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Doc 10002

Cabin Crew Safety Training Manual

Second Edition, 2020



Approved by and published under the authority of the Secretary General

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AMENDMENTS

Amendments are announced in the supplements to the *Products and Services Catalogue*; the Catalogue and its supplements are available on the ICAO website at www.icao.int. The space below is provided to keep a record of such amendments.

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FOREWORD

Cabin safety contributes to the prevention of accidents and incidents and protection of the aircraft's occupants, through proactive safety management, including hazard identification, safety risk management and the increase of survivability in the event of an emergency situation. Traditionally, the role of cabin crew members focused on the evacuation of an aircraft in the event of an accident. However, cabin crew members also play an important proactive role in managing safety, which can contribute to the prevention of incidents and accidents. Training is necessary to prepare cabin crew members to conduct their safety and security-related tasks during normal day-to-day flights and essential to enable them to recognize and act on any abnormal or emergency situation.

The *Cabin Crew Safety Training Manual* (Doc 10002) provides guidance related to cabin crew training requirements found in Annex 6 — *Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes*.

ICAO developed guidance for a competency-based approach to cabin crew safety training so that cabin crew members could be proficient to perform their tasks, and with the goal of establishing an international baseline for cabin crew competencies. The manual presents cabin crew safety training using a competency-based approach. It provides guidance for operators to develop competency-based cabin crew training and assessment.

This second edition aligns its contents with Amendment 5 to the *Procedures for Air Navigation Services — Training* (PANS-TRG, Doc 9868), which contains the overarching provisions and principles for competency-based training and assessment, the introduction of new definitions, the introduction of new provisions for cabin crew training and minor updates to existing provisions. This edition also includes guidance on the development and implementation of scenario-based training for cabin crew members, as well as guidelines to transition from traditional to competency-based assessments.

This manual is adaptable and operators should tailor it to suit their operation. It is also provided as guidance for States when approving a training programme. However, the content does not represent the sole means to meet regulatory requirements on cabin crew training. The training syllabus of cabin crew members assigned for duties on commercial air transport operations should include all relevant parts of the syllabuses suggested in this manual but should not be limited by it.

This manual was developed with inputs from experts from civil aviation authorities, operators, aircraft manufacturers, training organizations and international organizations. It was thereafter submitted for an extensive peer review to account for comments from the expert community.

ICAO gratefully acknowledges the contributions of the ICAO Cabin Safety Group and experts who provided support, advice and input for this manual.

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GLOSSARY

DEFINITIONS

Able-bodied passengers. Passengers who are clearly physically able and are willing to help cabin crew maintain good order and discipline on board the aircraft.

Accountable executive. A single, identifiable person having responsibility for the effective and efficient performance of the service provider's safety management systems (SMS).

Adapted competency model. A group of competencies with their associated description and performance criteria adapted from an ICAO competency framework that an organization uses to develop competency-based training and assessment for a given role.

Air operator certificate (AOC). A certificate authorizing an operator to carry out specified commercial air transport operations.

Aircraft. Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

Airworthy. The status of an aircraft, engine, propeller or part when it conforms to its approved design and is in a condition for safe operation.

Approved training organization — cabin crew. An organization approved by a Contracting State in accordance with the national regulations to perform cabin crew training and which operates under the supervision of that State.

Approved training — Cabin crew. Training conducted under special curricula and supervision approved by a Member State that, where applicable, is conducted within an approved training organization.

Apron. A defined area, on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance.

Assessment. The determination by an instructor, assessor or evaluator as to whether a candidate meets a required competency standard under given conditions, by collecting evidence from observable behaviours. Assessment takes place during instruction and evaluation.

Attendant panel. Control panel(s) intended for use by cabin crew to operate and/or monitor aircraft systems relevant to cabin crew tasks during normal operations and in the event of emergency situations.

Baggage. Personal property of passengers or crew carried on an aircraft by agreement with the operator.

Barostatic. An atmospheric pressure, used in forecasting the weather and determining altitude, derived using a barometer.

Cabin crew member. A crew member who performs, in the interest of safety of passengers, duties assigned by the operator or the pilot-in-command of the aircraft, but who shall not act as a flight crew member.

Change management. A formal process to manage changes within an organization in a systematic manner, so that changes which may impact identified hazards and risk mitigation strategies are accounted for, before the implementation of such changes.

Classroom training. In-person, instructor-led training, which may include group exercises and interactive instructional sessions.

Clean aircraft concept. All critical surfaces of an aircraft must be clean of any surface contamination. The critical surfaces of an aircraft are the wings, control surfaces, rotors, propellers, horizontal stabilizers, vertical stabilizers or any other stabilizing surface. In the case of an aircraft with rear mounted engines, the upper surface of the fuselage is also a critical surface.

Clear zone. The area of the passenger cabin immediately in front of the flight crew compartment door, including galleys and lavatories.

Cognitive. Pertaining to cognition. Knowing, perceiving, or conceiving as an act or faculty distinct from emotion and volition.

Colicky pain. Denoting or resembling the pain of colic: pain relating to the colon. Spasmodic pains in the abdomen caused by spasm, obstruction or twisting.

Competency. A dimension of human performance that is used to reliably predict successful performance on the job. A competency is manifested and observed through behaviours that mobilize the relevant knowledge, skills and attitudes to carry out activities or tasks under specified conditions.

Competency-based training and assessment. Training and assessment that are characterized by a performance orientation, emphasis on standards of performance and their measurement, and the development of training to the specified performance standards.

Competency standard. A level of performance that is defined as acceptable when assessing whether or not competency has been achieved.

Conditions. Anything that may qualify a specific environment in which performance will be demonstrated.

Co-pilot. A licensed pilot serving in any piloting capacity other than as pilot-in-command but excluding a pilot who is on board the aircraft for the sole purpose of receiving flight instruction.

Computer-based training. Training involving instructional aids, such as computers and tablets. Computer-based training may encompass the use of a data storage medium (such as CD-ROM or flash drive), as well as web-based training (commonly referred to as e-learning), distance learning and digital learning (such as virtual learning and gamification).

Crew member. A person assigned by an operator to duty on an aircraft during a flight duty period.

Critical phases of flight. The period of high workload on the flight deck, normally being the periods between the beginning of taxiing until the aircraft is on the route climb phase and between the final part of descent to aircraft parking.

Cruising level. A level maintained during a significant portion of a flight.

Dangerous goods. Articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified according to those Instructions.

Note.— Dangerous goods are classified in Annex 18 — The Safe Transport of Dangerous Goods by Air, Chapter 3.

Defences. Specific mitigating actions, preventive controls or recovery measures put in place to prevent the realization of a hazard or its escalation into an undesirable consequence.

Direct access. A direct route or passage from a seat to an exit from which a passenger can proceed without entering an aisle or passing around an obstruction.

Disembarkation. The leaving of an aircraft after a landing, except by crew or passengers continuing on the next stage of the same through-flight.

Disinfection. The procedure whereby health measures are taken to control or kill infectious agents on a human or animal body, in or on affected parts of aircraft, baggage, cargo, goods or containers, as required, by direct exposure to chemical or physical agents.

Disinsection. The procedure whereby health measures are taken to control or kill insects present in aircraft, baggage, cargo, containers, goods and mail.

Ditching. The forced landing of an aircraft on water.

Duty period. A period which starts when a flight or cabin crew member is required by an operator to report for or to commence a duty and ends when that person is free from all duties.

Duty. Any task that flight or cabin crew members are required by the operator to perform, including, for example, flight duty, administrative work, training, positioning and standby when it is likely to induce fatigue.

Embarkation. The boarding of an aircraft for the purpose of commencing a flight, except by such crew or passengers as have embarked on a previous stage of the same through-flight.

Emergency exit. Door, window exit, or any other type of exit (e.g. hatch in the flight deck, tail cone exit) used as an egress point to allow maximum opportunity for cabin evacuation within an appropriate time period.

Emergency exit row seating. Each seat in a row of seats located adjacent to an emergency exit, having direct access to the exit.

Error. An action or inaction by an operational person that leads to deviations from organizational or the operational person's intentions or expectations.

Note.— See Attachment E of Annex 13 — Aircraft Accident and Incident Investigation for a description of operational personnel.

Error management. The process of detecting and responding to errors with countermeasures that reduce or eliminate the consequence of errors and mitigate the probability of further errors or undesired states.

Evaluator. A person authorized to conduct the formal and final summative assessment of a trainee's performance.

Exanthematous diseases. Relating to an exanthema: a skin eruption occurring as a symptom of an acute viral or coccal disease, as in scarlet fever or measles.

Fatigue. A physiological state of reduced mental or physical performance capability resulting from sleep loss, extended wakefulness, circadian phase, and/or workload (mental and/or physical activity) that can impair a person's alertness and ability to perform safety-related operational duties.

Fatigue risk management system (FRMS). A data-driven means of continuously monitoring and managing fatigue-related safety risks, based upon scientific principles and knowledge as well as operational experience that aims to ensure relevant personnel are performing at adequate levels of alertness.

Flight crew member. A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.

Flight duty period. A period which commences when a flight or cabin crew member is required to report for duty that includes a flight or a series of flights and which finishes when the aeroplane finally comes to rest and the engines are shut down at the end of the last flight on which he/she is a crew member.

Flight simulation training device. Any one of the following three types of apparatus in which flight conditions are simulated on the ground:

A flight simulator, which provides an accurate representation of the flight deck of a particular aircraft type to the extent that the mechanical, electrical, electronic, etc. aircraft systems control functions, the normal environment of flight crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated;

A flight procedures trainer, which provides a realistic flight deck environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic, etc. aircraft systems, and the performance and flight characteristics of aircraft of a particular class;

A basic instrument flight trainer, which is equipped with appropriate instruments, and which simulates the flight deck environment of an aircraft in flight in instrument flight conditions.

Flight time — Aeroplanes. The total time from the moment an aeroplane first moves for the purpose of taking off until the moment it finally comes to rest at the end of the flight.

Note.— Flight time as here defined is synonymous with the term “block to block” time or “chock to chock” time in general usage which is measured from the time an aeroplane first moves for the purpose of taking off until it finally stops at the end of the flight.

Ground handling. Services necessary for an aircraft's arrival at, and departure from, an airport, other than air traffic services.

Hands-on exercise. Exercise on the use of equipment or aircraft systems that is conducted without a specific context. Equipment that is removed from operation, or other representative training equipment considered acceptable by the State can be used for the purposes of this training.

Hazard. A condition or an object with the potential to cause or contribute to an aircraft incident or accident.

Human factors principles. Principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance.

Human performance. Human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.

Hypoglycaemic attack. Pertaining to or characterized by hypoglycaemia: abnormal decrease in concentration of glucose in the circulating blood, e.g. less than the minimum of the normal range.

Hypothermia. A subnormal body temperature significantly below 37°C.

Hypoxia. A deficiency of oxygen in inspired gases, arterial blood or tissue, short of anoxia (almost complete absence of oxygen).

ICAO competency framework. A competency framework, developed by ICAO, is a selected group of competencies for a given aviation discipline. Each competency has an associated description and observable behaviours.

Improvised explosive device. A device, placed or delivered, and fabricated in an improvised manner incorporating explosives or destructive, lethal, noxious, pyrotechnic or incendiary chemicals designed to destroy, disfigure, distract or harass.

Instructional systems design (ISD). A formal process for designing training which includes analysis, design and production, and evaluation.

In-flight. The period from the moment all external aircraft doors are closed following boarding through the moment when one external door is opened to allow passengers to leave the aircraft or until, if a forced landing, competent authorities take over responsibility for the aircraft and individuals and property on the aircraft. For the purpose of the Tokyo Convention an aircraft is considered to be in flight from the moment when power is applied for the purpose of take-off until the moment when the landing run ends.

In-charge cabin crew member. Cabin crew leader who has overall responsibility for the conduct and coordination of cabin procedures applicable during normal operations and during abnormal and emergency situations.

Lockdown. The condition of the flight crew compartment door being closed and locked securely, with no traffic permitted either in or out of the flight crew compartment.

Medical assessment. The evidence issued by a Contracting State that the licence holder meets specific requirements of medical fitness

Minimum equipment list (MEL). A list which provides for the operation of aircraft, subject to specified conditions, with particular equipment inoperative, prepared by an operator in conformity with, or more restrictive than, the master minimum equipment list (MMEL) established for the aircraft type.

Mock-up. A training device that is a partial, functional replica of an actual aircraft, without motion.

Observable behaviour (OB). A single role-related behaviour that can be observed and may or may not be measurable.

Operations manual. A manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties.

Operator. The person, organization or enterprise engaged in or offering to engage in an aircraft operation.

Performance criteria. Statements used to assess whether the required levels of performance have been achieved for a competency. A performance criterion consists of an observable behaviour, condition(s) and a competency standard.

Person with disabilities. Any person whose mobility is reduced due to a physical incapacity (sensory or locomotor), an intellectual deficiency, age, illness or any other cause of disability when using transport and whose situation needs special attention and the adaptation to the person's needs of the services made available to all passengers.

Pilot-in-command. The pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight.

Pressure-altitude. An atmospheric pressure expressed in terms of altitude which corresponds to that pressure in the Standard Atmosphere.

Prophylaxis. Prevention of disease or injury or a process which can lead to disease or injury.

Protective breathing equipment (PBE). Breathing equipment providing full, sealed protection against smoke, fumes, etc., covering the head, the collar and upper shoulder area. Fifteen-minutes minimum oxygen supply per PBE is recommended.

Psychoactive substances. Alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded.

Remote on-board areas. Areas that are not in the passenger compartment but that are accessible to occupants, such as crew rest area(s), cargo area, or electronics compartment.

Rest period. A continuous and defined period of time, subsequent to and/or prior to duty, during which flight or cabin crew members are free of all duties.

Risk mitigation. The process of incorporating defences or preventive controls to lower the severity and/or likelihood of a hazard's projected consequence.

Safety. The state in which risks associated with aviation activities, related to, or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level.

Safety management system. A systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures.

Safety risk. The predicted probability and severity of the consequences or outcomes of a hazard.

Simulated exercise. Exercise representing a full context scenario (e.g. aircraft evacuation) where cabin crew apply the operator's procedures and associated crew responsibilities for dealing with the specific situation. This is typically conducted in a representative training device capable of reproducing the appropriate environment or equipment characteristics (e.g. cabin, flight deck, accessible cargo compartment, crew rest area, etc.), or on an actual aircraft.

Simulator. An apparatus which provides an accurate representation of the flight deck and/or cabin of a particular aircraft type to the extent that the mechanical, electrical, electronic, etc., aircraft systems control functions, the normal environment of flight crew members and/or cabin crew members and the performance and characteristics of that type of aircraft are realistically simulated.

Special categories of passengers. Persons who need special conditions, assistance, or equipment when travelling by air. These may include but are not limited to:

- a) infants;
- b) unaccompanied children;
- c) persons with disabilities;
- d) persons with mobility impairments;

- e) persons on stretchers; and
- f) inadmissible passengers, deportees or persons in custody.

State of the Operator. The State in which the operator's principal place of business is located, or if there is no such place of business, the operator's permanent residence.

Sterile flight deck. During critical phases of flight and all flight operations (except cruise) conducted below 10 000 feet, no crew member may engage in any activity or conversation that is not required for safe operation of the aircraft. Non-essential cockpit-cabin communication is prohibited during this period.

Technical Instructions. The *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284), approved and issued periodically in accordance with the procedure established by the ICAO Council.

Threat levels. A series of four defined threat levels of passenger disturbances, established so as to give common definition and thereby understanding to all concerned parties as to what is occurring on the aircraft:

- Level 1 — Disruptive behaviour (suspicious or verbally threatening);
- Level 2 — Physically abusive behaviour;
- Level 3 — Life-threatening behaviour;
- Level 4 — Attempted breach or actual breach of the flight crew compartment.

Threat. Events or errors that occur beyond the influence of an operational person, increase operational complexity and must be managed to maintain the margin of safety.

Note.— See Attachment E of Annex 13 — Aircraft Accident and Incident Investigation for a description of operational personnel.

Threat and error management (TEM). An overarching safety concept regarding aviation operations and human performance.

Threat management. The process of detecting and responding to threats with countermeasures that reduce or eliminate the consequences of threats and mitigate the probability of errors or undesired states.

Tokyo Convention. Convention on Offences and Certain Other Acts Committed on Board Aircraft, signed at Tokyo on 14 September 1963.

Unstaffed exit. Emergency exit for which no cabin crew member has been positioned for the flight.

LIST OF ACRONYMS

AC	Advisory circular
ADDIE	Analyse, design, develop, implement and evaluate
AED	Automated external defibrillator
AOC	Air operator certificate
AQP	Advanced Qualification Programme
ATO	Approved training organization
CASS	Commercial Air Service Standards
CBR	Chemical/biological/radiological
CBT	Computer-based training
C-EFB	Cabin electronic flight bag
CS-CCD	Certification Specifications for Cabin Crew Data
CS-FCO	Certification Specifications for Flight Crew Data
CS-MCS	Certification Specifications for Maintenance
CS-MMEL	Certification Specifications for Master Minimum Equipment List
CS-SIMD	Certification Specifications for Simulator Data
CPR	Cardiopulmonary resuscitation
CRM	Crew resource management
CRS	child restraint systems
CTD	Cabin training devices
CCOM	Cabin crew operations manual
DNA	Do not resuscitate
EASA	European Union Aviation Safety Agency
EMK	Emergency medical kit
EU	European Union
FAA	Federal Aviation Administration
FAK	First-aid kit
FRMS	Fatigue risk management system
FSAG	Fatigue Safety Action Group
I/C	In-charge cabin crew member
IATA	International Air Transport Association
IFE	In-flight entertainment
ILCOR	International Liaison Committee on Resuscitation
ISD	Instructional systems design
MEL	Minimum equipment list
MMEL	Master minimum equipment list
OB	Observable behaviour
OHCHR	Office of the United Nations High Commissioner for Human Rights
OSD	Operational Suitability Data
PBE	Protective breathing equipment
PED	Personal electronic device
SARPs	Standards and Recommended Practices
SOPs	Standard operating procedures
SMS	Safety management system
STC	Supplemental type certificate

TC	Type certificate
TCCA	Transport Canada Civil Aviation
TEM	Threat and error management
UPK	Universal precaution kit
UTC	Coordinated universal time
WHO	World Health Organization

DEFINITIONS

Able-bodied passengers. Passengers who are clearly physically able and are willing to help cabin crew maintain good order and discipline on board the aircraft.

Accountable executive. A single, identifiable person having responsibility for the effective and efficient performance of the service provider's safety management systems (SMS).

Adapted competency model. A group of competencies with their associated description and performance criteria adapted from an ICAO competency framework that an organization uses to develop competency-based training and assessment for a given role.

Air operator certificate (AOC). A certificate authorizing an operator to carry out specified commercial air transport operations.

Aircraft. Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

Airworthy. The status of an aircraft, engine, propeller or part when it conforms to its approved design and is in a condition for safe operation.

Approved training organization — cabin crew. An organization approved by a Contracting State in accordance with the national regulations to perform cabin crew training and which operates under the supervision of that State.

Approved training — Cabin crew. Training conducted under special curricula and supervision approved by a Member State that, where applicable, is conducted within an approved training organization.

Apron. A defined area, on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance.

Assessment. The determination by an instructor, assessor or evaluator as to whether a candidate meets a required competency standard under given conditions, by collecting evidence from observable behaviours. Assessment takes place during instruction and evaluation.

Attendant panel. Control panel(s) intended for use by cabin crew to operate and/or monitor aircraft systems relevant to cabin crew tasks during normal operations and in the event of emergency situations.

Baggage. Personal property of passengers or crew carried on an aircraft by agreement with the operator.

Barostatic. An atmospheric pressure, used in forecasting the weather and determining altitude, derived using a barometer.

Cabin crew member. A crew member who performs, in the interest of safety of passengers, duties assigned by the operator or the pilot-in-command of the aircraft, but who shall not act as a flight crew member.

Change management. A formal process to manage changes within an organization in a systematic manner, so that changes which may impact identified hazards and risk mitigation strategies are accounted for, before the implementation of such changes.

Classroom training. In-person, instructor-led training, which may include group exercises and interactive instructional sessions.

Clean aircraft concept. All critical surfaces of an aircraft must be clean of any surface contamination. The critical surfaces of an aircraft are the wings, control surfaces, rotors, propellers, horizontal stabilizers, vertical stabilizers or any other stabilizing surface. In the case of an aircraft with rear mounted engines, the upper surface of the fuselage is also a critical surface.

Clear zone. The area of the passenger cabin immediately in front of the flight crew compartment door, including galleys and lavatories.

Cognitive. Pertaining to cognition. Knowing, perceiving, or conceiving as an act or faculty distinct from emotion and volition.

Colicky pain. Denoting or resembling the pain of colic: pain relating to the colon. Spasmodic pains in the abdomen caused by spasm, obstruction or twisting.

Competency. A dimension of human performance that is used to reliably predict successful performance on the job. A competency is manifested and observed through behaviours that mobilize the relevant knowledge, skills and attitudes to carry out activities or tasks under specified conditions.

Competency-based training and assessment. Training and assessment that are characterized by a performance orientation, emphasis on standards of performance and their measurement, and the development of training to the specified performance standards.

Competency standard. A level of performance that is defined as acceptable when assessing whether or not competency has been achieved.

Conditions. Anything that may qualify a specific environment in which performance will be demonstrated.

Co-pilot. A licensed pilot serving in any piloting capacity other than as pilot-in-command but excluding a pilot who is on board the aircraft for the sole purpose of receiving flight instruction.

Computer-based training. Training involving instructional aids, such as computers and tablets. Computer-based training may encompass the use of a data storage medium (such as CD-ROM or flash drive), as well as web-based training (commonly referred to as e-learning), distance learning and digital learning (such as virtual learning and gamification).

Crew member. A person assigned by an operator to duty on an aircraft during a flight duty period.

Critical phases of flight. The period of high workload on the flight deck, normally being the periods between the beginning of taxiing until the aircraft is on the route climb phase and between the final part of descent to aircraft parking.

Cruising level. A level maintained during a significant portion of a flight.

Dangerous goods. Articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified according to those Instructions.

Note.— Dangerous goods are classified in Annex 18 — The Safe Transport of Dangerous Goods by Air, Chapter 3.

Defences. Specific mitigating actions, preventive controls or recovery measures put in place to prevent the realization of a hazard or its escalation into an undesirable consequence.

Direct access. A direct route or passage from a seat to an exit from which a passenger can proceed without entering an aisle or passing around an obstruction.

Disembarkation. The leaving of an aircraft after a landing, except by crew or passengers continuing on the next stage of the same through-flight.

Disinfection. The procedure whereby health measures are taken to control or kill infectious agents on a human or animal body, in or on affected parts of aircraft, baggage, cargo, goods or containers, as required, by direct exposure to chemical or physical agents.

Disinsection. The procedure whereby health measures are taken to control or kill insects present in aircraft, baggage, cargo, containers, goods and mail.

Ditching. The forced landing of an aircraft on water.

Duty period. A period which starts when a flight or cabin crew member is required by an operator to report for or to commence a duty and ends when that person is free from all duties.

Duty. Any task that flight or cabin crew members are required by the operator to perform, including, for example, flight duty, administrative work, training, positioning and standby when it is likely to induce fatigue.

Embarkation. The boarding of an aircraft for the purpose of commencing a flight, except by such crew or passengers as have embarked on a previous stage of the same through-flight.

Emergency exit. Door, window exit, or any other type of exit (e.g. hatch in the flight deck, tail cone exit) used as an egress point to allow maximum opportunity for cabin evacuation within an appropriate time period.

Emergency exit row seating. Each seat in a row of seats located adjacent to an emergency exit, having direct access to the exit.

Error. An action or inaction by an operational person that leads to deviations from organizational or the operational person's intentions or expectations.

Note.— See Attachment E of Annex 13 — Aircraft Accident and Incident Investigation for a description of operational personnel.

Error management. The process of detecting and responding to errors with countermeasures that reduce or eliminate the consequence of errors and mitigate the probability of further errors or undesired states.

Evaluator. A person authorized to conduct the formal and final summative assessment of a trainee's performance.

Exanthematous diseases. Relating to an exanthema: a skin eruption occurring as a symptom of an acute viral or coccal disease, as in scarlet fever or measles.

Fatigue. A physiological state of reduced mental or physical performance capability resulting from sleep loss, extended wakefulness, circadian phase, and/or workload (mental and/or physical activity) that can impair a person's alertness and ability to perform safety-related operational duties.

Fatigue risk management system (FRMS). A data-driven means of continuously monitoring and managing fatigue-related safety risks, based upon scientific principles and knowledge as well as operational experience that aims to ensure relevant personnel are performing at adequate levels of alertness.

Flight crew member. A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.

Flight duty period. A period which commences when a flight or cabin crew member is required to report for duty that includes a flight or a series of flights and which finishes when the aeroplane finally comes to rest and the engines are shut down at the end of the last flight on which he/she is a crew member.

Flight simulation training device. Any one of the following three types of apparatus in which flight conditions are simulated on the ground:

A flight simulator, which provides an accurate representation of the flight deck of a particular aircraft type to the extent that the mechanical, electrical, electronic, etc. aircraft systems control functions, the normal environment of flight crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated;

A flight procedures trainer, which provides a realistic flight deck environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic, etc. aircraft systems, and the performance and flight characteristics of aircraft of a particular class;

A basic instrument flight trainer, which is equipped with appropriate instruments, and which simulates the flight deck environment of an aircraft in flight in instrument flight conditions.

Flight time — Aeroplanes. The total time from the moment an aeroplane first moves for the purpose of taking off until the moment it finally comes to rest at the end of the flight.

Note.— Flight time as here defined is synonymous with the term “block to block” time or “chock to chock” time in general usage which is measured from the time an aeroplane first moves for the purpose of taking off until it finally stops at the end of the flight.

Ground handling. Services necessary for an aircraft's arrival at, and departure from, an airport, other than air traffic services.

Hands-on exercise. Exercise on the use of equipment or aircraft systems that is conducted without a specific context. Equipment that is removed from operation, or other representative training equipment considered acceptable by the State can be used for the purposes of this training.

Hazard. A condition or an object with the potential to cause or contribute to an aircraft incident or accident.

Human factors principles. Principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance.

Human performance. Human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.

Hypoglycaemic attack. Pertaining to or characterized by hypoglycaemia: abnormal decrease in concentration of glucose in the circulating blood, e.g. less than the minimum of the normal range.

Hypothermia. A subnormal body temperature significantly below 37°C.

Hypoxia. A deficiency of oxygen in inspired gases, arterial blood or tissue, short of anoxia (almost complete absence of oxygen).

ICAO competency framework. A competency framework, developed by ICAO, is a selected group of competencies for a given aviation discipline. Each competency has an associated description and observable behaviours.

Improvised explosive device. A device, placed or delivered, and fabricated in an improvised manner incorporating explosives or destructive, lethal, noxious, pyrotechnic or incendiary chemicals designed to destroy, disfigure, distract or harass.

Instructional systems design (ISD). A formal process for designing training which includes analysis, design and production, and evaluation.

In-flight. The period from the moment all external aircraft doors are closed following boarding through the moment when one external door is opened to allow passengers to leave the aircraft or until, if a forced landing, competent authorities take over responsibility for the aircraft and individuals and property on the aircraft. For the purpose of the Tokyo Convention an aircraft is considered to be in flight from the moment when power is applied for the purpose of take-off until the moment when the landing run ends.

In-charge cabin crew member. Cabin crew leader who has overall responsibility for the conduct and coordination of cabin procedures applicable during normal operations and during abnormal and emergency situations.

Lockdown. The condition of the flight crew compartment door being closed and locked securely, with no traffic permitted either in or out of the flight crew compartment.

Medical assessment. The evidence issued by a Contracting State that the licence holder meets specific requirements of medical fitness

Minimum equipment list (MEL). A list which provides for the operation of aircraft, subject to specified conditions, with particular equipment inoperative, prepared by an operator in conformity with, or more restrictive than, the master minimum equipment list (MMEL) established for the aircraft type.

Mock-up. A training device that is a partial, functional replica of an actual aircraft, without motion.

Observable behaviour (OB). A single role-related behaviour that can be observed and may or may not be measurable.

Operations manual. A manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties.

Operator. The person, organization or enterprise engaged in or offering to engage in an aircraft operation.

Performance criteria. Statements used to assess whether the required levels of performance have been achieved for a competency. A performance criterion consists of an observable behaviour, condition(s) and a competency standard.

Person with disabilities. Any person whose mobility is reduced due to a physical incapacity (sensory or locomotor), an intellectual deficiency, age, illness or any other cause of disability when using transport and whose situation needs special attention and the adaptation to the person's needs of the services made available to all passengers.

Pilot-in-command. The pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight.

Pressure-altitude. An atmospheric pressure expressed in terms of altitude which corresponds to that pressure in the Standard Atmosphere.

Prophylaxis. Prevention of disease or injury or a process which can lead to disease or injury.

Protective breathing equipment (PBE). Breathing equipment providing full, sealed protection against smoke, fumes, etc., covering the head, the collar and upper shoulder area. Fifteen-minutes minimum oxygen supply per PBE is recommended.

Psychoactive substances. Alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded.

Remote on-board areas. Areas that are not in the passenger compartment but that are accessible to occupants, such as crew rest area(s), cargo area, or electronics compartment.

Rest period. A continuous and defined period of time, subsequent to and/or prior to duty, during which flight or cabin crew members are free of all duties.

Risk mitigation. The process of incorporating defences or preventive controls to lower the severity and/or likelihood of a hazard's projected consequence.

Safety. The state in which risks associated with aviation activities, related to, or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level.

Safety management system. A systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures.

Safety risk. The predicted probability and severity of the consequences or outcomes of a hazard.

Simulated exercise. Exercise representing a full context scenario (e.g. aircraft evacuation) where cabin crew apply the operator's procedures and associated crew responsibilities for dealing with the specific situation. This is typically conducted in a representative training device capable of reproducing the appropriate environment or equipment characteristics (e.g. cabin, flight deck, accessible cargo compartment, crew rest area, etc.), or on an actual aircraft.

Simulator. An apparatus which provides an accurate representation of the flight deck and/or cabin of a particular aircraft type to the extent that the mechanical, electrical, electronic, etc., aircraft systems control functions, the normal environment of flight crew members and/or cabin crew members and the performance and characteristics of that type of aircraft are realistically simulated.

Special categories of passengers. Persons who need special conditions, assistance, or equipment when travelling by air. These may include but are not limited to:

- a) infants;
- b) unaccompanied children;
- c) persons with disabilities;
- d) persons with mobility impairments;
- e) persons on stretchers; and
- f) inadmissible passengers, deportees or persons in custody.

State of the Operator. The State in which the operator's principal place of business is located, or if there is no such place of business, the operator's permanent residence.

Sterile flight deck. During critical phases of flight and all flight operations (except cruise) conducted below 10 000 feet, no crew member may engage in any activity or conversation that is not required for safe operation of the aircraft. Non-essential cockpit-cabin communication is prohibited during this period.

Technical Instructions. The *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284), approved and issued periodically in accordance with the procedure established by the ICAO Council.

Threat levels. A series of four defined threat levels of passenger disturbances, established so as to give common definition and thereby understanding to all concerned parties as to what is occurring on the aircraft:

- Level 1 — Disruptive behaviour (suspicious or verbally threatening);
- Level 2 — Physically abusive behaviour;
- Level 3 — Life-threatening behaviour;
- Level 4 — Attempted breach or actual breach of the flight crew compartment.

Threat. Events or errors that occur beyond the influence of an operational person, increase operational complexity and must be managed to maintain the margin of safety.

Note.— See Attachment E of Annex 13 — Aircraft Accident and Incident Investigation for a description of operational personnel.

Threat and error management (TEM). An overarching safety concept regarding aviation operations and human performance.

Threat management. The process of detecting and responding to threats with countermeasures that reduce or eliminate the consequences of threats and mitigate the probability of errors or undesired states.

Tokyo Convention. Convention on Offences and Certain Other Acts Committed on Board Aircraft, signed at Tokyo on 14 September 1963.

Unstaffed exit. Emergency exit for which no cabin crew member has been positioned for the flight.

Chapter 1

CABIN CREW SAFETY TRAINING REQUIREMENTS AND QUALIFICATIONS

1.1 OVERVIEW OF CABIN SAFETY AND THE ROLE OF CABIN CREW

1.1.1 Cabin safety contributes to the prevention of accidents and incidents, the protection of the aircraft's occupants, through proactive safety management, including hazard identification and safety risk management, and the increase of survivability in the event of an emergency situation. Cabin safety focuses on: regulations relating to cabin operations, operator's procedures and documentation, cabin crew training and qualifications (including facilities and devices), human performance, design and manufacturing, equipment and furnishings on board aircraft, and the operational environment.

1.1.2 ICAO defines a cabin crew member as a crew member who performs, in the interest of safety of passengers, duties assigned by the operator or the pilot-in-command of the aircraft, but who shall not act as a flight crew member. Traditionally, the role of cabin crew members focused on the evacuation of an aircraft in the event of an accident. However, cabin crew members also play an important proactive role in managing safety, which can contribute to the prevention of accidents. This role includes, but is not limited to:

- a) preventing incidents from escalating in the cabin, such as smoke or fire;
- b) informing the flight crew of abnormal situations observed in the cabin or relating to the aircraft, such as pressurization problems, engine anomalies, and contamination of critical surfaces; and
- c) preventing unlawful interference and managing passenger events that can compromise safety and security of the flight, such as hijackings.

1.1.3 Operators can gain insight into hazards relating to their operations through their safety management systems. Cabin crew members play a key role in identifying hazards and reporting any condition that can pose a risk to the safe operation of an aircraft and to its occupants' safety.

1.2 CABIN CREW SAFETY AND SECURITY TRAINING

1.2.1 The role that cabin crew members play, both in terms of day-to-day safety management in normal operations and in the event of an abnormal or emergency situation, requires that they undergo specialized and thorough training to gain sound knowledge of their safety role and the required competencies needed to perform their tasks.

1.2.2 Training must focus on cabin crew members' tasks in the event of an abnormal or emergency situation. Since accidents are statistically rare, the training programme needs to ensure that cabin crew members remain proficient and are able to execute the required tasks in the event that they occur.

1.2.3 Cabin crew training should also address safety and security-related tasks relating to normal day-to-day operations, including the role that cabin crew members play in maintaining safety and security.

1.2.4 Joint safety and emergency training for both flight crew and cabin crew is recommended, particularly for some key topics such as crew resource management. Joint training enhances communication and coordination and promotes a better understanding of the crew members' roles and responsibilities. This aspect is discussed in detail in Chapter 7.

1.2.5 The role of cabin crew members is constantly expanding. Beyond safety and abnormal/emergency procedures, cabin crew members must manage security-related events, medical situations, and participate in the operator's overarching management programmes, such as safety management systems. Training should encompass all these aspects.

1.2.6 ICAO developed a competency-based approach to cabin crew safety training so that cabin crew members may be proficient to perform their tasks, and to establish an international baseline for cabin crew competencies. As a result, this manual has been rewritten to align with this approach. An overview of the competency-based approach is presented in Chapter 2. The cabin crew competency framework is presented in the Appendices to Chapters 4, 5, 6, 8, 9 and 14.

1.3 ICAO STANDARDS AND RECOMMENDED PRACTICES (SARPs)

1.3.1 The assignment of cabin crew members for safety duties on board commercial passenger aircraft is a requirement of Annex 6 — *Operation of Aircraft* to the Convention on International Civil Aviation.

1.3.2 Paragraph 12.1 of Annex 6, Part I — *International Commercial Air Transport — Aeroplanes*, states that:

“An operator shall establish, to the satisfaction of the State of the Operator, the minimum number of cabin crew required for each type of aeroplane, based on seating capacity or the number of passengers carried, in order to effect a safe and expeditious evacuation of the aeroplane, and the necessary functions to be performed in an emergency or a situation requiring emergency evacuation. The operator shall assign these functions for each type of aeroplane.”

1.3.3 Cabin crew safety training is addressed in 12.4 — Training, of Annex 6, Part I, which states that:

“An operator shall establish and maintain a training programme, approved by the State of the Operator, to be completed by all persons before being assigned as a cabin crew member. Cabin crew members shall complete a recurrent training programme annually. These training programmes shall ensure that each person is:

- a) competent to execute those safety duties and functions which the cabin crew member is assigned to perform in the event of an emergency or in a situation requiring emergency evacuation;
- b) drilled and capable in the use of emergency and life-saving equipment required to be carried, such as life jackets, life rafts, evacuation slides, emergency exits, portable fire extinguishers, oxygen equipment, first-aid and universal precaution kits, and automated external defibrillators;
- c) when serving on aircrafts operated above 3 000 m (10 000 ft), knowledgeable as regards the effect of lack of oxygen and, in the case of pressurized aircrafts, as regards physiological phenomena accompanying a loss of pressurization;

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- d) aware of other crew members' assignments and functions in the event of an emergency so far as is necessary for the fulfilment of the cabin crew member's own duties;
- e) aware of the types of dangerous goods which may, and may not, be carried in a passenger cabin; and
- f) knowledgeable about human performance as related to passenger cabin safety duties including flight crew-cabin crew coordination."

1.3.4 The requirements for the training of cabin crew members in the transport of dangerous goods are included in the Dangerous Goods Training Programme contained in Annex 18 — *The Safe Transport of Dangerous Goods by Air* and the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284). The content of dangerous goods training for cabin crew members, detailed in the Technical Instructions, includes:

- a) general philosophy;
- b) limitations;
- c) labelling and marking;
- d) recognition of undeclared dangerous goods;
- e) provisions for passengers and crew; and
- f) emergency procedures.

1.3.5 Security-related training for cabin crew is addressed in Annex 6, Part I, 13.4 – *Training programmes*, which states that:

"An operator shall establish and maintain an approved security training programme which ensures crew members act in the most appropriate manner to minimize the consequences of acts of unlawful interference. As a minimum, this programme shall include the following elements:

- a) determination of the seriousness of any occurrence;
- b) crew communication and coordination;
- c) appropriate self-defence responses;
- d) use of non-lethal protective devices assigned to crew members whose use is authorized by the State of the Operator;
- e) understanding of behaviour of terrorists so as to facilitate the ability of crew members to cope with hijacker behaviour and passenger responses;
- f) live situational training exercises regarding various threat conditions;
- g) flight crew compartment procedures to protect the aircraft; and

- h) aircraft search procedures and guidance on least-risk bomb locations where practicable.

An operator shall also establish and maintain a training programme to acquaint appropriate employees with preventive measures and techniques in relation to passengers, baggage, cargo, mail, equipment, stores and supplies intended for carriage on an aircraft so that they contribute to the prevention of acts of sabotage or other forms of unlawful interference.”

1.4 RECOMMENDED MINIMUM QUALIFICATIONS

1.4.1 At present, there are no international Standards for the qualifications of cabin crew members. However, it is important that specific minimum qualifications relating to fitness to perform tasks, knowledge, age and other aspects are met, so that cabin crew members can fulfil their role in terms of safety management.

1.4.2 A set of minimum qualifications enables cabin crew trainees to successfully complete the training programme and increases their ability to perform the required tasks once they are on the line. Cabin crew members must be able to operate equipment and systems which may be physically challenging, exercise good judgement, manage the cabin and communicate effectively with flight crew members, fellow cabin crew members, other personnel and passengers.

1.4.3 Operators should develop minimum qualifications for their cabin crew members. These qualifications should be in accordance with national regulations, where applicable.

1.4.4 Recommended minimum qualifications typically include:

- a) a minimum age requirement (at least 18 years old);
- b) high school diploma or an equivalent diploma (10 years of schooling or more);
- c) the ability to read, speak, write and understand a designated common language to ensure appropriate communication with both crew members and passengers;
- d) the ability to retrieve safety and emergency equipment and open and close overhead bins on the aircraft, from a standing position;
- e) the ability and strength to operate equipment/systems, as applicable to the operator's procedures during normal, abnormal and emergency situations and to the aircraft type(s) to which the cabin crew member will be assigned duties;
- f) being clear of a criminal record and passing a security background check; and
- g) meeting any other requirements, as defined by the State of the operator or the operator itself (e.g. pass a swim test, undergo a medical assessment).

1.5 TYPES OF TRAINING

1.5.1 The following sections provide definitions of the different types of training that should be provided, as a minimum, to cabin crew members.

1.5.2 The types of training addressed are as follows:

- a) initial training;
- b) aircraft type training;
- c) differences' training;
- d) aircraft visit;
- e) familiarization flight;
- f) recurrent training; and
- g) requalification training.

1.6 INITIAL TRAINING

1.6.1 Initial training is required for persons who have not previously operated as a cabin crew member. The goal of initial training is to ensure that each trainee acquires the competencies, knowledge and skills required to perform the tasks related to the safety of passengers and flight during normal, abnormal and emergency situations. This is accomplished through classroom instruction and computer-based training (CBT), complemented by a series of hands-on and simulated exercises such as first aid, firefighting, etc. Cabin crew trainees must successfully complete initial training before they are assigned duties as cabin crew members.

1.6.2 Initial training includes:

- a) aviation indoctrination;
- b) cabin crew tasks;
- c) normal, abnormal and emergency procedures;
- d) aircraft type training;
- e) dangerous goods;
- f) human performance;
- g) cabin health and first aid;
- h) aviation security; and
- i) identifying and responding to trafficking in persons.

1.7 AIRCRAFT TYPE TRAINING

1.7.1 Aircraft type training is required to gain a qualification on the aircraft model that the cabin crew member will be assigned on (e.g. a Boeing B777 or an Airbus A330).

1.7.2 This training should include, but is not limited to, the following elements, if applicable to the particular aircraft:

- a) aircraft description;
- b) cabin configuration (number and distribution of cabin crew seats and number of passenger seats);
- c) cabin layout (interior design, stowage compartments such as overhead bins, and closets, etc.);
- d) galleys;
- e) lavatories;
- f) flight deck familiarization and egress;
- g) crew rest areas (normal and emergency egress) and other remote areas;
- h) exits (type, number, location and operation);
- i) assisting evacuation means (slide, slide-raft, life raft, rope, etc.);
- j) safety and emergency equipment, including location and operation;
- k) aircraft systems relevant to cabin crew tasks:
 - 1) air conditioning, ventilation, and pressurization systems;
 - 2) communication systems and associated signalling panels;
 - 3) control panels;
 - 4) electrical systems (galley, lavatory, in-flight entertainment system, in-seat electrical system, circuit breaker panels, etc.);
 - 5) evacuation alarm system;
 - 6) fire suppression and extinguishing systems;
 - 7) lighting systems (interior, exterior and emergency lights);
 - 8) oxygen systems (cabin and flight deck);
 - 9) smoke detection system; and
 - 10) water and waste systems;
- l) normal procedures and the related hands-on and/or simulated exercises;

- m) abnormal and emergency procedures and the related hands-on and/or simulated exercises; and
- n) design-related elements that may impact normal and/or emergency procedures (stairs, smoke curtain, social areas, non-forward facing passenger seats, cargo areas if accessible from the passenger compartment during flight, etc.).

1.7.3 This training and the associated checking should be accomplished through classroom instruction, CBT as well as hands-on and simulated exercises with a representative training device capable of reproducing the appropriate environment/equipment characteristics, or on an actual aircraft.

1.8 DIFFERENCES TRAINING

1.8.1 Differences training is required to gain competence before the cabin crew member is assigned to duty on an aircraft that has differences from the model or series that the crew member is previously qualified on. Examples of different models include an Airbus A320 vs. A340 or a Boeing B737 vs. B777. Examples of different series include a B777-200 vs. B777-300 or an A330-200 vs. A330-300.

1.8.2 The training should include the following as a minimum, as applicable to the particular aircraft:

- a) exits (type, number, location and operation);
- b) assisting evacuation means (slide, slide-raft, life raft, rope, etc.);
- c) safety and emergency equipment, including location and operation;
- d) aircraft systems relevant to cabin crew tasks (refer to 1.7.2 (k));
- e) normal procedures and the related hands-on and/or simulated exercises;
- f) abnormal and emergency procedures and the related hands-on and/or simulated exercises; and
- g) design-related elements that may impact on normal and/or emergency procedures (stairs, smoke curtain, social areas, non-forward facing passenger seats, cargo areas if accessible from the passenger compartment during flight, etc.).

1.8.3 This training and the associated checking should be accomplished through classroom instruction, CBT, as well as hands-on and simulated exercises with a representative training device capable of reproducing the appropriate environment/equipment characteristics, or on an actual aircraft.

1.9 AIRCRAFT VISIT

1.9.1 The purpose of an aircraft visit is to familiarize each cabin crew member with the aircraft environment and its equipment. Each cabin crew trainee should participate in a visit to an aircraft prior to participating on a familiarization flight (refer to 1.10). The visit is typically conducted on board a stationary aircraft. Aircraft visits should be conducted by suitably qualified persons and in accordance with the syllabus described in the cabin crew operations manual (CCOM) and/or the cabin crew training manual. They should be conducted in accordance with national regulations, where applicable.

1.9.2 The aircraft visit should provide an overview of the aircraft's exterior, interior and systems including but not limited to the following, if applicable, to the particular aircraft:

- a) cabin crew stations;
- b) cabin layout (interior design, stowage compartments such as overhead bins, and closets, etc.);
- c) galleys;
- d) lavatories;
- e) flight deck familiarization and egress;
- f) crew rest areas and any other remote areas;
- g) safety and emergency equipment;
- h) exits (location and their environment);
- i) assisting evacuation means (location and stowage);
- j) aircraft systems relevant to cabin crew tasks:
 - 1) communication systems and associated signalling panels;
 - 2) control panels;
 - 3) electrical systems (galley, lavatory, in-flight entertainment system, in-seat electrical system, circuit breaker panels, etc.);
 - 4) evacuation alarm system;
 - 5) fire suppression and extinguishing systems;
 - 6) lighting systems (interior, exterior and emergency lights);
 - 7) oxygen systems (cabin and flight deck);
 - 8) smoke detection system; and
 - 9) water and waste systems; and
- k) cargo areas if accessible from the passenger compartment during flight.

1.10 FAMILIARIZATION FLIGHT

1.10.1 A familiarization flight is also referred to as "line indoctrination". Each cabin crew trainee should participate in a familiarization flight as described below. Familiarization flights should be conducted in accordance with national regulations, where applicable.

1.10.2 The familiarization flight should be completed within a specified number of days of fulfilling the requirements of the ground-training portion of the operator's training programme. This time frame is usually defined by the State.

1.10.3 During the familiarization flight, the cabin crew trainee should be additional to the minimum number of operating cabin crew members required by the State. The familiarization flight should be conducted under appropriate supervision (e.g. in-charge cabin crew member, instructor, evaluator, line checker, etc.). It should be structured and involve the cabin crew trainee in the participation of safety-related pre-flight, in-flight, pre-landing and post-flight duties. Familiarization flights should form part of the training record for each cabin crew member.

Note.— A new (start-up) operator may not have personnel which meet the criteria for persons authorized to conduct familiarization flights. In those instances of new (start-up) operators, the State may need to work with the operator to establish criteria for an "appropriate" supervision and special procedures for the conduct of familiarization flights for the purpose of initial certification.

1.10.4 A familiarization flight should include the following, as a minimum:

- a) cabin crew tasks as determined by the operator including, but not limited to:
 - 1) pre-flight and post-flight tasks (e.g. participation in briefings, conducting pre-flight checks, reviewing documentation);
 - 2) a review of abnormal and emergency situations, associated procedures, and safety and emergency equipment; and
 - 3) normal operations safety and security-related procedures;
- b) cabin crew stations for take-off and landing (i.e. seating assignments) for persons conducting the familiarization flight and for the cabin crew trainees; and
- c) crew communication procedures (including the use of interphone and public address system).

1.10.5 The operator should define situations which may prompt the termination of a familiarization flight. These situations include:

- a) any abnormal or emergency situation (as described in Chapter 5);
- b) any situation involving acts of unlawful interference (as described in Chapter 9);
- c) an incapacitation of the person who conducts the familiarization flight; or
- d) any other situation preventing the cabin crew trainee from completing the familiarization flight.

1.10.6 A familiarization flight is usually conducted as part of a revenue flight with passengers on board. However, some States may allow for group familiarization flights during non-revenue flights (refer to Appendix 5 to this chapter).

Note.— Guidance on the ratio of trainees to the person who conducts the familiarization flight is presented in Chapter 15.

1.11 RECURRENT TRAINING

1.11.1 Recurrent training is conducted annually to maintain and enhance cabin crew members' competence at the desired level through a series of hands-on exercises, simulated exercises, exams, etc. for general training elements such as first-aid as well as for training elements relevant to each aircraft type on which the cabin crew member is assigned to operate. It may also be provided to familiarize crew members with new requirements, procedures and/or equipment introduced since their last training. Recurrent training ensures that cabin crew members, by practising most tasks and their associated competencies, maintain the required level of performance.

1.11.2 ICAO Standards and Recommended Practices (SARPs) require cabin crew to undergo annual recurrent training. For recurrent training, the content may vary in regard to the tasks covered, the training media used, as well as the competencies that may be assessed, which for example may be covered over a 36-month cycle. The content of recurrent training must be covered within the cycle defined by the State.

1.11.3 Recurrent training should include the following, as a minimum:

- a) exits (type, number, location and operation);
- b) assisting evacuation means (slide, slide-raft, life raft, rope, etc.);
- c) safety and emergency equipment, including location and operation;
- d) aircraft systems relevant to the cabin crew tasks (refer to 1.7.2 (k));
- e) normal procedures and the related hands-on and/or simulated exercises;
- f) abnormal and emergency procedures and the related hands-on and/or simulated exercises, including:
 - 1) firefighting (including a live firefighting exercise, as required by the State);
 - 2) fume events;
 - 3) decompression;
 - 4) evacuation on land and on water (including a wet drill, as required by the State); and
 - 5) flight and cabin crew member incapacitation;
- g) crew resource management;
- h) passenger handling and crowd control;
- i) aviation security;
- j) first aid;
- k) dangerous goods (within 24 months of previous training, refer to Chapter 6, 6.1.5);
- l) review of recent incidents and/or accidents pertinent to the operator; and
- m) identifying and responding to trafficking in persons.

1.11.4 This training and the associated checking should be accomplished through classroom instruction and/or CBT, and hands-on and simulated exercises with a representative training device capable of reproducing the appropriate environment/equipment characteristics, or on an actual aircraft.

1.12 REQUALIFICATION TRAINING

1.12.1 Requalification training should be defined for cabin crew members whose qualifications have expired for any reason (e.g. prolonged absence from flying duties), as part of the process to regain qualification enabling the cabin crew member to perform the required tasks. This is determined based on the applicable validity period(s), namely the time elapsed since the cabin crew member's last required training. The cabin crew member may need to follow a specific series of steps in order to regain qualification.

1.12.2 Requalification training should be conducted in accordance with national regulations, where applicable. National regulations may require requalification based on different time frames or circumstances. The operator should establish a process, based on the applicable validity periods of the required training, to monitor when a cabin crew member's qualification(s) expire. The cabin crew member should complete the training required for requalification prior to being assigned as part of the operating crew.

1.12.3 This training and the associated checking should be accomplished through classroom instruction, and/or CBT, as well as hands-on and simulated exercises with a representative training device capable of reproducing the appropriate environment and the equipment characteristics, or on an actual aircraft.

1.12.4 Examples of the types of requalification training programmes are provided in Appendix 1 to this chapter.

1.13 SPECIFIC TRAINING METHODS

Some States have developed specific training methods, which provide operators with a flexible approach to deliver cabin crew safety training. Although these methods are currently limited to certain States, the information presented in this section can be beneficial for other States who may wish to implement similar methods and allow operators to use them as acceptable means of compliance with national regulations. Further guidance on these training methods can be found in Appendices 2 to 6 to Chapter 1.

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Appendix 1 to Chapter 1

EXAMPLES OF REQUALIFICATION TRAINING PROGRAMMES

Example 1: Transport Canada requalification requirements

The Transport Canada requirements for requalification as a cabin crew member (referred to as a flight attendant) are as follows:

Annual training. The validity of the annual training expires on the first day of the thirteenth month following the month in which the training was completed.

Where the annual training has expired, the flight attendant shall requalify as follows:

- a) if a period of 13 up to 24 months or part thereof has elapsed since the last required training, the flight attendant shall complete Requalification Training and Annual Training;
- b) if a period of 24 up to 36 months or part thereof has elapsed since the last required training and the flight attendant has three continuous years' experience with the air operator, the flight attendant shall complete Requalification Training, Annual Training, and Line Indoctrination;
- c) if a period of 24 months or more has elapsed since the last required Annual Training and the flight attendant does not have three continuous years' experience with the air operator, the flight attendant shall complete Initial Training and Line Indoctrination; and
- d) if a period of more than 36 months has elapsed since the last required Annual Training with the air operator, the flight attendant shall complete Initial Training and Line Indoctrination.

Example 2: European Union Aviation Safety Agency (EASA) provisions for requalification

Although not referred to as "requalification" in the European Union (EU) rules, training is required as soon as the validity period, specified in the rules for each type of training, has expired. Requalification is achieved by completing the programme of the type of training required, as applicable to each case.

- a) Initial training and related cabin crew attestation have a 60-month validity period. After 60 months without any flying duties, the initial training must be completed again and the related cabin crew attestation must be (re)issued. Initial training does not include aircraft type training.
- b) Aircraft type training, referred to as 'aircraft type specific and operator conversion training¹' in the EU, must be completed by a cabin crew member before being assigned by the operator to operate on each aircraft type/variant. This training has a 12-month validity period. Competence is maintained by completing recurrent training.

1. Operator conversion training is considered in this manual as a part of initial training.

- c) Recurrent training has a 12-month validity period counted from the end of the month when the check was taken (e.g. training and checking completed on 10 December 2013, validity until 31 December 2014).
- d) When within the 12-month validity period of the last required training, a cabin crew member has not performed any flying duties during the preceding 6 months, refresher training is required. The “last required training” may be aircraft type specific/operator conversion training or recurrent training, as relevant to the cabin crew member's particular case. An operator may replace refresher training by recurrent training, in which case the 12-month validity period will count from that new completion date.
- e) When the 12-month validity period of the last recurrent training and checking has expired, or when the cabin crew member has not performed any flying duties during 12 consecutive months, aircraft type specific and operator conversion training (a part of initial training in this manual) must be completed before being assigned again to flying duties.

Example 3: Federal Aviation Administration (FAA) requalification requirements

The operator will determine what requalification requirements will be necessary based on the last calendar day of the cabin crew member's “base month”. A training cycle is an annual cycle of 12 months. The national regulations provide an additional month or “grace month” in which cabin crew members can maintain these annual qualifications. On the first day of the calendar month after the cabin crew member's grace month, if she/he has not attended annual recurrent training, the cabin crew member is longer qualified to fly.

In order to become qualified to fly again, requalification programme is necessary to ensure qualification currency and proficiency. As an example, if a cabin crew member's base month is October, she/he remains qualified until the following October (12 months). The “grace month” is November. If the cabin crew member does not attend training within the month of November, on 1 December, she/he is not qualified to fly. Depending on the period of time that elapses between this date and the date on which the cabin crew member attends training will determine what “form” of requalification requirements are necessary.

Each operator's training programme is approved by the Authority. Therefore, the amount and type of training required for requalification depend on the length of each training programme. Most operators in the United States require cabin crew members to go back through initial training after 36 months. It depends on each operator's approved programme.

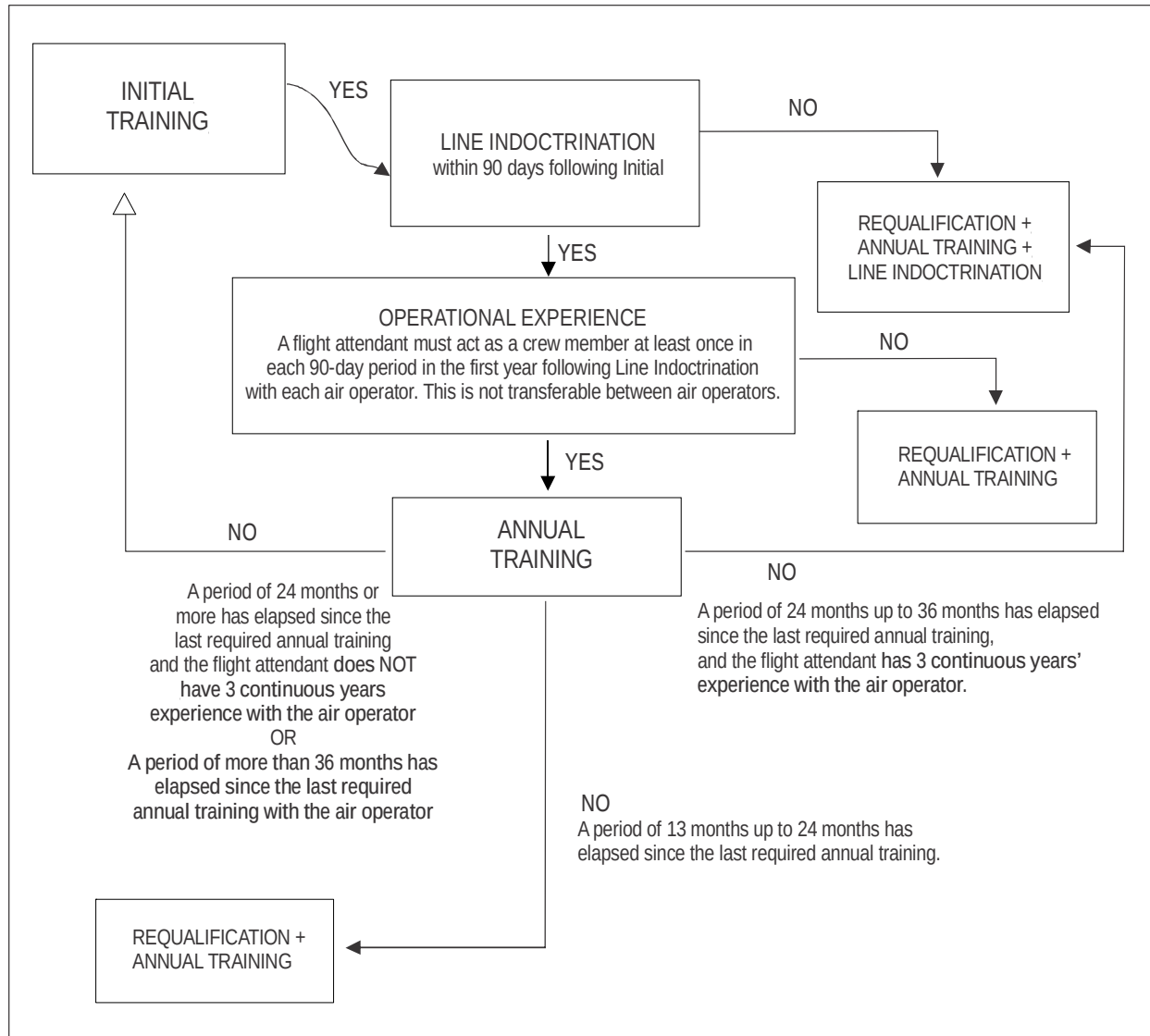


Figure 1-App-1. Sample quick reference guide for requalification requirements
(Source: Transport Canada)

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Appendix 2 to Chapter 1

ADVANCED QUALIFICATION PROGRAMME

The Federal Aviation Administration (FAA) of the United States created the Advanced Qualification Programme (AQP) as a systematic methodology for developing the content of training programmes for operators' crew members and flight dispatchers.

AQP replaces programmed hours with proficiency-based training and evaluation derived from a detailed job task analysis that includes crew resource management (CRM). It incorporates data-driven quality control processes for validating and maintaining the effectiveness of curriculum content.

AQP is a voluntary programme. It provides an alternate method of qualifying and certifying, if required, pilots, flight engineers, cabin crew members, aircraft dispatchers, instructors, evaluators, and other operations personnel subject to the training and evaluation requirements by the FAA.

The primary goal of AQP is to achieve the highest possible standard of individual and crew performance. The programme emphasizes crew-oriented training and evaluation. In order to achieve its goal, AQP seeks to reduce the probability of crew-related errors by aligning training and evaluation requirements more closely with the known causes of human error. For example:

- a) crew performance;
- b) crew resource management;
- c) scenario-based training and evaluation.

The AQP encourages innovation in the methods and technology that are used during instruction and evaluation, and efficient management of training systems. AQP replaces inventory-based programmed hours with competency-based training and evaluation derived from a detailed analysis of the specific job tasks, knowledge, and skill requirements of each duty position that includes crew resource management. AQP incorporates data-driven quality control processes for validating and maintaining the effectiveness of curriculum content and strategies.

The FAA developed an Advisory Circular (AC 120-54A), which provides detailed information on AQP. The Advisory Circular can be obtained from ICAO website in the Cabin Safety Library, at: www.icao.int/cabinsafety.

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Appendix 3 to Chapter 1

TRANSFERABLE TRAINING EXAMPLES

TRANSFERABLE TRAINING ELEMENTS ACROSS MULTIPLE OPERATORS

The European Union Aviation Safety Agency (EASA), through its regulations, allows cabin crew initial training, and the related knowledge and competencies gained by the cabin crew member, to be granted credit and be transferable among operators. This approach is based on the issuance to each cabin crew member of a cabin crew attestation that is recognized across the EU.

EASA's approach supports the aviation industry's efforts to adapt to the free movement of persons across the EU. As aviation is an increasingly mobile sector, it provides more flexibility to operators and facilitates the mobility of experienced cabin crew, also considering that their knowledge of the operations can be beneficial to safety.

The training elements that may be credited and transferred, as representative of the knowledge and competencies gained by cabin crew attestation holders, are listed below:

- a) general theoretical knowledge of aviation and aviation regulations covering all elements relevant to cabin crew members' tasks ;
- b) communication techniques, common language and terminology;
- c) introductory course on human factors in aviation and crew resource management (CRM);
- d) passenger handling and cabin surveillance;
- e) aero-medical aspects and first aid;
- f) dangerous goods in accordance with the applicable ICAO Technical Instructions;
- g) general security aspects in aviation;
- h) fire and smoke training including hands-on training using equipment used in aviation; and
- i) survival training covering the principles of survival in hostile environments and wet drills for water survival.

To ensure the transferability of the initial training, the programme does not include any training elements that are specific to individual operators. Those training elements must be covered by cabin crew trainees when completing the training provided by individual operators, e.g. aircraft type specific training and operator conversion training, differences training, etc.

This approach differs from the initial training specified in Chapter 1, 1.6, which takes into account that a single initial training programme delivered by the operator encompasses all the elements, including aircraft type training. More information regarding EASA's approach can be found at: www.easa.europa.eu/regulations.

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