing maintenance Trainings h. FOD management		a. Understanding ICAO Annex 14 and PANS-Aerodromes b. Aerodrome Pavement Maintenance c. Airfield Lighting including PAPI/VASIS Maintenance d. Maintenance of Markings, Signs and markers e. Removal of Contaminants from Aerodrome Pavements f. Runway Incursion Awareness and Prevention g. Radiotelephone phraseology	A. Initial training B. Recurrent training C. Refresher training as required D. Specialized training as required		

			h. Maintenance of Unpaved Surfaces		
	References: • ICAO Annexes 14 and 19 • ICAO Doc 9981- PANS Aerodromes • ICAO Doc 9137 - Airport Services Manual, Part 2 Pavement Surface condition. • ICAO Doc 9137 - Airport Services Manual, Part 6 Control of Obstacles • ICAO Doc 9137 - Airport Services Manual, Part 8 Airport Operational Services • ICAO Doc 9137 - Airport Services Manual, Part 9 Maintenance practices • ICAO Doc 9137 - Airport Services Manual, Part 5 Electrical Systems • ICAO Doc 9859 - Safety Management Manual				
Officers / Technicians (Carrying out day-to day Aerodrome	a. National Legislation and regulations / requirements, including aerodrome compliance to regulations (applicable	Basic	a. National aerodrome regulations; b. NOTAM	A. Initial training B. Recurrent training	Yes

Movement Area Maintenance)	parts only) b. NOTAM c. AIP		c. AIP	C. Refresher training as required	
	Aerodrome operations and safety management system, covering: a. Identification of safety Hazards b. Safety reporting – mandatory, voluntary & confidential	Intermediate	Relevant parts of aerodrome and SMS manuals	A) Initial training + OJT	Yes
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes
	Job related requirements: a. Pavement characteristics b. Method and technology for pavements	Intermediate	a. Understanding ICAO Annex 14 and PANS-Aerodromes b. Airside Safety and Operations c. Aerodrome	A. Initial training + OJT B. Recurrent training	Yes

	maintenance c. Maintenance of the paved and unpaved areas including storm-water drainage systems d. Maintenance of aerodrome visual aids e. Foreign Object debris (FOD) management f. Protection of navigational aids References: • Relevant parts of ICAO Annex 14 • ICAO Doc 9981 - PANS-Aerodromes (applicable parts/chapters only) • ICAO Doc 9137 - Airport Services Manual , Part 2 Pavement Surface condition. • ICAO Doc 9137 - Airport Services Manual , Part 6 Control of Obstacles • ICAO Doc 9137 - Airport Services Manual, Part 8 Airport Operational Services • ICAO Doc 9137 - Airport		Pavement Maintenance d. Airfield Lighting Maintenance e. Maintenance of Markings, Signs and markers f. Removal of Contaminants from Aerodrome Pavements g. Runway Incursion Awareness and Prevention h. FOD Training i. Maintenance of Unpaved Surfaces j. Radiotelephone phraseology	C. Refresher training as required	

	Services Manual, Part 9 Maintenance practices • ICAO Doc 9137 - Airport Services Manual, Part 2 Pavements • ICAO Doc 9137 - Airport Services Manual, Part 5 Electrical Systems • ICAO Doc 9859 - Safety Management Manual			

Note:- Managers/supervisors and Officers / Technicians carrying out day-to day aerodrome movement area maintenance may be from Civil Engineering or Electrical Engineering background depending on the field of the maintenance..

C) Table A2-3 Matrix - Inspection of Movement Area

Aerodrome Operations Personnel	Competency areas (knowledge, skills and attitudes)	Required Competency Level (Basic/ Intermediate/ Advanced)	Training Areas	Required Type of Training (Initial, OJT, Refresher, Recurrent, Specialised)	Requirement of Competency Check
Head of Aerodrome Operation	National Legislation and regulations / requirements, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training (when significant amendment/changes applied)	No
	National Legislation and regulations / requirements, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training (when significant amendment/changes applied)	No
	Aerodrome operations and safety management system	Basic	Relevant parts of aerodrome/SMS manuals	A. Initial training B. Recurrent training	No
	Aerodrome layout	Intermediate	Aerodrome layout	A. Initial training	No

			(Based on aerodrome layout drawing and onsite orientation)	B. Recurrent training C. Refresher training as required	
	Job related requirements: National and international requirements and best practices on: a. Wildlife Hazard Management b. Obstacle limitation Surfaces c. Movement area Inspection d. Visual aids e. Low visibility operations, if applicable f. Adverse weather operations g. FOD management	Basic	a. Aerodrome safeguarding b. Aerodrome Inspection c. Airside safety and operations (which includes Wildlife Hazard Management, Adverse Weather, Low Visibility Operations)	A. Initial training B. Recurrent training C. Refresher training as required	No

	References: • ICAO Annexes 14 and 19 • ICAO Doc 9981 - PANS Aerodromes • ICAO Doc 9137 - Airport Services Manual, Part 2 Pavement Surface condition. • ICAO Doc 9137 - Airport Services Manual, Part 6 Control of Obstacles • ICAO Doc 9137 - Airport Services Manual, Part 8 Airport Operational Services • ICAO Doc 9137 - Airport Services Manual , Part 3 Wildlife Control and Reduction • ICAO Doc 9157 -			

	Aerodrome Design Manual , Part 4 – Visual Aids • ICAO Doc 9365 - Manual of all Weather Operations • ICAO Doc 9859 - Safety Management Manual				
Managers/ Supervisors	<u>National and international requirements:</u> a. National Legislation and regulations / requirements, including aerodrome certification process b. NOTAM c. AIP	Basic	a. National aerodrome regulations; b. NOTAM c. AIP	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	<u>Aerodrome operations and</u>	Intermediate	Relevant parts of aerodrome/SMS manuals	A. Initial training B. Recurrent training	Yes

	Safety management system, covering: a. Identification of safety Hazards b. Risk assessment and Mitigation c. Accident/Incident Investigation Safety/Audits Inspections			C.) Refresher training as required	
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Job related requirements: a. Developing SOP related to inspection of movement area b. Radiotelephone c. Runway incursion	Advanced	a. Understanding ICAO Annex 14 and PANS-Aerodrome b. Aerodrome Inspection c. Aerodrome safeguarding d. Airside safety and	A. Initial training B. Recurrent training C. Refresher training as required D. Specialized training as required	Yes

d. Knowledge on Wildlife Hazard Management e. Obstacle limitation Surfaces f. Movement area Inspection g. Visual aids h. Low visibility operations, if applicable i. Adverse weather operations j. Providing Inspection Trainings k. FOD management References: • ICAO Annexes 14 and 19 • ICAO Doc 9981 - PANS Aerodromes • ICAO Doc 9859 - Safety Management		operations (which includes Wildlife Hazard Management, Adverse Weather, Low Visibility Operations) e. Radio telephony phraseology f. Runway incursion awareness and prevention	

	Manual • ICAO Doc 9157 - Aerodrome Design Manual , Part 4 – Visual Aids • ICAO Doc 9137 - Airport Services Manual, Part 2 Pavement Surface Condition. • ICAO Doc 9137 - Airport Services Manual, Part 6 Control of Obstacles • ICAO Doc 9137 - Airport Services Manual, Part 8 Airport Operational Services • ICAO Doc 9137 - Airport Services Manual, Part 3 Wildlife Control and Reduction • ICAO Doc 9365 - Manual of all Weather Operations				
Officers/ Technicians	a. National Legislation and regulations /	Basic	a. National aerodrome regulations	A. Initial training	Yes

(Carrying out day-to day inspection of the movement area)	requirements including aerodrome compliance to regulations (applicable parts/chapters only) b. NOTAM c. AIP		b. NOTAM c. AIP	B. Recurrent training C. Refresher training as required	
	Aerodrome operations and safety management system, covering: a. Identification of safety hazards b. Safety reporting – mandatory, voluntary & confidential	Intermediate	Relevant parts of aerodrome/SMS manuals	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes
	Job related requirements:	Intermediate	a. Understanding ICAO Annex 14 including	A. Initial training + OJT	Yes

a. Radiotelephone b. Runway incursion c. Wildlife Hazard Management d. Obstacle Control e. Visual aids f. Low visibility operations, if applicable g. Adverse weather operations h. FOD management References: • ICAO Annex 14 (applicable parts only) • ICAO Doc 9981-PANS-Aerodromes (applicable parts/chapters only) • ICAO Doc 9157 - Aerodrome Design		PANS Aerodrome b. Aerodrome Inspection c. Aerodrome safeguarding d. Airside safety and operations (which includes Wildlife Hazard Management, Adverse Weather, Low Visibility Operations) e. Radio telephony phraseology f. Runway incursion awareness and prevention g. Adverse weather and low visibility operations (if applicable)	B. Recurrent training C. Refresher training as required

	Manual, Part 4 – Visual Aids			
	• ICAO Doc 9137 - Airport Services Manual, Part 6 Control of Obstacles			
	▪ ICAO Doc 9137 - Airport Services Manual, Part 8 - Airport Operational Services			
	▪ ICAO Doc 9137 - Airport Services Manual, Part 3 - Wildlife Control and Reduction			
	▪ ICAO Doc 9365 - Manual of all Weather Operations			
	▪ ICAO Doc 9859 - Safety Management Manual			

D) Table A2-4 Matrix - Works in Progress on the Airside

Aerodrome Operations Personnel	Competency areas (knowledge, skills and attitudes)	Required Competency Level (Basic/ Intermediate/ Advanced)	Training Areas	Required Type of Training (Initial, OJT, Refresher, Recurrent, Specialised)	Requirement of Competency Check
Head of Aerodrome Maintenance (Technical Services)	National Legislation and regulations / requirements, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training (when significant amendment/changes applied)	No
	Aerodrome operations and safety management system	Basic	Relevant parts of aerodrome/SMS manuals	A. Initial training B. Recurrent training	No
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	No
	Job related requirements:	Basic	a. Understanding ICAO Annex 14 and PANS-	A. Initial training	No

	National and International requirements and best practices on:		Aerodromes	B. Recurrent training
	a. Compliance with aerodrome works safety plan and procedures including OLS		b. Aerodrome Safety Management System	C. Refresher training as required
	b. Aerodrome emergency plan		c. Accident/incident investigation	
	c. Development of training program to mitigate potential safety hazards caused by works in progress		d. Runway incursion Awareness and Prevention	
	d. Works authorization procedure		e. Aerodrome Inspection	
	e. Promoting safety awareness		f. Managing Works in Progress	
	f. Accidents and incidents Investigation			
	g. Hazards Identification and Risk management			
	h. Conduct of internal safety audit Implementation of the proposed mitigations;			
	i. Coordination with ATS and other stakeholders/agencies,			

	as required				
	References: • ICAO Annexes 14 and 19 • ICAO Doc 9981 - PANS-Aerodromes • ICAO Doc 9859 - Safety Management Manual • CAA Advisory Circular (Guidance materials)				
Managers/ Supervisors	a. National Legislation and regulations / requirements, including aerodrome certification process b. NOTAM c. AIP	Basic	a. National aerodrome regulations b. NOTAM c. AIP	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	<u>Aerodrome operations and safety management system, covering:</u> a. Identification of safety Hazards b. Risk assessment and Mitigation c. Accident/incident	Intermediate	Relevant parts of aerodrome and SMS manuals	A. Initial training B. Recurrent training C. Refresher training as required	Yes

	investigation d. Safety/Audits Inspections e. Occupational Health and Safety				
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Job related requirements: a. Develop work safety plan and work control procedures b. Aerodrome emergency plan c. Provide work safety training d. Promote work safety awareness e. Evaluate and control of contractor f. Prepare inspection checklist g. Perform safety inspection h. Reduced runway length operations	Advanced	a. Understanding ICAO Annex 14 and PANS-Aerodromes b. Managing Operations during construction c. Runway incursion Awareness and Prevention which includes FOD control d. Emergency Planning and Response e. Airside operation	A. Initial training B. Recurrent training C. Refresher training as required D. Specialized training as required	Yes

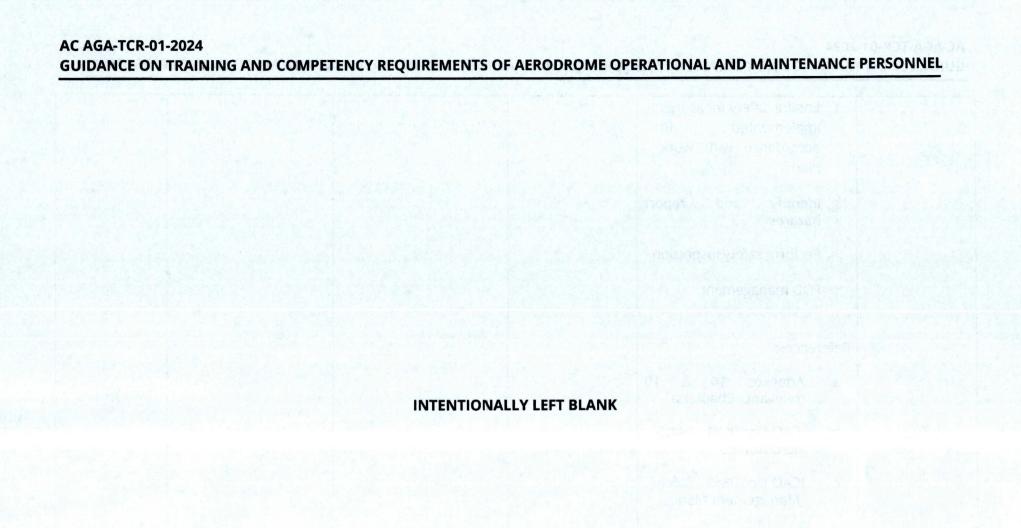|					
	i. FOD management References: • ICAO Annexes 14 and 19 • ICAO Doc 9981 - PANS-Aerodromes • ICAO Doc 9859 - Safety Management Manual • CAA Advisory Circular (relevant parts only)		and safety f. Aerodrome Safety Management System		
Officers/ Technicians	a. National Legislation and regulations / requirements including aerodrome compliance to regulations (applicable parts/chapters only) b. NOTAM c. AIP	Basic	a. National aerodrome regulations b. NOTAM c. AIP	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Aerodrome operations and safety management system, covering: a. Identification of safety Hazards b. Safety reporting – mandatory, voluntary and	Intermediate	Relevant parts of aerodrome and SMS manuals	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes

	confidential				
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes
	Job related requirements: a. Execute work safety plan and procedures and monitor the height of installations/equipment b. Role in aerodrome emergency plan c. Ensure works in progress in accordance with work plan d. Ensure working area are marked and lit in accordance with work plan e. Ensure access routes in accordance with work plan	Intermediate	a. Understanding Annex 14 and PANS-Aerodromes b. Managing Operations during construction c. Runway incursion Awareness and Prevention which includes FOD control d. Emergency Planning and Response e. Airside operation and safety f. Aerodrome Safety Management System	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes

	f. Ensure safety measures implemented in accordance with work plan g. Identify and report hazards h. Perform safety inspection i. FOD management References: a. Annexes 14 & 19 (relevant Chapters) b. ICAO Doc 9981 - PANS-Aerodromes c. ICAO Doc 9859 - Safety Management Manual d. CAA Advisory Circular (relevant parts only)			

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E) Table A2-5 Matrix - Foreign Object Debris Management

Aerodrome Operations Personnel	Competency areas (knowledge, skills and attitudes)	Required Competency Level (Basic/ Intermediate/ Advanced)	Training Areas	Required Type of Training (Initial, OJT, Refresher, Recurrent, Specialised)	Requirement of Competency Check
Head of Aerodrome Operation	National Legislation and regulations / requirements, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training (when significant amendment/changes applied)	No
	Aerodrome operations and safety management system	Basic	Relevant parts of aerodrome/SMS manuals	A. Initial training B. Recurrent training	No
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	No
	Job related requirements:	Basic	FOD Management (Refer to PANS- Aerodrome)	A. Initial training	No

	a. Documentation and Reporting b. Analysis and Evaluation c. FOD Mitigation References: • ICAO Annexes 14 and 19 • ICAO Doc 9981 - PANS-Aerodromes • Relevant parts of ICAO Doc 9137 • CAA Advisory Circular (Guidance materials)			B. Recurrent training C. Refresher training as required	
Managers/ Supervisors	National Legislation and regulations / requirements, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Aerodrome operations and safety management system covering: a. Identification of safety Hazards	Intermediate	Relevant parts of aerodrome/SMS manuals	A. Initial training B. Recurrent training C. Refresher training as required	Yes

	b. Risk assessment and Mitigation c. Accident/incident investigation Safety/Audits Inspections				
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Job related requirements: a. FOD management b. FOD occurrence analysis and evaluation c. Airside Driving d. Specific equipment operation e. Radiotelephone f. Aerodrome markings, signs and lights g. Familiar with actions for	Advanced	a. FOD Management (Refer to PANS-Aerodrome) b. Airside driving (Refer to PANS-Aerodromes) c. Radiotelephone phraseology d. Aerodrome markings, signs and lights e. FOD detection	A. Initial training B. Recurrent training C. Refresher training as required D. Specialized training as required	Yes

	emergency cases References: • ICAO Annexes 14 and 19 • ICAO Doc 9981 - PANS-Aerodromes • Relevant parts of ICAO Doc 9137 • CAA Advisory Circular (Guidance materials)		equipment (if applicable, provided by manufacturer)		
Officers/ technicians	National Legislation and regulations / requirements, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Aerodrome operations and safety management system covering: a. Identification of safety Hazards b. Safety reporting – mandatory,	Intermediate	Relevant parts of aerodrome/SMS manuals	A. Initial training + OJT B. Recurrent training	Yes

	voluntary and confidential c. FOD inspection and reporting				
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes
	Job Related Requirements: a. FOD inspection and reporting b. Airside Driving c. Specific equipment operation d. Radiotelephone e. Aerodrome markings, signs and lights f. Familiar with actions for emergency cases References: • ICAO Annexes 14 and	Intermediate	a. FOD Management (Refer to PANS-Aerodrome) b. Airside driving (Refer to PANS-Aerodromes) c. Radiotelephone phraseology d. Aerodrome markings, signs and lights e. FOD detection equipment (if	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes

	19		applicable, provided by manufacturer)		
	• ICAO Doc 9981 - PANS-Aerodromes				
	• Relevant parts of ICAO Doc 9137				
	• CAA Advisory Circular (Guidance materials)				

F) Table A2-6 Matrix - Wildlife Hazard Management

Aerodrome Operations Personnel	Competency areas (knowledge, skills and attitudes)	Required Competency Level (Basic/ Intermediate/ Advanced)	Training Areas	Required Type of Training (Initial, OJT, Refresher, Recurrent, Specialized)	Requirement of Competency Check
Head of Aerodrome Operation	National Legislation and regulations/requirement, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training (when significant amendment/changes applied)	No
	Aerodrome operations and safety management system	Basic	Relevant parts of aerodrome/SMS manuals	A. Initial training B. Recurrent training	No
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	Yes

| | Job related requirements:

Airport wildlife hazard management programme, focusing:

a. Role and responsibility of aerodrome wildlife committee;

b. Operational practices to control wildlife hazard;

c. Staff training requirements.

References:

• Annexes 14 and 19

• ICAO Doc 9981 - PANS Aerodromes

• ICAO Doc 9137 - Airport Services Manual, Part 3 - Wildlife Hazard Management; | Basic | Wildlife Hazard Management (Refer to PANS-Aerodrome) | A. Initial training

B. Recurrent training | No |

	• CAA Advisory Circular (if available)				
Managers/ Supervisors (In charge of wildlife hazard management of the airport)	National Legislation and regulations / requirements, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Aerodrome operations and safety management system, covering: a. Accident and incident investigation management b. Hazard and risk management including wildlife strike risk assessment and mitigation	Basic	Relevant parts of aerodrome/SMS manuals	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Job related requirements:	Advanced	a. Wildlife Hazard	A. Initial training	Yes

	a. Wildlife survey b. Understanding of habitat management - how wildlife is attracted to the environment c. Understanding of wildlife ecology - how wildlife could respond to different control methods d. Documentation and strike reporting e. Use of dispersal equipment and other methodology f. Review/evaluation of the effectiveness of the airport wildlife hazard management programme g. Radiotelephone		Management (Refer to PANS-Aerodrome) b. Dispersal equipment (provided by manufacturer) c. Radiotelephone phraseology d. Airside driving (Refer to PANS-Aerodromes)	B. Recurrent training C. Refresher training as required D. Specialized training as required	

	h. Airside driving References: - Annexes 14 and 19 - ICAO Doc 9981 - PANS Aerodromes - ICAO Doc 9137 - Airport Services Manual, Part 3 - Wildlife Hazard Management; - CAA Advisory Circular (if available)				
Officers/ Technicians (Doing day- to day wildlife surveys, patrols, dispersal)	National Legislation and regulations / requirements, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Aerodrome operations and safety management system, covering: a. Hazard and risk management b. Safety reporting – mandatory, voluntary and	Intermediate	Relevant parts of aerodrome/SMS manuals	Initial training + OJT	Yes

	confidential reports				
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes
	Job related requirements: a. Wildlife identification and management b. Biology and behavior of wildlife c. Documentation and strike reporting d. Use of dispersal equipment and other methodology e. Analysis and evaluation f. Wildlife habitat management g. Migration of bird h. Airside driving	Intermediate	a. Wildlife Hazard Management (Refer to PANS- Aerodrome) b. Dispersal equipment (provided by manufacturer) c. Radiotelephone phraseology Airside driving (Refer to PANS-Aerodromes)	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes

	i. Radiotelephone References: - Annexes 14 and 19 - ICAO Doc 9981 - PANS Aerodromes - ICAO Doc 9137 - Airport Services Manual, Part 3 - Wildlife Hazard Management; - CAA Advisory Circular (if available)				

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G) Table A2-7 Matrix - Apron Safety

Aerodrome Operations Personnel	Competency areas (knowledge, skills and attitudes)	Required Competency Level (Basic/ Intermediate/ Advanced)	Training Areas	Required Type of Training (Initial, OJT, Refresher, Recurrent, Specialised)	Requirement of Competency Check
Head of Aerodrome Operation	National Legislation and regulations / requirements, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training (when significant amendment/changes applied)	No
	Aerodrome operations and safety management system	Basic	Relevant parts of aerodrome/SMS manuals	A. Initial training B. Recurrent training	No
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	No
	Job related requirements: National and international requirements and best practices on:	Basic	a. Understanding ICAO Annex 14 and PANS-Aerodromes	A. Initial training B. Recurrent training	No

			b. Aerodrome Safety Management System (SMS) c. Airside Safety and Operations Emergency Planning and Response	C. Refresher training as required	
	a. Aircraft turnaround procedures b. Role in Aerodrome Emergency Plan References: • ICAO Annexes 14 and 19 (relevant parts) • ICAO Doc 9981 - PANS Aerodromes • ICAO Doc 9859 - Safety Management Manual				
Managers/ Supervisors	National Legislation and regulations / requirements, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Aerodrome operations, including: a. FOD management	Intermediate	Relevant parts of aerodrome and SMS manuals	A. Initial training B. Recurrent training	Yes

			C. Refresher training as required	
b. Safety management during construction and maintenance works c. Understanding of aerodrome emergency procedures d. Follow-me procedures e. Safety management systems				
Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	Yes
Job related requirements: a. Airside driving regulations b. Aircraft turnaround procedures (e.g. Passenger loading bridge operations, Passenger safety on apron, Aircraft fueling	Advanced	a. Understanding ICAO Annex 14 and PANS-Aerodromes b. Managing Works in Progress c. Emergency Planning and Response	A. Initial training B. Recurrent training C. Refresher training as required D. Specialized training as required	Yes

	safety, flight catering safety etc.) c. Jet blast hazards d. Marshalling e. Apron signs and marking f. Operations under adverse weather g. Handling of fuel and oil spills h. Apron inspection and cleaning (FOD, pavement, markings, signs, ensuring GSE in place etc.) i. Use of personal protective equipment (earplugs, high-visibility vest etc.) j. Role in Aerodrome Emergency Plan k. Radiotelephone terminology		d. Airside Safety and Operations e. Aerodrome Safety Management System f. FOD Training	

	I. Compliance with safety rules during construction and maintenance works References: • ICAO Annexes 14 and 19 (relevant parts) • ICAO Doc 9981 - PANS Aerodromes • ICAO Doc 9859 - Safety Management Manual				
Officers/ Technicians	a. National Legislation and regulations / requirements b. NOTAM c. AIP	Basic	a. National aerodrome regulations b. NOTAM c. AIP	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Aerodrome operations, including: a. Apron management b. Apron safety management	Intermediate	Relevant parts of aerodrome and SMS manuals	A. Initial training + OJT B. Recurrent training	Yes

			C. Refresher training as required	
	c. Follow-me procedures Safety management system, covering: a. Identification of safety Hazards b. Safety reporting – mandatory, voluntary and confidential			
	Aerodrome layout including apron layouts and stand configurations	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes
	Job related requirements: a. Airside driving regulations and safety hazards b. Aircraft turnaround procedures (e.g. Passenger loading bridge operations, Passenger safety on apron, Aircraft fueling safety, flight-	Intermediate	a. Understanding ICAO Annex 14 and PANS-Aerodromes b. Airside Safety and Operations c. Aerodrome Safety Management System	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes.

	catering safety etc.)			
	c. Jet blast hazards			
	d. Marshalling			
	e. Apron signs and marking			
	f. Operations under adverse weather			
	g. Handling of fuel and oil spills			
	h. Apron inspection and cleaning (FOD, pavement, markings, signs, ensuring GSE in place etc.)			
	i. Use of personal protective equipment (earplugs, high-visibility vest etc.)			
	j. Role in Aerodrome Emergency Plan			
	k. Radiotelephone terminology			
	l. Compliance with safety rules during construction			

	and maintenance works References: - ICAO Annexes 14 and 19 (relevant parts) - ICAO Doc 9981 - PANS Aerodromes			

H) Table A2-8 Matrix - Runway Safety

Aerodrome Operations Personnel	Competency areas (Knowledge, skills and attitudes)	Required Competency Level (Basic / Intermediate / Advanced)	Training Areas	Required Type of Training (Initial, OJT, Refresher, Recurrent, Specialized)	Requirement of Competency Check
Head of Aerodrome Operation	National Legislation and regulations / requirements, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training (when significant amendment/changes applied)	No
	Aerodrome operations and safety management systems	Basic	Relevant parts of aerodrome/SMS manuals	A. Initial training B. Recurrent training	No
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	No

| | Job related requirements:
National and international requirements and best practices on:

a. Emergency planning and response

b. Aerodrome operations and maintenance in general

c. Accident and incident investigation

d. Runway Safety Programme and runway safety team | Basic | a. Emergency Planning and Response

b. Airside Safety and Operations

c. Aerodrome accident and incident investigation

d. National and Airport runway safety programmes | A. Initial training

B. Recurrent training

C. Refresher training as required | No |
| | References:

• ICAO Annexes 14 and 19 (relevant parts)

• ICAO Doc 9981 - PANS Aerodromes

• ICAO Doc 9859 - Safety Management Manual

• ICAO Doc 9870 - Manual on Prevention of Runway Incursion | | | | |

	• Runway Safety Team Handbook • Runway Safety Programme – Global Runway Safety Action Plan First Edition, November 2017 • CAA Advisory Circulars (Relevant Parts)				
Managers/ Supervisors	National Legislation and regulations / requirements, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Aerodrome operations including: a. FOD management b. Safety management during construction and maintenance works c. Understanding of aerodrome emergency procedures d. Follow-me procedures	Intermediate	Relevant parts of aerodrome/SMS manuals	A. Initial training B. Recurrent training C. Refresher training as required	Yes

	e. Safety management systems				
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Job related requirements: All of the competency requirements for frontline officers, but at advanced level, plus: a. Understanding of disabled aircraft removal plan. b. Re-declaration of runway distances c. SMS principles including safety risk management. d. Preliminary investigations of accidents and incidents e. Safety during construction and maintenance works f. Runway Safety Programme and runway safety team	Advanced	a. Emergency Planning and Response b. Understanding ICAO Annex 14 and PANS-Aerodrome c. Aerodrome SMS d. Aerodrome Incident/Accident Investigation e. Managing Works in Progress f. Airside Safety and Operations g. Runway incursion awareness and prevention	A. Initial training B. Recurrent training C. Refresher training as required D. Specialized training as required	Yes.

	References: • ICAO Annexes 14 and 19 (relevant parts) • ICAO Doc 9981 - PANS Aerodromes • ICAO Doc 9859 - Safety Management Manual • ICAO Doc 9870 - Manual on Prevention of Runway Incursion • Runway Safety Team Handbook • Runway Safety Programme – Global Runway Safety Action Plan First Edition, November 2017 • CAA Advisory Circulars (Relevant Parts)		h. Runway safety management i. Wildlife hazard management (Refer to PANS-Aerodromes) j. National and Airport runway safety programmes		
Officers / Technicians	a. National Legislation and regulations / requirements b. NOTAM	Basic	a. National aerodrome regulations b. NOTAM	A. Initial training B. Recurrent training	Yes

	c. AIP		c. AIP	C. Refresher training as required	
	Aerodrome operations a. Understanding of the aerodrome manual of the airport concerned b. Follow-me procedures Safety management system, covering: a. Identification of safety Hazards b. Safety reporting – mandatory, voluntary and confidential	Intermediate	Relevant parts of aerodrome and SMS manuals	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes
	Job related requirements: a. Runway inspection including FOD, pavement conditions, drainage, markings and signs, in- pavement lights, obstacles,	Intermediate	a. Understanding ICAO Annex 14 and PANS Aerodromes b. Aerodrome Inspection	A. Initial training + OJT B. Recurrent training	Yes.

	etc. b. Runway surface condition reporting c. Airside driving including airfield signs and markings d. Radiotelephone e. Adverse weather operations and low visibility procedures f. Removal of runway contaminants, e.g. rubber, ice, snow g. Vegetation control h. Wildlife hazard management i. Follow-me procedures j. Prevention of runway incursion k. Compliance with safety rules during construction and maintenance works l. Emergency response procedures		c. Runway Condition Reporting d. Airside Driving (Refer to PANS- Aerodrome) e. Adverse weather and low Visibility Operations f. Removal of Contaminants from Aerodrome Pavements g. Escort and Follow-Me Operations h. Runway Safety Management i. Runway incursion awareness and prevention j. Airside Safety and Operations k. Managing Works in	C. Refresher training as required	

				Progress		
	m. Role in Runway Safety Team References: • ICAO Annexes 14 and 19 (relevant parts) • ICAO Doc 9981 - PANS Aerodromes • ICAO Doc 9859 - Safety Management Manual • Runway Safety Team Handbook			l. Wildlife hazard management m. Emergency Planning and Response n. National and Airport runway safety programmes		

I) Table A2-9 Matrix - Aerodrome Driver Permit Scheme and Vehicle/Equipment Safety Requirement

Aerodrome Operations Personnel	Competency/knowledge areas	Required Competency Level (Basic/ Intermediate / Advanced)	Training Areas	Required Type of Training (Initial, OJT, Refresher, Recurrent, Specialized)	Requirement of Competency Check
Head of Aerodrome Operation	National Legislation and regulations / requirements, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training (when significant amendment/changes applied)	No
	Aerodrome operations and safety management system	Basic	Relevant parts of aerodrome/SMS manuals	A. Initial training B. Recurrent training	No
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	No
	Job related requirements:	Basic	Airside driving (Refer to PANS-Aerodromes)	A. Initial training	No

			B. Recurrent training	
	a. Emergency procedures for aerodrome driving		C. Refresher training as required	
	b. Vehicle/equipment safety requirements			
	c. Aerodrome driver training program			
	d. Aerodrome driver permit record system and vehicle/equipment permit record system			
	References: • ICAO Annexes 14 and 19 • ICAO Doc 9981 - PANS-Aerodromes • ICAO Doc 9859 - Safety Management Manual • ICAO Doc 9137 - Airport Services Manual, Part 9 – Airport Maintenance Practices (Relevant Chapters) • ICAO Doc 9870 - Manual on prevention of runway incursion			

	• CAA Advisory Circular (Guidance materials)				
Managers/ Supervisors	National Legislation and regulations / requirements, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Aerodrome operations and safety management system, covering: a. Identification of safety Hazards b. Risk assessment and Mitigation c. Accident/incident investigation d. Safety/Audits Inspections	Intermediate	Relevant parts of aerodrome/SMS manuals	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training B. Recurrent training C. Refresher training as required	Yes

	Job Related Requirements:	Advanced	Airside driving (Refer to PANS-Aerodromes)	A. Initial training	Yes
				B. Recurrent training	
	a. Develop airside traffic rules and procedures			C. Refresher training as required	
	b. Provide airside safety training to drivers				
	c. Promote airside safety awareness to drivers			D. Specialized training as required	
	d. Provide Radiotelephone training				
	e. Familiarization with vehicle/equipment safety requirements				
	f. Conduct inspection for vehicle/equipment				
	g. Keep data and records of aerodrome driver permit and vehicle/equipment permit				
	References:				
	• ICAO Annexes 14 and 19				
	• ICAO Doc 9981 - PANS-Aerodromes				

	• ICAO Doc 9859 - Safety Management Manual • ICAO Doc 9137 - Airport Services Manual, Part 9 – Airport Maintenance Practices (Relevant Chapters) • ICAO Doc 9870 - Manual on Prevention of Runway Incursion • CAA Advisory Circular (Guidance materials)				
Officers/ technicians (working on maneuvering area)	National Legislation and regulations / requirements, including aerodrome certification process	Basic	National aerodrome regulations	A. Initial training B. Recurrent training C. Refresher training as required	Yes
	Aerodrome operations and safety management system, covering: a. Identification of safety Hazards b. Safety reporting – mandatory, voluntary and confidential	Intermediate	Relevant parts of aerodrome/SMS manuals	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes

	Aerodrome layout	Intermediate	Aerodrome layout (Based on aerodrome layout drawing and onsite orientation)	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes
	Job Related Requirements: a. Holder of a valid official driver license of the same class of vehicle recognized/issued by the local government b. Medical fitness certificate c. Driving skill d. Specific equipment operation e. Radiotelephone f. Airside operations safety rules g. Airside driving rules h. Adverse weather conditions procedures i. Aerodrome signage, markings and lightings	Intermediate	a) Airside driving (Refer to PANS-Aerodromes) b) Specific equipment operation (if applicable, provided by manufacturer)	A. Initial training + OJT B. Recurrent training C. Refresher training as required	Yes

	j. Roles in aerodrome emergency plan References: • ICAO Annexes 14 and 19 • ICAO Doc 9981 - PANS-Aerodromes • ICAO Doc 9859 - Safety Management Manual • ICAO Doc 9137 - Airport Services Manual, Part 9 – Airport Maintenance Practices (Relevant Chapters) • ICAO Doc 9870 - Manual on Prevention of Runway Incursion • CAA Advisory Circular (Guidance materials)			

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APPENDIX 3
TRAINING SYLLABI

Note 1: PANS-Aerodromes (ICAO Doc 9981) provides following training curricula/syllabi:

  a) FOD training (refer to Appendix 1 to Chapter 5 of Part II);
  b) Wildlife control training (refer to Appendix 1 to Chapter 6 of Part II);
  c) Framework for an airside vehicle driver training programme (refer to Appendix 1 to Chapter 9 of Part II);

Note 2: Examples of the training syllabi that are required for Runway Surface Conditions Assessment and Reporting, Aerodrome Movement Area Maintenance, Inspection of Movement Area, Work in progress on the airside, Apron Safety and Runway Safety are provided in **Appendix 3A-3R**. Depending on the needs of aerodrome, Civil Aviation Authority of the Philippines or aerodrome operator, as appropriate, may assess and determine whether the training syllabi in **Appendix 3A-3R** qualify as basic, intermediate or advanced courses.

Note 3: ICAO and industry recognized training courses for aerodrome operations personnel can be found in following websites:

  a) ICAO Global Aviation Training *https://www.icao.int/training/Pages/Training-Catalogue.aspx?subjectid=1*
      Airports Council International *https://aci.aero/global-training/programmes/*
      International Air Transport Association *https://www.iata.org/en/training/courses/*

      ICAO TRAINAIR Plus Regional Training Centres of Excellence in APAC Regions:

      1. Capital Airports Management Academy, China *http://www.cah.com.cn/*
      2. GMR Aviation Academy, India *http://www.gmraviationacademy.org/*
      3. Incheon Airport Aviation Academy (IAAA), Republic of Korea *https://academy.airport.kr:844/academy/index.jsp*
      4. Civil Aviation Training Center, Republic of Korea *https://www.airport.co.kr/kcaaeng/main.do*
      5. Singapore Aviation Academy (SAA), Singapore *https://saa.caas.gov.sg/*

Note 4:- Aerodrome operators and training organizations approved by CAAP can develop and deliver a training course   based   on   the course content.

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APPENDIX 3A

Title of Training Course	Understanding ICAO Annex 14 and PANS-Aerodrome	Course Reference No.: 01	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-2, A2-3, A2-4, A2-7, A2-8**		
Course Goal (Purpose of the course)	The ICAO Annex 14 sets out the fundamental Standards and Recommended Practices (SARPs) for airport design and operations, which States undertake to apply through national legislation. This course provides an introduction to the content and structure of ICAO Annex 14. This course also covers the implementation of the PANS-Aerodrome in the context of an aerodrome Safety Management System.		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ Describe the SARPs contained in ICAO Annex 14 ✓ Implementation of SARPs. ✓ Discuss best practices to meet the requirements of ICAO Annex 14. ✓ Share experience with experts on the different options to implement and further improve best practices. ✓ Conduct Aerodrome operational safety assessments, as per PANS-Aerodromes, for safety risk management, aeronautical and compatibility studies		
Prerequisites for taking this course	Title of Training Course *(if applicable)*: N/A ☐ None ☑ Indoctrination/Familiarization ☐ Initial ☐ On-Job-Training		
Training Type	☐ Indoctrination/Familiarization ☑ Initial ☐ On-Job-Training ☐ Recurrent ☐ Refresher ☐ Specialized		
Course Content	Reference to the ICAO/Industry recognized training course(s): 1) Understanding Annex 14 (ACI); or https://aci.aero/global-training/training-information/course categories/safety/understanding-icao-annex-14/ 2) Working with Annex 14 (ACI) https://aci.aero/global-training/training-information/course categories/safety/gsn-4-working-with-annex-14/		

	In addition to the above, for PANS-Aerodromes, refer to "Aerodrome Safety Management incorporating PANS-Aerodromes" (IAAA) https://academy.airport.kr:844/academy/pagework_02102.html		
Training method/activities	☐ CBT/Online	☑ Class room	☐ Practical/Simulator
	☐ Practical (On-site)	☐ Factory/Manufacturer	
Assessment	☐ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required) ☐ Satisfactory result in on-site assessment (If assessment is required)		

APPENDIX 3B

Title of Training Course	Runway Condition Reporting (ICAO-ACI GRF Online Training)	Course Reference No.: 02	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-1, A2-8**		
Course Goal (Purpose of the course)	The ICAO Global Reporting Format (GRF) is a globally-harmonized methodology for runway surface condition assessment and reporting that it is intended to be the only such reporting format for international aviation, with the objective of reducing runway excursions, thus improving the safety of airport operations. The aim of the course is to assist airport personnel to implement the new Runway Condition reporting requirements as outlined in ICAO Circular 355 (Assessment, Measurement and Reporting of Runway Surface Conditions).		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ Describe the background for Runway Condition Assessment and Reporting as it relates to the ICAO Global Reporting Format (GRF) ✓ Explain the major elements of the Runway Condition Assessment Matrix (RCAM) ✓ Describe when a Runway Condition Assessment should be conducted ✓ Describe the steps required to conduct a Runway Condition Assessment ✓ Explain under what circumstances Runway Condition Codes can be adjusted ✓ Determine the Runway Condition Codes to be used as per the GRF ✓ Explain the formatting and use of the SNOWTAM and other means of promulgation ✓ Complete a Runway Condition Report (RCR) using the ACI Runway Condition Worksheet ✓ Through multiple case scenarios, apply the steps required to generate an RCR and NOTAM		
Prerequisites for taking this course	Title of Training Course *(if applicable)*: ACI/ICAO Global Reporting Format (GRF) online training course (Desirable) https://www.olc.aero/product/icao-global-reporting-format/ ☐ None ☑ Indoctrination/Familiarization ☑ Initial ☐ On-Job-Training		
Training Type	☐ Indoctrination/Familiarization ☐ Recurrent	☑ Initial ☐ Refresher	☐ On-Job-Training ☐ Specialized
Course Content	Reference to the ICAO/Industry recognized training course(s):		

	ACI-ICAO Global Reporting Format (GRF) for Runway Surface Condition Assessment and Reporting. https://aci.aero/global-training/training-information/course-categories/safety/grf-for runway-surface-condition-assessment-and-reporting/		
Training method/activities	☐ CBT/Online	☑ Class room	☐ Practical/Simulator
	☐ Practical (On-site)	☐ Factory/Manufacturer	
Assessment	☐ Attendance only (If competency test / assessment is not required)		
	☑ Minimum passing score: 80% (If competency test is required)		
	☐ Satisfactory result in on-site assessment (If assessment is required)		

APPENDIX 3C

Title of Training Course	Airside Safety and Operations	Course Reference No.: 03	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-1, A2-2, A2-3, A2-7, A2-8**		
Course Goal (Purpose of the course)	The Airside Operations course provides participants with a broad understanding of airside operations at an airport. Participants will investigate the various components of airside operations and how they interact together to form an operational system.		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ Describe the safety operations at airports. ✓ Describe the factors that affect safety at airports. ✓ Explain how to control and maintain safety at airports. ✓ Apply practical and up-to-date tools for managing safety on the airport. ✓ Implement safety standards in airport operations.		
Prerequisites for taking this course	Title of Training Course *(if applicable)*: Airside Operations - online training (ACI) https://aci.aero/global-training/programmes/airport-operations-diploma/airside operations/ ☐ None ☐ Indoctrination/Familiarization ☑ Initial ☐ On-Job-Training		
Training Type	☐ Indoctrination/Familiarization ☑ Initial ☐ On-Job-Training ☐ Recurrent ☐ Refresher ☐ Specialized		
Course Content	Reference to the ICAO/Industry recognized training course(s): Airside Safety and Operations (ACI) https://aci.aero/global-training/training-information/course-categories/safety/gsn-2- airside-safety-operations/		
Training method/activities	☐ CBT/Online ☑ Class room ☐ Practical/Simulator ☐ Practical (On-site) ☐ Factory/Manufacturer		
Assessment	☐ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required) ☐ Satisfactory result in on-site assessment (If assessment is required)		

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GUIDANCE ON TRAINING AND COMPETENCY REQUIREMENTS OF AERODROME OPERATIONAL AND MAINTENANCE PERSONNEL

APPENDIX 3D

Title of Training Course	Runway Incursion Awareness and Prevention	Course Reference No.: 04	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-1, A2-2, A2-3, A2-4, A2-8**		
Course Goal (Purpose of the course)	To raise awareness of the danger of runway incursions by sharing information of incidents (through case studies and facilitated discussion) and offering advice to operational personnel about how airport operators, airlines and air traffic service providers can prevent runway incursions. To raise awareness of this key topic and give participants practical ideas which they can implement at their own aerodrome to enhance safety.		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ select terms and definitions associated with runway safety; ✓ risks to runway safety and factors that contribute to the rise in runway incursions; ✓ purpose and scope of ICAO Manual for Prevention of Runway Incursions (ICAO Doc 9870); ✓ purpose of runway incursion prevention programs and runway safety teams; ✓ common runway incursion scenarios; ✓ common factors that could contribute to a runway incursion; ✓ purpose and benefits of a standardized approach to runway incursion incident reporting and data collection; ✓ communication procedures to prevent runway incursions; ✓ procedures for runway safety teams; ✓ problems that contribute to the breakdown of communication; ✓ visual aids to help maintain situational awareness; ✓ best practices for taxi operations; and ✓ usefulness of Standard Operating Procedures (SOP).		
Prerequisites for	Title of Training Course *(if applicable)*: N/A		

taking this course	☐ None	☑ Indoctrination/Familiarization	☐ Initial	☐ On-Job-Training
Training Type	☐ Indoctrination/Familiarization ☐ Recurrent	☑ Initial ☐ Refresher		☐ On-Job-Training ☐ Specialized
Course Content	Reference to the ICAO/Industry recognized training course(s) *(if available)*: Runway incursion awareness and prevention (ACI) https://aci.aero/Global-Training/Training-Information/Course Categories/Safety/Runway-Incursion-Awareness-and-Prevention/			
Training method/activities	☐ CBT/Online ☐ Practical (On-site)	☑ Class room ☐ Factory/Manufacturer		☐ Practical/Simulator
Assessment	☐ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required) ☐ Satisfactory result in on-site assessment (If assessment is required)			

APPENDIX 3E

Title of Training Course	Aerodrome Inspection		Course Reference No.: 05	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-3, A2-4, A2-8**			
Course Goal (Purpose of the course)	This course provides a competency-based training on aerodrome safety inspection for aviation authorities and airport operators. Trainees will learn how to carry out aerodrome inspection in accordance with ICAO SARPs (Standards and Recommended Practices) and relevant national standards through classroom interaction training, field practices and exercises at airside areas.			
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ Employ standard communication phraseology required for safely conducting aerodrome inspection ✓ Conduct an Aerodrome Surface Inspection ✓ Conduct an inspection of Visual aids and navigational aids (NAVAIDs) ✓ Verify airside access and movement in airside areas ✓ Conduct an inspection for the application of safety measures in airside operations ✓ Verify the application of Notice to Airmen (NOTAMs) ✓ Inspect the presence of wildlife ✓ Conduct an inspection of Aerodrome Rescue and Fire Fighting Services (ARFFS) ✓ Conduct an inspection of a Safety Management System (SMS)			
Prerequisites for taking this course	Title of Training Course *(if applicable)*: N/A ☐ None ☑ Indoctrination/Familiarization ☐ Initial ☐ On-Job-Training			
Training Type	☐ Indoctrination/Familiarization ☑ Initial ☐ On-Job-Training ☐ Recurrent ☐ Refresher ☐ Specialized			
Course Content	Reference to the ICAO/Industry recognized training course(s) *(if available)*: 1) Aerodrome Inspection (IAAA); or https://academy.airport.kr:844/academy/pagework_02104.html 2) GSN 6: Aerodrome Auditing and Compliance (ACI)			

	https://aci.aero/global-training/training-information/course-categories/safety/gsn-6-aerodrome-auditing-and-compliance/		
Training method/activities	☐ CBT/Online ☑ Practical (On-site)	☑ Classroom ☐ Factory/Manufacturer	☐ Practical/Simulator
Assessment	☐ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required) ☐ Satisfactory result in on-site assessment (If assessment is required)		

APPENDIX 3F

Title of Training Course	Aerodrome Safeguarding	Course Reference No.: 06	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-3, A2-4, A2-8**		
Course Goal (Purpose of the course)	All aerodromes have to ensure that the environment both on and off the airport are maintained in a safe condition for aircraft operations. The aerodrome safeguarding course is designed to introduce participants to the different forms that safeguarding takes and how to develop procedures in order to implement effective controls.		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ Explain the importance of safeguarding in today's aviation environment ✓ Understand the elements of aerodrome safeguarding ✓ Explain how aerodrome safeguarding procedures may be developed ✓ Describe the legal aspects of the safeguarding process ✓ Apply the knowledge on aerodrome safeguarding at their own		
Prerequisites for taking this course	Title of Training Course (if applicable): N/A ☐ None ☑ Indoctrination/Familiarization ☐ Initial ☐ On-Job-Training		
Training Type	☐ Indoctrination/Familiarization ☑ Initial ☐ On-Job-Training ☐ Recurrent ☐ Refresher ☐ Specialized		
Course Content	Reference to the ICAO/Industry recognized training course(s) (if available): Aerodrome Safeguarding and OLS (ACI) https://aci.aero/global-training/training-information/course categories/safety/aerodrome-safeguarding/		
Training method/activities	☐ CBT/Online ☑ Classroom ☐ Practical/Simulator ☐ Practical (On-site) ☐ Factory/Manufacturer		
Assessment	☐ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required) ☐ Satisfactory result in on-site assessment (If assessment is required)		

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APPENDIX 3G

Title of Training Course	Adverse Weather and Low Visibility Operations	Course Reference No.: 07	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-3, A2-8**		
Course Goal (Purpose of the course)	Through practical planning exercises and real-life examples, this one-of-a-kind course reviews operational obstacles due to weather and the solutions to address them. Explore planning tools and procedures that will help your airport respond to rare disturbances. Learn how to prepare your resources, equipment and staff to establish a proactive culture across your operations and organization.		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ Understand how adverse weather conditions produce complications ✓ Build response and action plans that address the risks your airport faces ✓ Minimize the impact of disruption and quickly return to normal operations ✓ Strengthen cooperation between departments and operations to become more efficient in planning and response ✓ Improve the allocation of resources, equipment and staff		
Prerequisites for taking this course	Title of Training Course *(if applicable)*: N/A ☐ None ☑ Indoctrination/Familiarization ☐ Initial ☐ On-Job-Training		
Training Type	☐ Indoctrination/Familiarization ☑ Initial ☐ On-Job-Training ☐ Recurrent ☐ Refresher ☐ Specialized		
Course Content	Reference to the ICAO/Industry recognized training course(s) *(if available)*: Airport Extreme Weather Operations and Planning (IATA) https://www.iata.org/en/training/courses/airport-operations-weather/262/en/		
Training method/activities	☐ CBT/Online ☑ Classroom ☐ Practical/Simulator ☐ Practical (On-site) ☐ Factory/Manufacturer		
Assessment	☐ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required) ☐ Satisfactory result in on-site assessment (If assessment is required)		

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APPENDIX 3H

Title of Training Course	Emergency Planning and Response	Course Reference No.: 08	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-4, A2-7, A2-8**		
Course Goal (Purpose of the course)	This course investigates the importance of planning for emergency situations and of properly managing activities in crisis situations. It introduces the international requirements of an Emergency Plan, discusses how to manage the press and media in crucial situations, as well as focusing on business continuity and the return to normal operations after a crisis. The support provided to victims and the need to rebuild confidence after an incident are also discussed. Current topics on aviation terrorism are included. Case studies provide key insights into the current world climate.		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ Explain the key role of emergency planning. ✓ Describe best practices in crisis management. ✓ Apply relevant tools and advice to implement emergency plans and procedures.		
Prerequisites for taking this course	Title of Training Course *(if applicable)*: N/A ☐ None ☑ Indoctrination/Familiarization ☐ Initial ☐ On-Job-Training		
Training Type	☐ Indoctrination/Familiarization ☑ Initial ☐ On-Job-Training ☐ Recurrent ☐ Refresher ☐ Specialized		
Course Content	Reference to the ICAO/Industry recognized training course(s) *(if available)*: GSN 3: Emergency Planning and Crisis Management (ACI) https://aci.aero/global-training/training-information/course-categories/safety/gsn-3- emergency-planning-crisis-management/		
Training method/activities	☐ CBT/Online ☑ Classroom ☐ Practical/Simulator ☐ Practical (On-site) ☐ Factory/Manufacturer		
Assessment	☐ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required) ☐ Satisfactory result in on-site assessment (If assessment is required)		

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APPENDIX 3I

Title of Training Course	Aerodrome Accident and Incident Investigation	Course Reference No.: 09	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-8**		
Course Goal (Purpose of the course)	This course will introduce industry best practices for Accident and Incident Investigation at airports. Key concepts and issues such as the impact of human factors on increasing incidents and accidents in aviation. Through this course, participants will become able to establish mitigation measures at their own airports to reduce incidents and accidents.		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ Describe the type of incidents and accidents that can happen at airports. ✓ Conduct formal investigations to reduce and prevent accidents at their airport. ✓ Apply personal experience to further determine how best to prevent accidents and incidents at their airport.		
Prerequisites for taking this course	Title of Training Course *(if applicable)*: N/A ☐ None ☑ Indoctrination/Familiarization ☐ Initial ☐ On-Job-Training		
Training Type	☐ Indoctrination/Familiarization ☑ Initial ☐ On-Job-Training ☐ Recurrent ☐ Refresher ☐ Specialized		
Course Content	Reference to the ICAO/Industry recognized training course(s) *(if available)*: 1) Accident and Incident Investigation (ACI); or https://aci.aero/global-training/training-information/coursecategories/safety/accident-and-incident-investigation/ 2) Aircraft Accident Investigation Techniques (SAA); or https://saa.caas.gov.sg/course-details?courseTitle=aircraft-accident-investigationtechniques&courseId=1000467 3) Aircraft Accident Investigation Management (SAA); or https://saa.caas.gov.sg/course-details?courseTitle=aircraft-accident-investigation management&courseId=1000468		

	4) Incident Investigation: Effective Safety Risk Management (SAA) https://saa.caas.gov.sg/course-details?courseTitle=incident-investigation:-effective-safety-risk-management&courseId=1000665		
Training method/activities	☐ CBT/Online ☐ Practical (On-site)	☑ Classroom ☐ Factory/Manufacturer	☐ Practical/Simulator
Assessment	☐ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required) ☐ Satisfactory result in on-site assessment (If assessment is required)		

APPENDIX 3J

Title of Training Course	Runway Safety Management	Course Reference No.: 10	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-8**		
Course Goal (Purpose of the course)	Runway Safety is a significant challenge and top priority for airport operations. This training program deals with Runway Safety Management designed for airport operators. The content of this course is distilled from a wide range of guidance material from Civil Aviation Authorities, operational safety procedures from airports, guidance from ICAO and best practices from other international aviation organizations dealing with runway safety.		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ Understand the importance of runway safety at an aerodrome ✓ Describe the key steps required to establish a runway safety team ✓ Explain major industry best practices with regards to runway Planning and Design from a safety perspective ✓ Describe the major requirements of runway inspections and reporting ✓ Explain key Low Visibility Procedures required to ensure the safe operation of aircraft during low visibility conditions including the protection of Navigational Aids (NAVAIDs) ✓ Understand the key elements of airside operations and how they impact on runway safety ✓ Describe the key elements of runway maintenance ✓ Explain how to manage temporary restrictions and how to disseminate this information to stakeholders ✓ Describe the major safety measures with regards to construction associated with the operational areas of the aerodrome		
Prerequisites for taking this course	Title of Training Course *(if applicable)*: N/A ☐ None ☑ Indoctrination/Familiarization ☐ Initial ☐ On-Job-Training		
Training Type	☐ Indoctrination/Familiarization ☑ Initial ☐ On-Job-Training ☐ Recurrent ☐ Refresher ☐ Specialized		
Course Content	Reference to the ICAO/Industry recognized training course(s) *(if available)*:		

	Runway Safety Management (ACI) https://www.olc.aero/product/runway-safety-management/		
Training method/activities	☑ CBT/Online □ Practical (On-site)	□ Classroom □ Factory/Manufacturer	□ Practical/Simulator
Assessment	□ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required) □ Satisfactory result in on-site assessment (If assessment is required)		

APPENDIX 3K

Title of Training Course	Aerodrome Pavement Maintenance	Course Reference No.: 11	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-1, A2-2**		
Course Goal (Purpose of the course)	This course will provide information needed to establish an effective aerodrome pavement management and maintenance program. This course will help trainees to understand the performance of pavements, how to evaluate them, the characteristics of a good pavement management and maintenance program, and current repair techniques used in the industry. This course will help airport officers make informed decisions about the maintenance of aerodrome pavements and address special considerations such as minimizing impacts on users, maximizing airport safety, and adapting to their local operating environments.		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ Evaluation of pavements and identification of types of distress ✓ Techniques for repairing Hot-Mix Asphalt and Portland Cement Concrete pavements ✓ Pavement management and maintenance programs ✓ Aerodrome pavement maintenance - case studies ✓ Conduct an Aerodrome Surface Inspection		
Prerequisites for taking this course	Title of Training Course *(if applicable)*: N/A ☐ None ☑ Indoctrination/Familiarization ☐ Initial ☐ On-Job-Training		
Training Type	☐ Indoctrination/Familiarization ☑ Initial ☐ On-Job-Training ☐ Recurrent ☐ Refresher ☐ Specialized		
Course Content	Reference to the ICAO/Industry recognized training course(s) *(if available)*: UC Berkeley, ITS-SAA Airport Maintenance (SAA) https://saa.caas.gov.sg/		
Training method/activities	☐ CBT/Online ☐ Classroom ☐ Practical/Simulator ☑ Practical (On-site) ☐ Factory/Manufacturer		
Assessment	☐ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required)		

☐ Satisfactory result in on-site assessment (If assessment is required)

APPENDIX 3L

Title of Training Course	Radiotelephone Phraseology	Course Reference No.: 12	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-1, A2-2, A2-5, A2-6**		
Course Goal (Purpose of the course)	Radiotelephone training. ICAO standard phraseologies are developed to provide efficient, clear, concise, and unambiguous communications. Constant attention should be given to the correct use of ICAO phraseologies in all instances in which they are applicable.		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ Employ standard phraseology; ✓ Understand the need to use clear, concise communications;		
Prerequisites for taking this course	Title of Training Course *(if applicable)*: N/A ☐ None ☑ Indoctrination/Familiarization ☐ Initial ☐ On-Job-Training		
Training Type	☐ Indoctrination/Familiarization ☑ Initial ☐ On-Job-Training ☐ Recurrent ☐ Refresher ☐ Specialized		
Course Content	Reference to the ICAO/Industry recognized training course(s) *(if available)*: *Note: The following training courses include Radiotelephone Phraseology* 1) Refer to PANS-Aerodromes – Framework for an Airside Vehicle Driver Training Programme 2) Aerodrome Inspection Course (Course reference no.: 05)		
Training method/activities	☐ CBT/Online ☑ Classroom ☐ Practical/Simulator ☐Practical (On-site) ☐ Factory/Manufacturer		
Assessment	☐ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required) ☐ Satisfactory result in on-site assessment (If assessment is required)		

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APPENDIX 3M

Title of Training Course	Removal of Contaminants from Aerodrome Pavements	Course Reference No.: 13	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-2, A2-8**		
Course Goal (Purpose of the course)	To provide participants with Knowledge, Skills and Attitudes to enable them effectively and efficiently monitor and remove contaminants (e.g. rubber deposits, ice, snow, etc. as per local climate conditions) on aerodrome pavements and apply appropriate removal methodology to obtain the required friction level.		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ Identify causes of reduction in friction value of runway surface and its effect on aircraft movement on active runway ✓ Appreciate importance of maintaining requisite friction value on runways ✓ Measure runway friction value ✓ Identify the low-friction areas ✓ Apply appropriate contaminant removal methods considering the pavements surface material and extent of deposits		
Prerequisites for taking this course	Title of Training Course (if applicable): N/A ☐ None ☑ Indoctrination/Familiarization ☐ Initial ☐ On-Job-Training		
Training Type	☐ Indoctrination/Familiarization ☑ Initial ☐ On-Job-Training ☐ Recurrent ☐ Refresher ☐ Specialized		
Course Content	Reference to the ICAO/Industry recognized training course(s) (if available): 1) Airport Runway Snow Removing Operations Management (Capital Airport Management Academy, China); or (https://www.icao.int/training/Pages/training-catalogue details.aspx?catid=446&language=0&region=&ITP=0) 2) Runway Rubber Removal (IAA)		

	(https://www.icao.int/training/Pages/training-catalogue details.aspx?catid=383&language=0&region=&ITP=0)	
Training method/activities	☐ CBT/Online Practical (On-site)	☑ Classroom ☐ Practical/Simulator ☑ ☑ Factory/Manufacturer
Assessment	☐ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required) ☐ Satisfactory result in on-site assessment (If assessment is required)	

APPENDIX 3N

Title of Training Course	Maintenance of Markings, Signs and Markers	Course Reference No.: 14	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-2, A2-8**		
Course Goal (Purpose of the course)	The course enables the participants to interpret and implement the certification specifications related to Runways, Taxiways, Aprons and adjacent areas markings and signs, e.g. for planning purposes and future maintenance. Based on best practices, the participants will become knowledgeable about the configuration, dimensioning and design of these infrastructural elements and will learn how to fulfill relevant requirements.		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to verify and maintain: ✓ Markings; Signs; Markers		
Prerequisites for taking this course	Title of Training Course *(if applicable)*: N/A ☐ None ☑ Indoctrination/Familiarization ☐ Initial ☐ On-Job-Training		
Training Type	☐ Indoctrination/Familiarization ☑ Initial ☐ On-Job-Training ☐ Recurrent ☐ Refresher ☐ Specialized		
Course Content	Reference to the ICAO/Industry recognized training course(s) *(if available)*: 1) Airfield Pavement Markings (IAA); and (https://www.icao.int/training/Pages/training-catalogue details.aspx?catid=382&language=0&region=&ITP=0) 2) Airfield Signs (IAA) (https://www.icao.int/training/Pages/training-catalogue details.aspx?catid=2426&language=0&region=&ITP=0)		
Training method/activities	☐ CBT/Online ☑ Classroom ☐ Practical/Simulator ☑ Practical (On-site) ☐ Factory/Manufacturer		
Assessment	☐ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required) ☐ Satisfactory result in on-site assessment (If assessment is required)		

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APPENDIX 3O

Title of Training Course	Managing Works in Progress	Course Reference No.: 15	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-4, A2-7, A2-8**		
Course Goal (Purpose of the course)	All aerodromes have to manage works in progress at some point, whether as a result of new developments or maintenance. It is therefore vital that staffs involved are able to manage the construction in a safe manner, enabling aircraft operation to continue, whilst at the same time allowing the works to carry on. This course provides detailed information on how to plan aerodrome works, ensuring the necessary documentation is produced in accordance with the Airport's Safety Management System, how the works are controlled on a day to day basis and how to bring new developments into operational status.		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ Effectively manage works, Risk Assessments and Compliance Statements, ensuring compliance with National and International Standards ✓ Explain how to effectively manage contractors to ensure safe operations ✓ Offer examples for managing works in the form of Case Studies as part of the learning experience ✓ Explain the need for effective and safe "Management of Change" in the Aerodrome works process		
Prerequisites for taking this course	Title of Training Course *(if applicable)*: Managing Operations During Construction online course (ACI) https://www.olc.aero/product/managing-operations-during-construction/ ☐ None ☑ Indoctrination/Familiarization ☐ Initial ☐ On-Job-Training		
Training Type	☐ Indoctrination/Familiarization ☐ Initial ☑ On-JobTraining ☐ Recurrent ☐ Refresher ☑ Specialized		
Course Content	Reference to the ICAO/Industry recognized training course(s) *(if available)*: Airport Safety Course - Managing Aerodrome Works (ACI)		

	https://aci.aero/global-training/training-information/course-categories/safety/managing aerodrome-works/		
Training method/activities	□ CBT/Online Practical (On-site)	☑ Classroom □ Factory/Manufacturer	□ Practical/Simulator ☑
Assessment	□ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required) □ Satisfactory result in on-site assessment (If assessment is required)		

APPENDIX 3P

Title of Training Course	Escort and Follow-me Operations	Course Reference No.: 16	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-8**		
Course Goal (Purpose of the course)	This course explains why Escort and Follow-Me Operations are required on a daily basis at airports and provides the theoretical knowledge required to undertake them.		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ Understand how Escort & Follow-Me operations help to facilitate secure, safe and efficient airside operations. ✓ Recognize the similarities and differences that exit between Escort and FollowMe operations. ✓ Explain the role and responsibilities of the driver in performing Escort and Follow-Me operations. ✓ Describe the key steps involved in conducting successful escort and follow-me operations. ✓ Understanding the procedures that must be followed when conducting Escort and Follow-Me operations. ✓ Understand the training that should be undertaken to ensure driver competence to conduct Escort and Follow-Me operations.		
Prerequisites for taking this course	Title of Training Course *(if applicable)*: ☐ None ☑ Indoctrination/Familiarization ☐ Initial ☐ On-Job-Training		
Training Type	☐ Indoctrination/Familiarization ☑ Initial ☐ On-JobTraining ☐ Recurrent ☐ Refresher ☐ Specialized		
Course Content	Reference to the ICAO/Industry recognized training course(s) *(if available)*: Escort and follow-me online course (ACI) https://www.olc.aero/product/escort-and-follow-me-operations/		
Training method/activities	☑ CBT/Online ☐ Classroom ☐ Practical/Simulator ☐ Practical (On-site) ☐ Factory/Manufacturer		
Assessment	☐ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required) ☐ Satisfactory result in on-site assessment (If assessment is required)		

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APPENDIX 3Q

Title of Training Course	Airfield Lighting including PAPI/VASIS Maintenance	Course Reference No.: 17	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-2**		
Course Goal (Purpose of the course)	This course provides trainees an overview of Airport Electrical & Mechanical Installations and their maintenance.		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ Provide participants knowledge skill & attitude (KSAs) about Aeronautical Grounds Aids, Serviceability and Maintenance Standards at their airports and to maintain the desired serviceability levels during day-to-day operation and during changes in infrastructures and procedures. ✓ Maintain the Airfield Lighting Systems as per ICAO Standards.		
Prerequisites for taking this course	Title of Training Course *(if applicable)*: ☐ None ☑ Indoctrination/Familiarization ☐ Initial ☐ On-Job-Training		
Training Type	☐ Indoctrination/Familiarization ☑ Initial ☐ On-JobTraining ☐ Recurrent ☐ Refresher ☐ Specialized		
Course Content	Reference to the ICAO/Industry recognized training course(s) *(if available)*: 1) Aeronautical Ground Aids, Serviceability standards and maintenance (IAA); or https://www.aai.aero/sites/default/files/CALENDAR%20%20ENGLISH.pdf 2) Maintenance of Airfield Lighting System (GMR Aviation Academy, India) https://gmraviationacademy.org/maintainance-of-airfield-lighting-system.aspx		
Training method/activities	☐ CBT/Online ☑ Classroom ☐ Practical/Simulator ☑ Practical (On-site) ☐ Factory/Manufacturer		
Assessment	☐ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required) ☐ Satisfactory result in on-site assessment (If assessment is required)		

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APPENDIX 3R

Title of Training Course	Maintenance of Unpaved Surfaces	Course Reference No.: 18	Version: 1/2024
	Reference to AOPC Matrix Table: **A2-2**		
Course Goal (Purpose of the course)	This course provides trainees the knowledge in maintenance of aerodrome unpaved surfaces.		
Course Objective (Learning objectives)	Upon successful completion of this course, participants will be able to: ✓ Gain a comprehensive knowledge in aerodrome unpaved surfaces including drainage in compliance with ICAO Annex 14.		
Prerequisites for taking this course	Title of Training Course *(if applicable)*: ☐ None ☑ Indoctrination/Familiarization ☐ Initial ☐ On-Job-Training		
Training Type	☐ Indoctrination/Familiarization ☑ Initial ☐ On-JobTraining ☐ Recurrent ☐ Refresher ☐ Specialized		
Course Content	Reference to the ICAO/Industry recognized training course(s) *(if available)*: Landscaping (GMR Aviation Academy, India) https://gmraviationacademy.org/landscaping.aspx		
Training method/activities	☐ CBT/Online ☑ Classroom ☐ Practical/Simulator ☑ Practical (On-site) ☐ Factory/Manufacturer		
Assessment	☐ Attendance only (If competency test / assessment is not required) ☑ Minimum passing score: 80% (If competency test is required) ☑ Satisfactory result in on-site assessment (If assessment is required)		

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