

## FOURTEENTH SCHEDULE (Regulations 12, 67, 74)

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**SUBPART A: GENERAL**

**14.001 APPLICABILITY**

This Schedule prescribes the minimum requirements for qualification and currency of operations personnel to be able to serve in commercial air transport or to be used by the holder of an Air Operator Certificate issued by Jamaica.

#### 14.005 DEFINITIONS

For the purpose of this Schedule, the following definitions shall apply—

- (1) **“Company Check Pilot (aircraft)”**. A person who is designated by the Authority, to conduct an evaluation in an aircraft, in a flight simulator or in a flight training device for a particular type aircraft.
- (2) **“Company Check Pilot (simulator)”**. A person who is designated by the Authority to conduct an evaluation, but only in a flight simulator or in a flight training device for a particular type aircraft.
- (3) **“Operational Control Person”**. A qualified person or licensed Flight Dispatcher as provided in Schedule 16.
- (4) **“Company Materials (COMAT)”**. Materials, belonging to the AOC holder that are being transported on board its aircraft.
- (5) **“Variant aircraft”**. An aircraft that is a variation of a basic type of aircraft but has the same or essentially the same characteristics in cockpit layout, power plant(s) and other aircraft systems. For example, A319/A320/A321, B757/767 or B737-400/-700/-800.

#### 14.010 ACRONYMS

The following acronyms are used in this Schedule -

- (1) AFM – Aircraft Flight Manual;
- (2) AOC – Air Operator Certificate;
- (3) ATP – Airline Transport Pilot;
- (4) BRNAV – Basic Area Navigation;
- (5) CAT – Category;
- (6) CCP – Company Check Pilot;
- (7) CRM – Crew Resource Management;
- (8) ETOPS – Extended Twin-engine Operations;
- (9) FE – Flight Engineer;
- (10) GPS – Global Positioning System;
- (11) IMC – Instrument Meteorological Conditions;
- (12) INS – Inertial Navigation System;
- (13) IR – Instrument Rating;
- (14) LDA – Localizer-type Directional Aid;
- (15) LOC – Localizer;
- (16) LVTO – Low Visibility Take Off;
- (17) MDA – Minimum Decent Altitude;
- (18) MNPS – Minimum Navigation Performance Specification;
- (19) PCC – Pilot Competency Check;
- (20) PPC – Pilot Proficiency Check;
- (21) PRM – Precision Runway Monitoring;
- (22) RNP – Required Navigation Performance;
- (23) RVR – Runway Visibility Range;
- (24) RVSM – Reduced Vertical Separation Minimum;
- (25) PBE – Protective Breathing Equipment;
- (26) PIC – Pilot-in-command;
- (27) SIC – Second-in-command;
- (28) SCA – Senior Cabin Attendant;
- (29) SM – Statute Miles;
- (30) VMC – Visual Meteorological Conditions;

## **SUBPART B: OPERATIONS PERSONNEL QUALIFICATIONS**

### **14.020 AGE 60 RESTRICTION**

- (a) The holder of a Commercial or Airline Transport Pilot Licence shall not on or after attaining the age of sixty years, act as pilot of an aircraft for the purpose of commercial air transport.
- (b) CCPs who have reached their 60th birthday or who do not hold an appropriate medical certificate may continue their check airman functions, but may not serve as or occupy the position of a required pilot flight crewmember on an aircraft engaged in international commercial air transport operations.

### **14.025 PIC LICENCE REQUIREMENTS: AIRCRAFT CERTIFICATED FOR TWO PILOTS**

No pilot may act as PIC of an aircraft certificated for two pilots in commercial air transportation operations unless he or she holds an ATP licence, a type rating for that aircraft and, if instrument flight is required, an instrument rating.

### **14.030 PIC LICENCE REQUIREMENTS: AIRCRAFT NOT CERTIFICATED FOR TWO PILOTS**

No pilot may act as PIC of an aircraft not certificated for two pilots in commercial air transport during —

- (1) IFR operations unless he or she holds a Commercial Pilot Licence with appropriate category and class ratings for the aircraft operated and an instrument rating; or
- (2) day VFR operations unless he or she holds a Commercial Pilot Licence with appropriate category and class ratings for the aircraft operated.

### **14.035 PIC AERONAUTICAL EXPERIENCE: SMALL AIRCRAFT**

No pilot may act as PIC of a small aircraft in commercial air transport during —

- (1) IFR-IMC operations across international borders unless he or she has accumulated 500 hours in commercial operations and at least 50 hours of instrument flight time; or
- (2) VMC operations across international borders unless he or she has logged a minimum of 500 hours of time as a pilot, including at least 100 hours of cross-country flight time including 25 hours of which were at night.

### **14.040 SIC LICENCE REQUIREMENTS**

No pilot may act as SIC of an aircraft in commercial air transport operations unless he —

- (1) holds a Commercial Pilot Licence with appropriate category, class and type, if applicable, ratings for the aircraft operated; and
- (2) holds an instrument rating if IFR flight is to be undertaken.

### **14.045 FE LICENCE REQUIREMENTS**

No person may act as the flight engineer of an aircraft unless he or she holds a Flight Engineer Licence with the appropriate class rating.

### **14.050 CABIN ATTENDANT REQUIREMENTS**

No person may operate as a required crewmember in commercial air transport operations unless that person

- (1) has completed and been certified as having met the training requirements of this Schedule; and
- (2) carries a copy of the record specified in the twelfth Schedule, Subsection 12.220 (b).

### **14.055 PERSONS QUALIFIED TO FLIGHT RELEASE**

No person may issue a flight release for a passenger-carrying commercial air transport operation in aircraft of more than 5,700 kg (12,500 lbs) unless that person —

- (1) holds a Flight Dispatcher Licence or an ATP rating; and
- (2) is currently qualified with the AOC holder for the operation and type of aircraft used.

**14.060 PAIRING OF LOW EXPERIENCE CREWMEMBERS**

- (a) If an SIC has fewer than 50 hours of flight time in an aircraft type of more than 5,700 kg (12,500 lbs) and more than 19 passenger seats, and the PIC is not an appropriately qualified CCP or training pilot, the PIC shall make all takeoffs and landings in situations designated as critical by the Authority.
- (b) The Authority may, upon application by the AOC holder, authorize deviations from paragraph (a) of this Subsection by an appropriate amendment to the Operations Specifications.

*(See Appendix 1 to 14.060 for those situations designated as critical by the Authority and for circumstances authorizing a deviation from paragraph (a).)*

**SUBPART C: GROUND TRAINING REQUIREMENTS**

**14.065 COMPANY PROCEDURES INDOCTRINATION**

No person may serve nor may any person use a person as a crewmember or Operational Control Person/Flight Dispatcher unless that person has completed the company procedures indoctrination curriculum approved by the Authority, which shall include a complete review of Operations Manual procedures pertinent to the crewmember or Operational Control Person/Flight Dispatcher's duties.

*(See Appendix 1 to 14.065 for recommended knowledge area and programme hours.)*

**14.070 INITIAL DANGEROUS GOODS TRAINING**

No person may serve nor may any person use a person as a crewmember unless he or she has completed the appropriate initial dangerous goods curriculum approved by the Authority.

*(See Appendix 1 to 14.070 for sample course curriculum.)*

**14.075 INITIAL SECURITY TRAINING**

- (a) No person may serve nor may any person use a person as a crewmember unless he or she has completed the initial security curriculum approved by the Authority.
- (b) This curriculum will instruct the crewmembers on the most appropriate manner to behave to minimize the consequences of acts of unlawful interference.
- (c) The programme shall familiarize these employees with preventive measures and techniques which will assist them in the prevention of acts of sabotage or other unlawful forms of interference.

*(See Appendix 1 to 14.075 for the minimum crewmember security programme training elements.)*

**14.080 INITIAL CREW RESOURCE MANAGEMENT**

- (a) No person may serve nor may any person use a person as a crewmember or operational control person unless that person has completed the initial CRM curriculum approved by the Authority.
- (b) The AOC holder shall, where practical, provide initial CRM training jointly to crewmembers and operational control persons.

*(See Appendix 1 to 14.080 for required course curriculum contents.)*

#### **14.085 INITIAL EMERGENCY EQUIPMENT DRILLS**

No person may serve nor may any AOC holder use a person as a crewmember unless that person has completed the appropriate initial emergency equipment curriculum and drills for the crewmember position approved by the Authority for the emergency equipment available on the aircraft to be operated.

*(See Appendix 1 to 14.085 for sample course curriculum content.)*

#### **14.090 INITIAL AIRCRAFT GROUND TRAINING**

- (a) No person may serve nor may any person use a person as a crewmember or Operational Control Person unless he or she has completed the initial ground training approved by the Authority for the aircraft type.
- (b) Initial aircraft ground training for flight crewmembers shall include the pertinent portions of the Operations Manual relating to aircraft-specific performance, mass and balance, operational policies, systems, limitations, normal, abnormal and emergency procedures on the aircraft type to be used.

*(See Appendix 1 to 14.090 for required course curriculum for flight crewmembers.)*

*(See Appendix 4 to 14.090 for initial ground and flight training instructional hour requirements for flight crewmembers.)*

**(Note:** *The AOC holder may have separate initial aircraft ground training curricula of varying lengths and subject emphasis which recognize the experience levels of flight crewmembers approved by the Authority.*)

- (c) For Cabin Attendants, initial aircraft ground training shall include the pertinent portions of the Operations Manual relating to aircraft-specific configuration, equipment, safety procedures, normal and emergency procedures for the aircraft types within the fleet.

*(See Appendix 2 to 14.090 for required course curriculum for Cabin Attendants.)*

- (d) For Flight Dispatchers, aircraft initial ground training shall include the pertinent portions of the Operations Manual relating to aircraft-specific flight preparation procedures, performance, mass and balance, systems, and limitations for the aircraft types within the fleet.

*(See Appendix 3 to 14.090 for required course curriculum for Flight Dispatchers.)*

### **SUBPART D: FLIGHT TRAINING REQUIREMENTS**

#### **14.091 CONTRACTED TRAINING**

An AOC holder may contract crewmember training to another organization provided –

- (1) the arrangement is clearly provided for in the approved training programme;
- (2) the outside organization uses the manuals and publications used by the air operator (SOP's, Aircraft Flight Manual, Aircraft Operating Manual, if applicable, Company Operations Manual, etc.);
- (3) the air operator ensures that the training is conducted in accordance with the approved programme;
- (4) where type training is conducted, the training is provided on the type and model operated by the air operator unless otherwise provided for in the approved training programme;
- (5) the air operator maintains training records as required by this Schedule; and
- (6) instruction is provided by a suitably qualified instructor approved by the Authority.

#### **14.092 OPERATIONS ON MORE THAN ONE AIRCRAFT TYPE OR VARIANT**

- (a) An AOC holder shall ensure that a flight crewmember does not operate on more than one type or variant, unless the flight crewmember is competent to do so.

*(Note: For the purposes of this Subsection, “type” with respect to single-engine, non-turbine powered aircraft means aircraft built by the same manufacturer shall be considered as one type. For example, a pilot could be qualified on Cessna aircraft C172, C182, and C185 but this would count as only one type.)*

- (b) Notwithstanding paragraph (a) of this Subsection, a flight crewmember may not operate –
  - (1) for operators of aircraft certificated for 9 or less passengers, more than three different aircraft types;
  - (2) for operators of aircraft certificated for more than 9 passengers, more than two different aircraft types;
  - (3) for operators operating a mixed fleet of the aircraft identified in paragraphs (b) (1) and (2) of this Subsection, more than three different aircraft types; and
  - (4) for operators operating both helicopters and aeroplanes, more than one type of each category of aircraft.
- (c) When considering operations of more than one type or variant, an operator shall ensure that the differences and/or similarities of the aeroplanes concerned justify such operations, taking into account the following –
  - (1) the level of technology;
  - (2) operational procedures; and
  - (3) handling characteristics.
- (d) An operator shall ensure that a flight crewmember operating more than one type or variant complies with all of the requirements prescribed in this Schedule for each type or variant unless the Authority has approved the use of credit(s) related to the training, checking and recent experience requirements.
- (e) An operator shall specify appropriate procedures and/or operational restrictions, approved by the Authority, in the Operations Manual, for any operation on more than one type or variant covering –
  - (1) the flight crewmembers' minimum experience level;
  - (2) the minimum experience level on one type or variant before beginning training for and operation of another type or variant;
  - (3) the process whereby flight crew qualified on one type or variant will be trained and qualified on another type or variant; and
  - (4) all applicable recent experience requirements for each type or variant.
- (f) When a flight crewmember operates more than one type or variant of aircraft, the operator shall specify appropriate procedures and/or operational restrictions governing such operation, approved by the Authority, in the Operations Manual.

*(See Appendix I to 14.092 for the training and checking requirements for operation of more than one aircraft type.)*

#### **14.095 INITIAL AIRCRAFT FLIGHT TRAINING**

- (a) No person may serve nor may any person use a person as a flight crewmember unless he or she has completed the initial flight training approved by the Authority for the aircraft type.
- (b) Initial flight training shall focus on the manoeuvring and safe operation of the aircraft in accordance with AOC holder's normal, abnormal and emergency procedures.
- (c) An AOC holder may have a separate initial flight training curriculum which recognizes the experience levels of flight crewmembers approved by the Authority.

*(See Appendix 1 to 14.095 for required flight curriculum.)*

*(See Appendix 4 to 14.090 for initial ground and flight training instructional hour requirements for flight crewmembers.)*

#### **14.098 PILOT SEAT CONVERSION TRAINING**

- (a) The qualifications requirements of a left seat-qualified pilot to operate an aircraft from the right seat are as follows –

- (1) be qualified and current on the aircraft type for left seat duties;
  - (2) receive sufficient technical ground training on right seat duties; and
  - (3) annually, receive sufficient aircraft or simulator training to enable a CCP, Chief Pilot or Training Pilot to certify the competency of the pilot to carry out pilot duties from the right seat (the certifying pilot shall be qualified on the aircraft type).
- (b) The qualifications requirements of a right seat-qualified pilot to operate an aircraft from the left seat are as follows –
- (1) be qualified and current on the aircraft type for right seat duties;
  - (2) receive sufficient technical ground training on left seat duties; and
  - (3) annually, receive sufficient aircraft or simulator training to enable a CCP, Chief Pilot or training pilot to certify the competency of the pilot to carry out pilot duties from the left seat (the certifying pilot shall be qualified on the aircraft type).
- (c) The training required by this Subsection shall be specified in the approved training programme.

#### **14.100 INITIAL SPECIALIZED OPERATIONS TRAINING**

- (a) No person may serve nor may any person use a person as a flight crewmember unless he or she has completed the appropriate initial specialized operations training curriculum approved by the Authority.
- (b) Specialized operations for which initial training curricula shall be developed include—
- (1) low minimums operations, including low visibility takeoffs and Category II and III operations;
  - (2) extended range operations;
  - (3) specialized navigation (MNPS, RNP, BRNAV);
  - (4) RVSM;
  - (5) PRM; and
  - (6) PIC right seat qualification.

*(See Appendix 1 to 14.100 for requirements for an initial specialized operations training curriculum.)*

#### **14.110 USE OF SIMULATORS AND TRAINING DEVICES**

- (a) Each aircraft simulator and other training device that is used for flight crewmember qualification shall —
- (1) be specifically approved by the Authority for —
    - (i) the AOC holder;
    - (ii) the type aircraft, including type variations, for which the training or check is being conducted; and
    - (iii) the particular manoeuvre, procedure or crewmember function involved;
  - (2) maintain the performance, functional and other characteristics that are required for approval;
  - (3) be modified to conform with any modification to the aircraft being simulated that results in changes to performance, functional or other characteristics required for approval;
  - (4) be given a daily functional pre-flight check before use; and
  - (5) have a daily discrepancy log kept by the appropriate instructor or CCP at the end of each training or check flight.
- (b) An air operator may conduct emergency training and testing on a cabin emergency evacuation trainer, rather than on an aeroplane if the trainer has been approved by the Authority.

*(See Appendix 1 to 14.110 for the requirements associated with the use of flight simulators and for a Cabin Emergency Evacuation Trainer.)*

#### **14.115 INTRODUCTION OF NEW EQUIPMENT OR PROCEDURES**

No person may serve nor may any person use a person as a crewmember when that service would require expertise in the use of new equipment or procedures for which a curriculum is included in the AOC holder's approved training programme, unless that person has satisfactorily completed that curriculum, with respect to both the crewmember position and the particular variant of that aircraft.

## SUBPART E: PROFICIENCY AND COMPETENCY CHECKS

### 14.120 PILOT AIRCRAFT, LINE AND INSTRUMENT PROFICIENCY CHECKS

- (a) Except as provided in paragraph (c) of this Subsection, no pilot may serve nor may any person use a pilot flight crewmember unless that person has passed the proficiency check prescribed by the Authority for each type of aircraft on which their services are required, the validity period of which has not expired.
- (b) No pilot may serve nor may any person use a pilot in IFR operations of aircraft certificated for a maximum takeoff mass of 5,700 kg (12,500 lbs) or more unless, since the beginning of the 6th calendar month before that service, that pilot has passed the proficiency check specified in paragraph (a) of this Subsection, including the instrument portion.
- (c) An AOC holder may use a pilot of single-engine aircraft in day VFR flight only who has not completed a PPC provided that pilot has completed a pilot competency check (PCC) conducted by the AOC holder's Chief Pilot or a Chief Pilot of another air operator who is current on that aircraft type.
- (d) Unless undergoing supervised line training, no person may serve nor may any person use a pilot in line operations using aircraft certificated for the carriage of more than nine (9) passengers unless, since the beginning of the 12th calendar month before that flight, that person has passed a line check over a typical route flown by the air operator in one of the aircraft types flown by that person.
- (e) An air operator shall ensure each pilot carries with him or her a competency card showing, as a minimum, the validity of any required flight checks.
- (f) The Authority or an approved check airman shall conduct pilot proficiency and line checks.

*(Note: The validity periods of proficiency checks are specified in Subsection 14.245.)*

*(See Appendix 1 to 14.120 for information and procedures pertaining to proficiency and competency checks.)*

### 14.125 FLIGHT ENGINEER PROFICIENCY CHECKS

No person may serve nor may any person use a Flight Engineer on an aircraft unless within the preceding 6 calendar months he or she has —

- (1) had a proficiency check in accordance with the requirements prescribed by the Authority; or
- (2) 50 hours flight time with an AOC holder as flight engineer in the type aircraft.

*(See Appendix 1 to 14.125 for requirements for procedures to be used in FE proficiency checks.)*

### 14.130 COMPETENCE CHECKS: CABIN ATTENDANTS

No person may serve nor may any person use a person as a Cabin Attendant unless, since the beginning of the 12th calendar month before that service, that person has passed the competency check prescribed by the Authority performing the emergency duties appropriate to that person's assignment. The AOC holder will issue a competency card that shows the valid period for which that individual is deemed competent to operate on the aircraft type(s) specified. This competency card must be kept on the person of that cabin crewmember at all times in the performance of their duties.

*(See Appendix 1 to 14.130 for recommended content for Cabin Attendant competence checks.)*

### 14.135 COMPETENCE CHECKS: FLIGHT DISPATCHERS

No person may serve nor may any person use a person as a Flight Dispatcher unless, since the beginning of the 12th calendar month before that service, that person has passed the competency check, prescribed by the Authority, performing the flight preparation and subsequent duties appropriate to that person's assignment.

*(See Appendix 1 to 14.135 for required content for an operational control competence check.)*

## **SUBPART F: SUPERVISED LINE FLYING**

### **14.140 SUPERVISED LINE FLYING: PILOTS**

- (a) Each pilot initially qualifying on an aircraft certificated for the carriage of more than 9 passengers shall complete a supervised line flying training programme approved by the Authority.
- (b) Except as provided in paragraph (c) of this Subsection, during the time that a qualifying pilot is acquiring operating experience, a CCP shall occupy a pilot station.
- (c) In the case of a PIC undergoing supervised line flying training, the CCP serving as PIC may occupy the observer's seat if the transitioning pilot has made at least two takeoffs and landings in the type aircraft used and has satisfactorily demonstrated to the CCP that he is qualified to perform the duties of a PIC for that type of aircraft.
- (d) For aircraft with 9 or less passengers, the pilots are not required to complete line flying under supervision if the original route check qualification in the type of aircraft was under the supervision of an authorized person of the Authority prior to the carriage of passengers in commercial air transport.

*(See Appendix 1 to 14.140 for supervised line flying training requirements.)*

### **14.145 SUPERVISED LINE FLYING: FLIGHT ENGINEERS**

Each person qualifying as a Flight Engineer for an aircraft type shall perform those functions for a minimum of five flights under the supervision of a CCP or a qualified Flight Engineer.

### **14.150 SUPERVISED LINE EXPERIENCE: CABIN ATTENDANTS**

Each person qualifying as a Cabin Attendant shall perform those functions for a minimum of two flights under the supervision of a senior Cabin Attendant, during which this person not be counted as a required crewmember.

*(See Appendix 1 to 14.150 for supervised line flying experience requirements for Cabin Attendants.)*

### **14.155 LINE OBSERVATIONS: FLIGHT DISPATCHERS**

- (a) No person may serve nor may any person use a person as a Flight Dispatcher following initial training unless that person has observed, on the flight deck, the conduct of at least 8 complete flights over routes representative of those for which that person is assigned duties.
- (b) No person may serve nor may any person use a person as a Flight Dispatcher unless, since the beginning of the 12th calendar month before that service, that person has observed, on the flight deck, the conduct of at least two complete flights over routes representative of those for which that person is assigned duties.

## **SUBPART G: CONTINUING QUALIFICATION**

### **14.160 AREA, ROUTE AND AERODROME QUALIFICATION**

- (a) No person may serve nor may any person use a pilot as the PIC of an aircraft on a flight into an area, along a route or into an aerodrome including any alternate aerodrome or routing unless –
  - (1) within the previous 12 months, the person has acted as a flight crewmember or has been on the flight deck as an observer on a flight along that route and into that aerodrome;
  - (2) the person is under the supervision of an approved check pilot; or
  - (3) the person has received training and met the requirements of paragraph (c) of this Subsection.

- (b) No person may serve nor may any person use a pilot as the PIC of an aircraft into an area or on a route or route segment for which that pilot is not currently qualified until such pilot has complied with Subsection 14.162 and Subsection 14.170.
- (c) Each such pilot shall demonstrate to the AOC holder an adequate knowledge of—
  - (1) the area and route to be flown and the aerodromes to be used. This shall include knowledge of—
    - (i) the terrain and minimum safe altitudes;
    - (ii) the seasonal meteorological conditions;
    - (iii) the meteorological, communication and air traffic facilities, services and procedures;
    - (iv) the search and rescue procedures; and
    - (v) the navigational facilities and procedures, including any long-range navigation procedures, associated with the route along which the flight is to take place; and
  - (2) procedures applicable to flight paths over heavily populated areas and areas of high air traffic density, obstructions, physical layout, lighting, approach aids and arrival, departure, holding and instrument approach procedures and applicable operating minima.
- (d) In the event a PIC has not met the requirements of paragraphs (a) or (b) of this Subsection, that person shall requalify by meeting those requirements in the aircraft or a training device which is adequate for such purpose.

#### **14.162 SPECIALIZED OPERATIONS: PILOT QUALIFICATION**

No person may perform PIC duties over a designated special operational area that requires a special navigation system or procedures or in ETOPS operations unless their competency with the system and procedures have been demonstrated to the AOC holder within the preceding 12 calendar months.

#### **14.165 PIC LOW MINIMUMS AUTHORIZATION**

- (a) After initial qualification for Category II approach minimums, a PIC may not plan for or initiate an instrument approach when the ceiling is less than 200 feet and the visibility less than ½ mile until he or she has 15 flights performing PIC duties in the aircraft type (which included 5 approaches to landing using Category II procedures).
- (b) After initial qualification for Category III approach minimums, a PIC may not plan for or initiate an approach when the ceiling is less than 100 feet or the visibility is less than 1200 RVR until he or she has 20 flights performing PIC duties in the aircraft type (which included 5 approaches and landings using Category III procedures).

#### **14.170 DESIGNATED SPECIAL AERODROMES AND HELIPORTS: PIC QUALIFICATION**

- (a) No person may serve nor may any person use a person as PIC for operations at designated special aerodromes and heliports unless within the preceding 12 calendar months —
  - (1) the PIC has been qualified by the AOC holder through a pictorial means acceptable to the Authority for that aerodrome; or
  - (2) the PIC or the assigned SIC has made a takeoff and landing at that aerodrome while serving as a flight crewmember for the AOC holder.

*(Note: If acceptable to the Authority, that portion of the demonstration including the arrival, holding, instrument approach and departure may be conducted in a simulator or training device adequate for those purposes.)*

- (b) Designated special aerodrome and heliport limitations are not applicable if the operation will occur —
  - (1) during daylight hours;
  - (2) when the visibility is at least 3 miles; and
  - (3) when the ceiling at that aerodrome is at least 1000 feet above the lowest initial approach altitude prescribed for an instrument approach procedure.

#### **14.175 RE-ESTABLISHING REGENCY OF EXPERIENCE: PILOT**

- (a) In addition to meeting all applicable training and checking requirements, a required pilot flight crewmember who, in the preceding 90 days has not made at least three takeoffs and landings in the type aircraft in which that person is to serve, shall, under the supervision of a CCP or training pilot, re-establish recency of experience by completing at least three takeoffs and landings in the type of aircraft in which that person is to serve, or in a qualified simulator, to include -
  - (1) at least one takeoff with a simulated failure of the most critical powerplant;
  - (2) at least one landing from the lowest DH authorized for the AOC holder;
  - (3) at least one landing with a simulated failure of the most critical powerplant; and
  - (4) at least one landing to a full stop.
- (b) When using a simulator to accomplish any of the takeoff and landing training requirements necessary to re-establish recency of experience, each required flight crewmember position shall be occupied by an appropriately qualified person and the simulator shall be operated as if in a normal in-flight environment without use of the repositioning features of the simulator.
- (c) A CCP who observes the takeoffs and landings of a pilot flight crewmember shall certify that the person being observed is proficient and qualified to perform flight duty in operations and may require any additional manoeuvres that are determined necessary to make this certifying statement.

### **SUBPART H: RECURRENT, UPGRADE, REQUALIFICATION AND DIFFERENCES TRAINING**

#### **14.180 RECURRENT TRAINING: FLIGHT CREWMEMBERS**

- (a) No person may serve nor may any person use a person as a flight crewmember unless within the preceding 12 calendar months that person has completed the recurrent ground and flight training curricula approved by the Authority.
- (b) The recurrent ground training shall include training on —
  - (1) aircraft systems and limitations and normal, abnormal and emergency procedures;
  - (2) emergency equipment and drills;
  - (3) crew resource management;
  - (4) recognition or transportation of dangerous goods; and
  - (5) security training.

*(Note: The AOC holder shall provide recurrent CRM training jointly to crewmembers and, where practical, Flight Dispatchers.)*
- (c) The recurrent flight training curriculum shall include —
  - (1) manoeuvring and safe operation of the aircraft in accordance with AOC holder's normal, abnormal and emergency procedures;
  - (2) manoeuvres and procedures necessary for avoidance of in-flight hazards; and
  - (3) for authorized pilots, at least one low visibility takeoff to the lowest applicable minimum LVTO and two approaches to the lowest approved minimums for the AOC holder, one of which is to be a missed approach.

*(See Appendix 1 to 14.180 for the required recurrent training programme content.)*

*(See Appendix 2 to 14.180 for recurrent ground and flight training instructional hour requirements for flight crewmembers.)*

#### **14.181 UPGRADE TRAINING: FLIGHT CREWMEMBERS**

An AOC holder shall, as part of the approved training programme, establish the upgrade training required for an SIC to qualify as PIC on each aircraft type certificated for two pilots.

**14.183      REQUALIFICATION TRAINING: FLIGHT CREWMEMBERS**

- (a) Where the validity period of any required check or training, has expired for 24 months or more on an aircraft type, the person shall requalify –
  - (1) by meeting the initial qualification training requirements for that type of aircraft as approved by the Authority; or
  - (2) if approved by the Authority in consideration of the person's background, experience and currency on a similar class of aircraft, the recurrent qualification training requirements for the type aircraft.
- (b) An AOC holder shall, as part of the approved training programme, establish the requalification training required where the validity period of any required check or training has expired on an aircraft type for periods less than 24 months.

**14.185      RECURRENT TRAINING: CABIN ATTENDANTS**

- (a) No person may serve nor may any person use a person as a Cabin Attendant unless within the preceding 12 calendar months that person has completed the recurrent ground curricula approved by the Authority.
- (b) The recurrent ground training shall include training on —
  - (1) legal requirements relating to Cabin Attendants and cabin emergencies;
  - (2) flight attendant duties and responsibilities;
  - (3) aircraft-specific configuration, equipment and procedures;
  - (4) emergency, evacuation and first aid equipment and drills;
  - (5) crew resource management and human performance;
  - (6) recognition or transportation of dangerous goods; and
  - (7) security training.

*(Note: The AOC holder shall provide recurrent CRM training jointly to crewmembers and, where practical, Flight Dispatchers.)*

*(See Appendix 1 to 14.185 for requirements for emergency programme training contents for Cabin Attendants.)*

**14.188      REQUALIFICATION TRAINING: CABIN ATTENDANTS**

Where the validity period of a Cabin Attendant annual training has been expired, the Cabin Attendant shall re-qualify as follows –

- (1) if a period of 13 up to 24 months or part thereof has elapsed since the last required training, the Cabin Attendant shall complete requalification and annual training;
- (2) if a period of 24 up to 36 months or part thereof has elapsed since the last required training and the Cabin Attendant has 3 continuous years experience with the air operator, the Cabin Attendant shall complete requalification, annual and supervised line flying training; and
- (3) if a period of 24 months or more has elapsed since the last required annual training and the Cabin Attendant does not have 3 continuous years experience with the air operator, the Cabin Attendant shall complete initial training and supervised line flying training.

**14.190      RECURRENT TRAINING: OPERATIONAL CONTROL PERSONS**

- (a) No person may serve nor may any person use a person as an Operational Control Person unless within the preceding 12 calendar months that person has completed the recurrent ground curricula approved by the Authority.
- (b) For Flight Dispatchers, the recurrent ground training shall include training on —
  - (1) aircraft-specific flight preparation, including flight planning, loading, mass and balance and performance;
  - (2) weather, including season effects on flight and radio reception

- (3) crew resource management; and
- (4) recognition or transportation of dangerous goods.

*(Note: The AOC holder shall provide recurrent CRM training jointly to crewmembers and, where practical, Flight Dispatchers.)*

*(See Appendix 1 to 14.190 for the required recurrent training content for Flight Dispatchers.)*

#### **14.193 REQUALIFICATION TRAINING: FLIGHT DISPATCHER**

Where the validity period of a Flight Dispatcher competency check or annual training has been expired for 12 months or more, the person shall requalify by meeting the training requirements specified in the company Operations Manual.

#### **14.194 DIFFERENCES TRAINING**

- (a) The AOC holder shall provide differences training, approved by the Authority, to crewmembers and Flight Dispatchers when variant aircraft are introduced to the company.
- (b) The AOC holder shall provide differences training to crewmembers when different emergency equipment is introduced to any aircraft.
- (c) No person may serve nor may any person use a person as a crewmember on, or a Flight Dispatcher dispatching, an aircraft of a type for which a differences curriculum is included in the AOC holder's approved training programme, unless that person has satisfactorily completed that curriculum.

*(See Appendix 1 to 14.194 for requirements for aircraft differences training pertaining to Flight Dispatchers.)*

### **SUBPART I: INSTRUCTOR & COMPANY CHECK PILOT QUALIFICATION**

#### **14.195 COMPANY CHECK PILOT QUALIFICATIONS AND TRAINING**

- (a) No person may use a person, nor may any person serve as a CCP unless, with respect to the aircraft type involved, that person meets the qualification requirements of the *Company Check Pilot Manual*.
- (b) No person may use and no person may serve as a CCP for an AOC holder unless he or she has completed the curricula approved by the Authority for those functions for which he or she are to serve.

*(See Appendix 1 to 14.195 for the required training programme content for company check pilots.)*

#### **14.200 FLIGHT INSTRUCTOR TRAINING**

No person may use and no person may serve as an instructor for an AOC holder unless he or she has completed the curricula approved by the Authority for those functions for which they are to serve.

*(See Appendix 1 to 14.200 for the required training programme content for instructor pilots.)*

#### **14.205 SIMULATOR INSTRUCTOR QUALIFICATIONS**

No person may use a person nor may any person serve as an instructor pilot unless, with respect to the aircraft type involved, that person —

- (1) holds the airman licences and rating required to serve as a PIC or a Flight Engineer, as applicable;
- (2) has satisfactorily completed the appropriate training for the aircraft, including recurrent training, that are required to serve as a PIC or flight engineer, as applicable;
- (3) has satisfactorily completed the appropriate proficiency checks that are required to serve as a PIC or Flight Engineer, as applicable;
- (4) if not a currently qualified line pilot, has completed within the preceding 12 calendar months the line observation requirements specified in the approved training programme; and

- (5) has satisfactorily completed the applicable instructor training requirements.

#### **14.207 AIRCRAFT INSTRUCTOR PILOT QUALIFICATIONS**

No person may use a person nor may any person serve as an instructor pilot unless, with respect to the aircraft type involved, that person —

- (1) holds the airman licences and ratings and medical certificate required to serve as a PIC or a Flight Engineer, as applicable;
- (2) has satisfactorily completed the appropriate training for the aircraft, including recurrent training, that are required to serve as a PIC or a Flight Engineer, as applicable;
- (3) has satisfactorily completed the appropriate proficiency, competency and recency of experience checks that are required to serve as a PIC or a Flight Engineer, as applicable; and
- (4) has satisfactorily completed the applicable initial or recurrent training requirements.

#### **14.208 CABIN ATTENDANT INSTRUCTOR QUALIFICATIONS**

No person may use a person nor may any person serve as a Cabin Attendant instructor unless, with respect to the aircraft type involved, that person —

- (1) Has been briefed on –
  - (i) the objectives and standards of the air operator's training programme;
  - (ii) the effective use of training devices used in the programme;
  - (iii) safety in the training environment; and
  - (iv) pertinent Jamaican Aviation Regulations and Schedules;
- (2) Shall have demonstrated, to the satisfaction of the air operator, a proficient level of practical and theoretical knowledge of –
  - (i) the subject the instructor is to teach;
  - (ii) the aeroplane type, the instructor is to teach;
  - (iii) preparation and use of lesson plans;
  - (iv) briefing and debriefing techniques relative to the exercises; and
  - (v) all associated training devices.
- (3) Has successfully completed the aeroplane type training programme which is approved by the Authority. The instructor must be tested and proven proficient in this training programme and must attend instructor re-currency training every two years.

#### **14.215 COMPANY CHECK PILOT DESIGNATION**

No person may serve nor may any AOC holder use a person as a CCP for any flight check unless that person has been designated by name and approved by the Authority within the preceding 12 calendar months.

#### **14.220 COMPANY CHECK PILOT LIMITATIONS**

No person may serve nor may any AOC holder use a person as a CCP for any check—

- (1) In an aircraft as a required pilot flight crewmember unless that person holds the required airman licences and ratings and has completed all applicable training, qualification and currency requirements of this Schedule applicable to the crew position and the flight operations being checked;
- (2) In a simulator unless that person has completed or observed all training, qualification and line observation requirements of Subsection 14.205 of this Schedule applicable to the position and flight operations being checked.

## **SUBPART J: ADMINISTRATIVE REQUIREMENTS**

### **14.225 SUBSTITUTION OF SIMULATOR EXPERIENCE**

- (a) No AOC holder may use a simulator for training or checking unless that simulator has been specifically approved for the AOC holder in writing by the Authority.
- (b) No AOC holder may use a simulator for any purpose other than that specified in the Authority's approval.

### **14.230 TERMINATION OF A PROFICIENCY, COMPETENCE OR LINE CHECK**

- (a) If it is necessary to terminate a check as a result of a failure, the AOC holder may not use the crewmember or Flight Dispatcher in commercial air transport operations until the completion of a satisfactory recheck.
- (b) If it is necessary to terminate a check for any other reason, the AOC holder may continue to use that crewmember or Flight Dispatcher provided the validity period of the check has not been exceeded.

### **14.233 EXAMINATIONS**

- (a) The AOC holder shall administer examinations upon completion of the following training –
  - (1) any crewmember or Flight Dispatcher initial, recurrent, upgrade or requalification training; and
  - (2) any specialized operations training.
- (b) The AOC holder shall maintain a record of the examinations completed as required by paragraph (a) of this Subsection in each person's training file.

### **14.234 TRAINING FACILITIES**

Training facilities shall be approved by the Authority and shall be adequate to ensure that training objectives can be achieved. Facilities shall be–

- (1) quiet and free of distractions;
- (2) suitably lighted for the type of instructions to be given, e.g. lectures, slides and audio-visual;
- (3) furnished with sufficient desks, chairs, chalkboards and other appropriate equipment; and
- (4) equipped with training aids such as films, Vu-graphs, system components, audio-visual, aircraft manuals or computer based systems.

### **14.235 TRAINING AND QUALIFICATIONS RECORDS**

- (a) The AOC holder shall maintain records for each crewmember and operational control person of the completion of any training or qualification required by this Schedule.
- (b) The crewmember may complete any curricula required by this Schedule concurrently or intermixed with other required curricula, but completion of each of these curricula shall be recorded separately.

### **14.245 VALIDITY PERIODS**

- (a) Except as provided in paragraphs (d) and (e) of this Subsection, a PPC is valid to –
  - (1) where the aircraft is certificated for a maximum takeoff mass of 5,700 kg (12,500 lbs) or more, the first day of the seventh month following the month in which the check was completed; and
  - (2) where the aircraft is certificated for a maximum takeoff mass of less than 5700 kg (12,500 lbs), the first day of the thirteenth month following the month in which the check was completed.
- (b) Except as provided in paragraphs (d) and (e) of this Subsection, a PCC is valid to the first day of the thirteenth month following the month in which the check was completed.
- (c) Except as provided in paragraphs (d) and (e) of this Subsection, a line check is valid to the first day of the thirteenth month following the month in which the check was completed.

- (d) Where any check or required training is renewed within the last 30 days of its validity period, its validity period is extended by six or 12 months, as appropriate.
- (e) The Authority may extend the validity period of a PPC, PCC, a Flight Dispatcher or Cabin Attendant competency check, a line check or any training by up to 30 days where the Authority is of the opinion that aviation safety is not likely to be affected.
- (f) Completion of a check or training requirement at any time during the periods specified in paragraphs (d) and (e) of this Subsection or has lapsed by any period up to 30 days shall be considered as completed in the month-due for calculation of the next due date.

#### **14.250 REDUCTIONS IN REQUIREMENTS**

- (a) The Authority may authorize reductions in, or waive, certain portions of the training requirements of this subpart, taking into account the previous experience of the crewmembers.
- (b) An AOC holder's request for reduction or waiver shall be made in writing and outline the basis under which the request is made.
- (c) If the request was for a specific crewmember, the correspondence from the Authority authorizing the reduction and the basis for it shall be filed in the record the AOC holder maintains for that crewmember.
- (d) With the approval of the Authority, correspondence courses or written examinations may be used to reduce the amount of classroom time for ground training subjects.

## **APPENDICES**

### **APPENDIX 1 TO 14.060: PAIRING OF LOW EXPERIENCE CREWMEMBERS: COMMERCIAL AIR TRANSPORT**

- (a) Situations designated as critical by the Authority at special aerodromes designated by the Authority or at special aerodromes designated by the AOC holder include —
  - (1) the prevailing visibility value in the latest weather report for the aerodrome is at or below 3/4 mile;
  - (2) the runway visual range for the runway to be used is at or below 4,000 feet;
  - (3) the runway to be used has water, snow, slush or similar conditions that may adversely affect aircraft performance;
  - (4) the braking action on the runway to be used is reported to be less than "good";
  - (5) the crosswind component for the runway to be used is in excess of 15 knots;
  - (6) windshear is reported in the vicinity of the aerodrome; or
  - (7) any other condition in which the PIC determines it to be prudent to exercise the PIC's prerogative.
- (b) Circumstances which would be routinely be considered for deviation from the required minimum line operating flight time include—
  - (1) a newly certified AOC holder does not employ any pilots who meet the minimum flight time requirements; or
  - (2) an existing AOC holder adds to its fleet a type aircraft not before proven for use in its operations.

### **APPENDIX 1 TO 14.065: COMPANY PROCEDURES INDOCTRINATION**

- (a) Each AOC holder shall ensure that all operations personnel are provided company indoctrination training that covers the following areas —
  - (1) AOC holder's organization, scope of operation, and administrative practices as applicable to their assignments and duties;
  - (2) appropriate provisions of these Schedules and other applicable Schedules and guidance material;
  - (3) AOC holder policies and procedures;
  - (4) applicable crewmember manuals; and
  - (5) appropriate portions of the AOC holder's operations manual.

- (b) The AOC holder shall provide a minimum of 40 programmed hours of instruction for company procedures indoctrination training unless a reduction is determined appropriate by the Authority.

**APPENDIX 1 TO 14.070: INITIAL DANGEROUS GOODS TRAINING**

- (a) Each AOC holder not holding a permanent approval to carry dangerous goods shall ensure that—
- (1) personnel engaged in general cargo handling have received training to carry out their duties in respect of dangerous goods. At a minimum this training shall cover the areas identified in Column 1 of Table 1 and be to a depth sufficient to ensure that an awareness is gained of the hazards associated with dangerous goods and how to identify such goods; and
  - (2) aircraft crewmembers, passenger handling staff and security staff employed by the AOC holder who deal with the screening of a passengers and their baggage, have received training which, at a minimum, shall cover the areas identified in Column 2 of Table 1 and be to a depth sufficient to ensure that an awareness is gained of the hazards associated with dangerous goods, how to identify them and what requirements apply to the carriage of such goods by passengers.

**Table 1**

<b>Areas Of Dangerous Goods Training</b>	<b>1</b>	<b>2</b>
General Philosophy	<b>x</b>	<b>x</b>
Limitations on Dangerous Goods in Air Transport	<b>x</b>	<b>x</b>
Package Marking and Labelling	<b>x</b>	<b>x</b>
Dangerous Goods in Passengers Baggage		<b>x</b>
Emergency Procedures		<b>x</b>

**Note:** *x indicates an area to be covered.*

- (b) Each AOC holder holding a permanent approval to carry dangerous goods shall ensure that —
- (1) personnel engaged in the acceptance of dangerous goods have received training and are qualified to carry out their duties. At a minimum, this training shall cover the areas identified in Column 1 of Table 2 and be to a depth sufficient to ensure the staff can take decisions on the acceptance or refusal of dangerous goods offered for carriage by air;
  - (2) personnel engaged in ground handling, storage and loading of dangerous goods have received training to enable them to carry out their duties in respect of dangerous goods. At a minimum, this training shall cover the areas identified in Column 2 of Table 2 and be to a depth sufficient to ensure that an awareness is gained of the hazards associated with dangerous goods, how to identify such goods and how to handle and load them;
  - (3) personnel engaged in general cargo handling have received training to enable them to carry out their duties in respect of dangerous goods. At a minimum, this training shall cover the areas identified in Column 3 of Table 2 and be to a depth sufficient to ensure that an awareness is gained of the hazards associated with dangerous goods, how to identify such goods and how to handle and load them;
  - (4) flight crewmembers and load planners have received training which, at a minimum, shall cover the areas identified in Column 4 of Table 2. Training shall be to a depth sufficient to ensure that an awareness is gained of the hazards associated with dangerous goods and how they should be carried on an aircraft; and
  - (5) passenger handling staff, security staff employed by the operator who deal with the screening of passengers and their baggage and crewmembers (other than flight crewmembers) have received training which, at a minimum, shall cover the areas identified in Column 5 of Table 2. Training shall be to a depth sufficient to ensure that awareness is gained of the hazards associated with dangerous goods and what requirements apply to the carriage of such goods by passengers or, more generally, their carriage on an aircraft.
  - (6) air operator's staff acting as shippers and operator's staff preparing dangerous goods as Company Material (COMAT) have received training which, at a minimum, shall cover the areas identified in

Column 6 of Table 2. Training shall be to a depth sufficient to ensure the staff can package, mark, label and prepare the required shipper's declaration documents.

- (c) Each AOC holder shall ensure that all personnel who require dangerous goods training receive recurrent training at intervals of not longer than 1 year except personnel who ship and accept dangerous goods, in which case the training shall be every two years..
- (d) Each AOC holder shall ensure that records of dangerous goods training are maintained for all personnel requiring such training and that these records are maintained at the location where the personnel perform such duties.
- (e) Each AOC holder shall ensure that its handling agent's staff are trained in accordance with the applicable column of Table 1 or Table 2.

**Table 2** *Note: x indicates an area to be covered.*

<b>Areas Of Training</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
General Philosophy	x	x	x	x	x	x
Limitations on Dangerous Goods in Air Transport	x	x	x	x	x	x
General Requirements for Shippers						x
Classification and List of Dangerous Goods	x	x		x		x
General Packing Requirements and Packing Instructions	x					x
Packaging Specifications Marking	x					x
Package Marking and Labelling	x	x	x	x	x	x
Documentation from the Shipper	x		x			x
Acceptance of Dangerous Good, Including the Use of a Checklist	x					x
Storage, Loading, Restrictions on Loading and Segregation	x	x	x	x		x
Inspections for Damage or Leakage and Decontamination Procedures	x	x	x			x
Provision of Information to Commander	x	x		x		
Dangerous Goods in Passengers' & Crew Baggage	x		x	x	x	x
Emergency Procedures	x	x	x	x	x	x

- (f) An AOC holder shall provide dangerous goods training manuals which contain adequate procedures and information to assist personnel in identifying packages marked or labelled as containing hazardous materials including—
  - (1) instructions on the acceptance, handling and carriage of hazardous materials;
  - (2) instructions governing the determination of proper shipping names and hazard classes;
  - (3) packaging, labelling, and marking requirements;
  - (4) requirements for shipping papers, compatibility requirements, loading, storage and handling requirements; and
  - (5) restrictions.

**APPENDIX 1 TO 14.075: INITIAL SECURITY TRAINING**

Initial and annual recurrent crew member security training shall include as a minimum the following elements—

- (1) determination of the seriousness of any occurrence;
- (2) crew communication and co-ordination;

- (3) appropriate self-defence responses;
- (4) use of non-lethal protective devices assigned to crewmembers whose use is authorized by the Authority;
- (5) understanding of behaviour of terrorists so as to facilitate the ability of crewmembers to cope with hijacker behaviour and passenger responses;
- (6) live situational training exercises regarding various threat conditions;
- (7) flight deck procedures to protect the aeroplane; and
- (8) aeroplane search procedures and guidance on least-risk bomb location where applicable.

**APPENDIX 1 TO 14.080: INITIAL CREW RESOURCE MANAGEMENT TRAINING**

- (a) Each AOC holder shall ensure that the Flight Dispatcher and all aircraft crewmembers have CRM training as part of their initial and recurrent training requirements.
- (b) A CRM training programme shall include —
  - (1) an initial indoctrination/awareness segment;
  - (2) a method to provide recurrent practice and feedback; and
  - (3) a method of providing continuing reinforcement.
- (c) Curriculum topics to be contained in an initial CRM training course include —
  - (1) communications processes and decision behaviour;
  - (2) internal and external influences on interpersonal communications;
  - (3) barriers to communication;
  - (4) listening skills;
  - (5) decision making skills;
  - (6) effective briefings;
  - (7) developing open communications;
  - (8) inquiry, advocacy and assertion training;
  - (9) crew self-critique;
  - (10) conflict resolution;
  - (11) team building and maintenance;
  - (12) leadership training;
  - (13) interpersonal relationships;
  - (14) workload management;
  - (15) situational awareness;
  - (16) how to prepare, plan and monitor task completions;
  - (17) workload distribution;
  - (18) distraction avoidance;
  - (19) individual factors; and
  - (20) stress reduction.

**APPENDIX 1 TO 14.085: INITIAL EMERGENCY EQUIPMENT DRILLS**

- (a) Each aircraft crewmember shall accomplish emergency training during the specified training periods, using those items of installed emergency equipment for each type of aircraft in which he or she is to serve.
- (b) During initial training, each aircraft crewmember shall perform the following emergency drills—
  - (1) Protective Breathing Equipment/Fire Fighting Drill –
    - (i) locate source of fire or smoke (actual or simulated fire);
    - (ii) implement procedures for effective crew co-ordination and communication, including notification of flight crewmembers about fire situation;
    - (iii) don and activate installed PBE or approved PBE simulation device;

- (iv) manoeuvre in limited space with reduced visibility;
- (v) effectively use the aircraft's communication system;
- (vi) identify class of fire;
- (vii) select the appropriate extinguisher;
- (viii) properly remove extinguisher from securing device;
- (ix) prepare, operate and discharge extinguisher properly; and
- (x) utilize correct fire fighting techniques for type of fire; and

(2) Emergency Evacuation Drill –

- (i) recognize and evaluate an emergency;
- (ii) assume appropriate protective position;
- (iii) command passengers to assume protective position;
- (iv) implement crew co-ordination procedures;
- (v) ensure activation of emergency lights;
- (vi) assess aircraft conditions;
- (vii) initiate evacuation (dependent on signal or decision);
- (viii) command passengers to release seatbelts and evacuate;
- (ix) assess exit and redirect, if necessary; to open exit, including deploying slides and commanding helpers to assist;
- (x) command passengers to evacuate at exit and run away from aircraft;
- (xi) assist special need passengers, such as handicapped, elderly, and persons in a state of panic; and
- (xii) actually exit aircraft or training device using at least one of the installed emergency evacuation slides.

*(Note: The crewmember may either observe the aircraft exits being opened in the emergency mode and the associated exit slide/raft pack being deployed and inflated, or perform the tasks resulting in the accomplishment of these actions.)*

(c) Each aircraft crewmember shall accomplish additional emergency drills during initial and recurrent training, including performing the following emergency drills —

(1) Emergency Exit Drill –

- (i) correctly pre-flight each type of emergency exit and evacuation slide or slideraft (if part of Cabin Attendant's assigned duties);
- (ii) disarm and open each type of door exit in normal mode;
- (iii) close each type of door exit in normal mode;
- (iv) arm each type of door exit in emergency mode;
- (v) opening each type of door exit in emergency mode;
- (vi) use manual slide inflation system to accomplish or ensure slide or slideraft inflation;
- (vii) open each type of window exit; and
- (viii) remove escape rope and position for use;

(2) Hand-held Fire Extinguisher Drill –

- (i) perform a pre-flight inspection on each type of hand-held fire extinguisher;
- (ii) locate source of fire or smoke and identify class of fire;
- (iii) select appropriate extinguisher and remove from securing device;
- (iv) prepare extinguisher for use;
- (v) actually operate and discharge each type of installed hand fire extinguisher;

*(Note: Fighting an actual or a simulated fire is not necessary during this drill.)*

- (vi) utilize correct firefighting techniques for type of fire; and
- (vii) implement procedures for effective crew co-ordination and communication, including notification of crewmembers about the type of fire situation;

(3) Emergency Oxygen System Drill –

- (i) actually operate portable oxygen bottles, including masks and tubing;
  - (ii) verbally demonstrate operation of chemical oxygen generators;
  - (iii) prepare for use and operate oxygen device properly, including donning and activation;
  - (iv) administer oxygen to self, passengers, and to those persons with special oxygen needs;
  - (v) utilize proper procedures for effective crew co-ordination and communication;
  - (vi) manually open each type of oxygen mask compartment and deploy oxygen masks;
  - (vii) identify compartments with extra oxygen masks;
  - (viii) implement immediate action decompression procedures; and
  - (ix) reset oxygen system, if applicable;
- (4) Flotation Device Drill –
- (i) don and inflate life vests;
  - (ii) remove and use flotation seat cushions;
  - (iii) demonstrate swimming techniques using a seat cushion; and
  - (iv) demonstrate use of adult/child vest; and
- (5) Ditching Drill, if applicable –

*(Note: During a ditching drill students shall perform the "prior to impact" and "after impact" procedures for a ditching, as appropriate to the specific operator's type of operation.)*

- (i) implement crew co-ordination procedures, including briefing with Captain to obtain pertinent ditching information and briefing flight attendants;
  - (ii) co-ordinate time frame for cabin and passenger preparation;
  - (iii) adequately brief passengers on ditching procedures;
  - (iv) ensure cabin is prepared, including the securing of carry-on baggage, lavatories, and galleys;
  - (v) demonstrate how to properly deploy and inflate sliderafts;
  - (vi) remove, position, attach sliderafts to aircraft;
  - (vii) inflate rafts;
  - (viii) use escape ropes at overwing exits;
  - (ix) command helpers to assist;
  - (x) use slides and seat cushions as flotation devices;
  - (xi) remove appropriate emergency equipment from aircraft;
  - (xii) board rafts properly;
  - (xiii) initiate raft management procedures (i.e., Disconnecting rafts from aircraft, applying immediate first aid, rescuing persons in water, salvaging floating rations and equipment, deploying sea anchor, tying rafts together, activating or ensuring operation of emergency locator transmitter);
  - (xiv) initiate basic survival procedures (i.e., removing and utilizing survival kit items, repairing and maintaining raft, ensuring protection from exposure, erecting canopy, communicating location, providing continued first aid, providing sustenance);
  - (xv) use heaving line to rescue persons in water;
  - (xvi) tie sliderafts or rafts together;
  - (xvii) use life line on edge of slideraft or raft as a handhold; and
  - (xviii) secure survival kit items.
- (d) Each aircraft crewmember shall accomplish additional emergency drill requirements during initial and annual recurrent training including observing the following emergency drills—
- (1) Slideraft Transfer Drill –
- (i) transfer of each type of slideraft pack from an unusable door to a usable door;
  - (ii) disconnect slideraft at unusable door;
  - (iii) redirect passengers to usable slideraft; and
  - (iv) installation and deployment of slideraft at usable door; and
- (2) Emergency Evacuation Slide Drill –
- (i) open armed exit with slide or slideraft deployment and inflation; and
  - (ii) egress from aircraft via the evacuation slide and run away to a safe distance.

**APPENDIX 1 TO 14.090: INITIAL AIRCRAFT GROUND TRAINING CURRICULUM - FLIGHT CREW**

- (a) Each AOC holder shall have an initial aircraft ground training curriculum for the flight crew applicable to their duties, the type of operations conducted and aircraft flown. Instructions shall include at least the following general subjects —
  - (1) AOC holder's dispatch, flight release or flight locating procedures;
  - (2) principles and methods for determining weight and balance and runway limitations for takeoff;
  - (3) adverse weather recognition and avoidance and flight procedures that shall be followed when operating in the following conditions —
    - (i) icing;
    - (ii) fog;
    - (iii) turbulence;
    - (iv) heavy precipitation;
    - (v) thunderstorms;
    - (vi) low-level windshear and microburst; and
    - (vii) low visibility;
  - (4) normal and emergency communications procedures and navigation equipment including the AOC holder's communications procedures and ATC clearance requirements;
  - (5) navigation procedures used in area departure, enroute, area arrival, approach and landing phases;
  - (6) air traffic control systems, procedures, and phraseology; and
  - (7) aircraft performance characteristics during all flight regimes, including —
    - (i) the use of charts, tables, tabulated data and other related manual information;
    - (ii) normal, abnormal and emergency performance problems;
    - (iii) meteorological and weight limiting performance factors (such as temperature, pressure, contaminated runways, precipitation, climb/runway limits);
    - (iv) inoperative equipment performance limiting factors (such as MEL/CDL, inoperative antiskid); and
    - (v) special operational conditions (such as unpaved runways, high altitude aerodromes and drift down requirements).
- (b) Each AOC holder shall have an initial aircraft ground training curriculum for the flight crew applicable to their duties, the type of operations conducted and aircraft flown, including at least the following aircraft systems —
  - (1) aircraft —
    - (i) aircraft dimensions, turning radius, panel layouts, cockpit and cabin configurations; and
    - (ii) other major systems and components or appliances of the aircraft;
  - (2) powerplants —
    - (i) basic engine description;
    - (ii) engine thrust ratings; and
    - (iii) engine components such as accessory drives, ignition, oil, fuel control, hydraulic, and bleed air features;
  - (3) electrical —
    - (i) sources of aircraft electrical power (engine driven generators, APU generator, and external power);
    - (ii) electrical buses;
    - (iii) circuit breakers;
    - (iv) aircraft battery; and
    - (v) standby power systems;
  - (4) hydraulic —
    - (i) hydraulic reservoirs, pumps, accumulators; filters, check valves, interconnects and actuators; and

- (ii) other hydraulically operated components;
- (5) fuel –
  - (i) fuel tanks (location and quantities);
  - (ii) engine driven pumps;
  - (iii) boost pumps;
  - (iv) system valves and crossfeeds;
  - (v) quantity indicators; and
  - (vi) provisions for fuel jettisoning;
- (6) pneumatic –
  - (i) bleed air sources (APU or external ground air); and
  - (ii) means of routing, venting and controlling bleed air via valves, ducts, chambers, and temperature and pressure limiting devices;
- (7) air conditioning and pressurization –
  - (i) heaters, air conditioning packs, fans and other environmental control devices;
  - (ii) pressurization system components such as outflow and negative pressure relief valves; and
  - (iii) automatic, standby and manual pressurization controls and annunciators;
- (8) flight controls –
  - (i) primary controls (yaw, pitch, and roll devices);
  - (ii) secondary controls (leading/trailing edge devices, flaps, trim and damping mechanisms);
  - (iii) means of actuation (direct/indirect or fly by wire); and
  - (iv) redundancy devices;
- (9) landing gear –
  - (i) landing gear extension and retraction mechanism including the operating sequence of struts, doors and locking devices, and brake and antiskid systems, if applicable;
  - (ii) steering (nose or body steering gear);
  - (iii) bogie arrangements;
  - (iv) air/ground sensor relays; and
  - (v) visual downlock indicators;
- (10) ice and rain protection –
  - (i) rain removal systems; and
  - (ii) anti-icing and/or de-icing system(s) affecting flight controls, engines, pitot static probes, fluid outlets, cockpit windows and aircraft structures;
- (11) equipment and furnishings –
  - (i) exits;
  - (ii) galleys;
  - (iii) water and waste systems;
  - (iv) lavatories;
  - (v) cargo areas;
  - (vi) crewmember and passenger seats;
  - (vii) bulkheads;
  - (viii) seating and/or cargo configurations; and
  - (ix) non-emergency equipment and furnishings;
- (12) navigation equipment –
  - (i) flight directors;
  - (ii) horizontal situation indicator;
  - (iii) radio magnetic indicator;
  - (iv) navigation receivers (GPS, ADF, VOR, RNAV, Marker Beacon, DME);
  - (v) inertial systems (INS, IRS);

- (vi) functional displays;
  - (vii) fault indications and comparator systems;
  - (viii) aircraft transponders;
  - (ix) radio altimeters;
  - (x) weather radar; and
  - (xi) cathode ray tube or computer generated displays of aircraft position and navigation information;
- (13) auto flight system –
- (i) autopilot;
  - (ii) autothrottles;
  - (iii) flight director and navigation systems;
  - (iv) automatic approach tracking;
  - (v) autoland; and
  - (vi) automatic fuel and performance management systems;
- (14) flight instruments –
- (i) panel arrangement;
  - (ii) flight instruments (attitude indicator, directional gyro, magnetic compass, airspeed indicator, vertical speed indicator, altimeters, standby instruments); and
  - (iii) instrument power sources and instrument sensory sources (e.g., pitot static pressure);
- (15) display systems –
- (i) weather radar; and
  - (ii) other CRT displays (e.g., checklist, vertical navigation or longitudinal navigation displays);
- (16) communication equipment –
- (i) VHF/HF radios;
  - (ii) audio panels;
  - (iii) inflight interphone and passenger address systems;
  - (iv) voice recorder; and
  - (v) air/ground passive communications systems (ACARS);
- (17) warning systems –
- (i) aural, visual, and tactile warning systems (including the character and degree of urgency related to each signal); and
  - (ii) warning and caution annunciator systems (including ground proximity and takeoff warning systems);
- (18) fire protection –
- (i) fire and overheat sensors, loops, modules or other means of providing visual and/or aural indications of fire or overheat detection;
  - (ii) procedures for the use of fire handles, automatic extinguishing systems and extinguishing agents; and
  - (iii) power sources necessary to provide protection for fire and overheat conditions in engines, APU, cargo bay/wheel well, cockpit, cabin and lavatories;
- (19) oxygen –
- (i) passenger, crew and portable oxygen supply systems;
  - (ii) sources of oxygen (gaseous or solid);
  - (iii) flow and distribution networks;
  - (iv) automatic deployment systems;
  - (v) regulators, pressure levels and gauges; and
  - (vi) servicing requirements;
- (20) lighting –
- (i) cockpit, cabin and external lighting systems;

- (ii) power sources;
  - (iii) switch positions; and
  - (iv) spare lightbulb locations;
- (21) emergency equipment –
- (i) fire and oxygen bottles;
  - (ii) first aid kits;
  - (iii) liferafts and life preservers;
  - (iv) crash axes;
  - (v) emergency exits and lights;
  - (vi) slides and sliderafts;
  - (vii) escape straps or handles; and
  - (viii) hatches, ladders and movable stairs; and
- (22) Auxiliary Power Unit (APU) –
- (i) electric and bleed air capabilities;
  - (ii) interfaces with electrical and pneumatic systems;
  - (iii) inlet doors and exhaust ducts; and
  - (iv) fuel supply.
- (c) Each AOC holder shall have an initial aircraft ground training curriculum for the flight crew applicable to their duties, the type of operations conducted and aircraft flown, including at least the following aircraft systems integration items –
- (1) use of checklist –
    - (i) safety chocks;
    - (ii) cockpit preparation (switch position and checklist flows);
    - (iii) checklist callouts and responses; and
    - (iv) checklist sequence;
  - (2) flight planning –
    - (i) performance limitations (meteorological, weight, and MEL/CDL items);
    - (ii) required fuel loads; and
    - (iii) weather planning (lower than standard takeoff minimums or alternate requirements);
  - (3) navigation systems –
    - (i) pre-flight and operation of applicable receivers;
    - (ii) onboard navigation systems; and
    - (iii) flight plan information input and retrieval;
  - (4) autoflight –
    - (i) autopilot, autothrust and flight director systems, including the appropriate procedures, normal and abnormal indications, and annunciators; and
  - (5) cockpit familiarization –
    - (i) activation of aircraft system controls and switches to include normal, abnormal and emergency switches; and
    - (ii) control positions and relevant annunciators, lights or other caution and warning systems.
- (d) Each AOC holder shall have an initial aircraft ground training curriculum for the flight crew applicable to their duties, the type of operations conducted and aircraft flown, including a curriculum for flight crewmembers in meeting passenger cabin safety requirements for aircraft that do not require a Cabin Attendant. The curriculum shall include –
- (1) aircraft exits –
    - (i) general information;
    - (ii) exits with slides or slide/rafts (pre-flight and normal operation);

- (iii) exits without slides (pre-flight and normal operations); and
- (iv) window exits;
- (2) passenger handling responsibilities –
  - (i) crewmember general responsibilities, including passenger safety briefing (normal and abnormal operations);
  - (ii) infants, children, and unaccompanied minors;
  - (iii) passengers needing special assistance;
  - (iv) passengers needing special accommodation;
  - (v) carry-on stowage requirements;
  - (vi) use of portable electronic equipment;
  - (vii) passenger seating requirements; and
  - (viii) smoking and no smoking requirements;
- (3) routine crewmember duties and procedures –
  - (i) reporting duties and procedures for specific aircraft;
  - (ii) pre-departure duties and procedures prior to passenger boarding;
  - (iii) passenger boarding and deplaning duties and procedures;
  - (iv) prior to movement on the surface duties and procedures;
  - (v) prior to takeoff duties and procedures applicable to specific aircraft;
  - (vi) in-flight duties and procedures;
  - (vii) prior to landing duties and procedures;
  - (viii) movement on the surface and arrival duties and procedures;
  - (ix) after arrival duties and procedures;
  - (x) intermediate stops;
  - (xi) first Aid training;
  - (xii) survival training;
  - (xiii) cabin safety briefing (planned and un-planned emergency); and
  - (xiv) if applicable, surface contamination

**APPENDIX 2 TO 14.090: INITIAL AIRCRAFT GROUND TRAINING CURRICULUM - CABIN ATTENDANTS**

- (a) Each AOC holder shall have an initial ground training curriculum for Cabin Attendants applicable to the type of operations conducted and aircraft flown, including at least the following general subjects –
  - (1) aircraft familiarization –
    - (i) aircraft characteristics and description;
    - (ii) flight deck configuration;
    - (iii) cabin configuration;
    - (iv) galleys;
    - (v) lavatories; and
    - (vi) stowage areas;
  - (2) aircraft equipment and furnishings –
    - (i) cabin Attendant stations;
    - (ii) cabin Attendant panels;
    - (iii) passenger seats;
    - (iv) passenger service units and convenience panels;
    - (v) passenger information signs;
    - (vi) aircraft markings; and
    - (vii) aircraft placards;
  - (3) aircraft systems –
    - (i) air conditioning and pressurization system;
    - (ii) aircraft communication systems (call, interphone and passenger address);

- (iii) lighting and electrical systems;
- (iv) oxygen systems (flight crew, observer and passenger); and
- (v) water system;
- (4) aircraft exits –
  - (i) general information;
  - (ii) exits with slides or slide/rafts (pre-flight and normal operation);
  - (iii) exits without slides (pre-flight and normal operations); and
  - (iv) window exits;
- (5) crewmember communication and co-ordination –
  - (i) authority of PIC;
  - (ii) routine communication signals and procedures; and
  - (iii) crewmember briefing;
- (6) routine crewmember duties and procedures –
  - (i) crewmember general responsibilities;
  - (ii) reporting duties and procedures for specific aircraft;
  - (iii) pre-departure duties and procedures prior to passenger boarding;
  - (iv) passenger boarding and deplaning duties and procedures;
  - (v) prior to movement on the surface duties and procedures;
  - (vi) prior to takeoff duties and procedures applicable to specific aircraft;
  - (vii) inflight duties and procedures;
  - (viii) prior to landing duties and procedures;
  - (ix) movement on the surface and arrival duties and procedures;
  - (x) after arrival duties and procedures;
  - (xi) intermediate stops;
  - (xii) first Aid training;
  - (xiii) survival training;
  - (xiv) minimum Equipment List (MEL); and
  - (xv) surface contamination;
- (7) passenger handling responsibilities –
  - (i) crewmember general responsibilities;
  - (ii) infants, children, and unaccompanied minors;
  - (iii) passengers needing special assistance;
  - (iv) passengers needing special accommodation;
  - (v) carry-on stowage requirements;
  - (vi) passenger seating requirements; and
  - (vii) smoking and no smoking requirements;
- (8) human performance training as related to passenger cabin safety duties;
- (9) high altitude physiology regarding the effect of lack of oxygen and, in the case of pressurized aircraft, the physiological phenomena accompanying a loss of pressurization;
- (10) company accident prevention and safety programme.
- (b) Each AOC holder shall have an initial ground training curriculum for Cabin Attendants applicable to the type of operations conducted and aircraft flown, including at least the following aircraft specific emergency subjects –
  - (1) emergency equipment –
    - (i) emergency communication and notification systems;
    - (ii) aircraft exits;
    - (iii) exits with slides or slide/rafts (emergency operation);
    - (iv) slides and slide/rafts in a ditching;

- (v) exits without slides (emergency operation);
  - (vi) window exits (emergency operation);
  - (vii) exits with tail-cones (emergency operation);
  - (viii) cockpit exits (emergency operation);
  - (ix) ground evacuation and ditching equipment;
  - (x) first aid equipment;
  - (xi) portable oxygen systems (oxygen bottles, chemical oxygen generators, protective breathing equipment (PBE));
  - (xii) fire-fighting equipment;
  - (xiii) emergency lighting systems; and
  - (xiv) additional emergency equipment;
- (2) emergency assignments and procedures –
- (i) general types of emergencies specific to aircraft;
  - (ii) emergency communication signals and procedures;
  - (iii) awareness of the other crewmembers' assignments and functions in the event of an emergency so far as is necessary for the fulfilment of the Cabin Attendant's own duties.
  - (iv) rapid decompression;
  - (v) insidious decompression and cracked window and pressure seal leaks;
  - (vi) fires;
  - (vii) ditching;
  - (viii) ground evacuation;
  - (ix) unwarranted evacuation (i.e., passenger initiated);
  - (x) illness or injury;
  - (xi) abnormal situations involving passengers or crewmembers;
  - (xii) hijacking;
  - (xiii) bomb threat;
  - (xiv) turbulence;
  - (xv) other unusual situations; and
  - (xvi) previous aircraft accidents and incidents; and
- (3) aircraft specific emergency drills –
- (i) emergency exit drill;
  - (ii) hand fire extinguisher drill;
  - (iii) emergency oxygen system drill;
  - (iv) flotation device drill;
  - (v) ditching drill, if applicable;
  - (vi) life-raft removal and inflation drill, if applicable;
  - (vii) slide/raft pack transfer drill, if applicable;
  - (viii) slide or slide/raft deployment, inflation and detachment drill, if applicable; and
  - (ix) emergency evacuation slide drill, if applicable.
- (c) Each AOC holder shall ensure that initial ground training for Cabin Attendants includes a competence check given by the appropriate supervisor or ground instructor to determine his or her ability to perform assigned duties and responsibilities.
- (d) Each AOC holder shall ensure that initial aircraft ground training for Cabin Attendants consists of at least the following programmed hours of instruction unless fewer hours are approved by the Authority –
- (1) multi-engine aircraft with MCTOW exceeding 20,000 kg (44,090 lbs) – 200 hours; and
  - (2) multi-engine aircraft with MCTOW of 20,000 kg (44,090 lbs) and less – 100 hours.

**APPENDIX 3 TO 14.090: INITIAL AIRCRAFT GROUND TRAINING CURRICULUM - FLIGHT DISPATCHER**

- (a) Each AOC holder shall provide initial aircraft ground training for Flight Dispatchers that include instruction in at least the following general dispatch subjects –

- (1) applicable contents of the Operations Manual;
  - (2) normal and emergency communications procedures;
  - (3) available sources of weather information;
  - (4) actual and prognostic weather charts;
  - (5) interpretation of weather information;
  - (6) seasonal meteorological conditions and the sources of meteorological information;
  - (7) adverse weather phenomena (e.g. clear air turbulence, windshear and thunderstorms);
  - (8) effects of meteorological conditions on radio reception in the aircraft used;
  - (9) notice to Airmen (NOTAM) system;
  - (10) peculiarities and limitations of each navigation system which is used by the operation;
  - (11) navigational charts and publications;
  - (12) air traffic control (ATC) and instrument procedures;
  - (13) familiarization with operational area;
  - (14) characteristics of special aerodromes and other operationally significant aerodromes which the operator uses (i.e., terrain, approach aids, or prevailing weather phenomena);
  - (15) joint Flight Dispatcher/pilot responsibilities.
- (b) Each AOC holder shall provide initial aircraft ground training for Flight Dispatchers that include instruction in at least the following aircraft characteristics –
- (1) general operating characteristics of the AOC holder’s aircraft;
  - (2) aircraft specific training with emphasis on the following topics –
    - (i) aircraft loading instructions;
    - (ii) aircraft operating and performance characteristics;
    - (iii) radio communications and navigation equipment capability;
    - (iv) instrument approach and communications equipment; and
    - (v) emergency equipment;
  - (3) flight manual training; and
  - (4) equipment training.
- (c) Each AOC holder shall provide initial aircraft ground training for Flight Dispatchers that include instruction in at least the following emergency procedures –
- (1) assisting the flight crew in an emergency; and
  - (2) alerting of appropriate governmental, company and private agencies.
- (d) Each AOC holder shall ensure that initial ground training for Flight Dispatchers includes a competence check given by an appropriate supervisor or ground instructor that demonstrates the required knowledge and abilities to accomplish the –
- (1) assistance of the PIC in the flight preparation and providing of relevant information;
  - (2) assistance in the operational and ATC flight plan preparation;
  - (3) furnish the PIC while in flight the information that may be necessary to safe conduct of the flight; and
  - (4) in the event of an emergency, initiate such procedures as may be outlined in the operations manual.

**APPENDIX 4 TO 14.090: INITIAL GROUND AND FLIGHT TRAINING INSTRUCTIONAL HOURS – FLIGHT CREW**

An AOC holder shall provide flight crewmembers with the following minimum initial ground and flight training as applicable to the aircraft category –

Ground Training (Hours)			Flight Training (PF Hours) -				
			Simulator and Aircraft			Simulator Only Level D	Aircraft Only
Basic	Pressurized	Turbine	Level A1	Level B/C	Aircraft		

<b>Single-Engine</b>	5.5	Add 2.0	Add 6.0	6.0	6.0	2.0**		3.0
<b>Single-Engine Helicopters</b>	15.0		Add 6.0					5.0
<b>Multi-Engine 9 or Less*</b>	11.0	Add 2.0	Prop add 15.0 Jet add 8.0	7.5	7.5	1.5**	10.0	6.0
<b>Multi-Engine 10 to 19*</b>	15.0	Add 2.0	Prop add 17.0 Jet add 10.0	8.0	8.0	1.5**	10.0	8.0
<b>Multi-Engine 20+*</b>	28.0	Add 6.0	Prop add 25.0 Jet add 14.0	10.0	10.0	2.0 **	12.0	12.0***
<b>ME Helicopters</b>	28.0		Add 12.0	10.0	10.0	2.0 **	12.0	12.0

**Note 1:**

\* Denotes the number of passenger seats for which the aircraft was certified.

\*\* May be reduced to that time necessary for 3 landings as follows, provided all other training has been completed in a Level C full flight simulator –

- one normal and one balked landing, one take-off with engine failure after the gear is up; and
- one full stop landing with simulated engine failure.

\*\*\* Turboprop and jet aircraft-only training to be approved in exceptional instances only.

**Note 2:**

(1) A Level A Full Flight Simulator (FFS) is a synthetic training device that has a motion and visual system that permits completion of a visual training programme and PPC. However, the sophistication of the device is such that there is also a requirement to complete airborne training and an airborne PPC. Recurrent training (and PPCs) may be conducted wholly in a Level A device, if approved by the Authority.

(2) A Level B FFS is a synthetic training device that has a higher fidelity visual and motion system than that of a Level A device. The system allows the device to accurately replicate aircraft handling when within ground effect and permits accurate depth perception and visual cues to assess sink rate. As a result, it has "landing credits" attached to it (i.e. all recurrent training and 90 day currency requirements may be completed in a Level B or higher synthetic training device).

(3) Level C and D FFS are synthetic training devices that have a much higher level of fidelity in their visual and motion systems compared to Level B simulators. All recurrent training may be conducted in the Level C or D FFS. Only Level D simulators are suitable for zero flight time initial training programmes.

(4) Flight training time in the matrix is expected to be flight times (block to block). A maximum of 15 minutes is allowed for ground time for each flight (i.e. air time must be 45 minutes of each hour logged for flight training purposes).

(5) Pilots will complete an equal amount of Pilot Not Flying (PNF) time in the simulator in addition to the Pilot Flying (PF) times given in the chart.

**APPENDIX 1 TO 14.092: OPERATION OF MORE THAN ONE AIRCRAFT TYPE**

- (a) An operator shall complete the full training/checking programme for each type of aircraft as specified in this Schedule unless credits are given in the case of large aircraft that have considerable commonality in flight deck, systems, handling and procedures. This may result in an abbreviated training and checking programme approved on the basis of USA, Canada or JAA-approved manufacturer's training matrixes.
- (b) The *base aircraft* type is the aircraft on which the flight crewmember is already type-rated and current and the *second aircraft* type is the aircraft type for which the completion of conversion training will meet licensing standards for the issue of a type rating. Completion of conversion training and the issue of a

rating may form the basis for mixed fleet flying which permits flight crews to maintain currency on two similar types of aircraft with a reduced training/checking programme.

- (c) Typical minimum entry qualifications to conversion training programmes require at least three months or a minimum of 150 hours experience on the base aircraft type before entering a conversion training programme for the second aircraft type. Once approved into a conversion programme, the flight crewmember's base aircraft type recurrent training and PPC may be extended to one-year validity to establish a stagger to arrive at alternating training and checks on each type.
- (d) Alternating training, proficiency and route checks shall be used when mixed fleet flying results from such conversion training. After six months flight on the line, a 6 month proficiency check shall be done on the second type. If satisfactory and the pilot is recommended by the check pilot, the check may be twelve months later on the second type provided that at the next six month point a check is done on the base aircraft type. In order to establish the required stagger between the two alternating type proficiency check requirements, the company shall provide a proposed schedule of the checks on both types. It shall commence from the last proficiency check on the base aircraft type and shall identify where extensions may be required to establish the required alternate checking schedule. The Authority may then issue a deviation to the regulations governing proficiency checking on a one-time basis for each pilot to establish the initial schedule. The base aircraft may be extended up to six months but not if that will result in more than twelve months having passed from the date of the last check. The second aircraft second check date may be advanced or extended not more than two months to establish the six month interval of the check dates for each type. Line training on the second type may have sectors reduced to a minimum of two, governed by any other factors such as MNPS, long range navigation, specific route complexity, sector requirements, etc.
- (e) Line checks shall alternate between types each year. No mixed fleet flying shall be permitted until all supervised line flying training and a satisfactory line check has been completed on the second aircraft type and a consolidation period has been completed (as applicable). Ninety-day landing currency shall be deemed to be met from landings on either type in the simulator with the provision that at least one actual landing must have been completed on one of the aircraft. Special operational qualifications attained in one aircraft, such as ETOPs, MNPS or low visibility operations, shall be deemed to have been met on the other aircraft provided all approved annual training proficiency and route currency requirements are met.
- (f) The minimum ground training programme for conversion training to a variant aircraft is –
  - (1) for large aircraft, the following times if the manufacturer has not recommended any –
    - (i) 20 hours (Cabin Attendants – 10 hours); and
    - (ii) home study - 5 hours (cockpit set-up/checklist);
  - (2) 15 hours for small, multi-engine and turbine powered aircraft; and
  - (3) 5 hours for small single-engine, non-turbine powered aircraft.

**(Note:** Aircraft conversion times approved by other CAAs may be approved by the Authority in lieu of these times, if the applicant requests such.)

#### **APPENDIX 1 TO 14.095: INITIAL AIRCRAFT FLIGHT TRAINING**

- (a) Each AOC holder shall ensure that pilot initial flight training includes at least the following –

**(Note:** Flight training may be conducted in an appropriate aircraft or adequate training simulator (simulator shall have landing capability).)

  - (1) preparation –
    - (i) visual inspection (for aircraft with a flight engineer, use of pictorial display authorized);
    - (ii) pre-taxi procedures; and
    - (iii) performance limitations;
  - (2) surface operation –
    - (i) pushback;

- (ii) powerback taxi, if applicable to type of operation to be conducted;
  - (iii) starting;
  - (iv) taxi; and
  - (v) pre take-off checks;
- (3) takeoff –
- (i) normal;
  - (ii) crosswind;
  - (iii) rejected;
  - (iv) power failure after  $V_1$ ; and
  - (v) lower than standard minimum, if applicable to type of operation to be conducted;
- (4) climb –
- (i) normal; and
  - (ii) one-engine inoperative during climb to enroute altitude;
- (5) enroute –
- (i) steep turns;
  - (ii) approaches to stalls (takeoff, enroute and landing configurations);
  - (iii) inflight powerplant shutdown;
  - (iv) inflight powerplant restart; and
  - (v) high speed handling characteristics;
- (6) descent –
- (i) normal; and
  - (ii) maximum rate;
- (7) approaches –
- (i) VFR procedures;
  - (ii) visual approach with 50% loss of available power (2 engines inoperative on 3-engine aircraft, one of which is to be the centre engine and for 4-engine aircraft, the loss is to be on one side) (PIC only);
  - (iii) visual approach with slat/flap malfunction;
  - (iv) IFR precision approaches (ILS and GPS, if applicable, normal and ILS with one-engine inoperative);
  - (v) IFR non-precision approaches (NDB normal and VOR normal and GPS, if applicable);
  - (vi) non-precision approach with one engine inoperative (LOC backcourse procedures, LDA, GPS and circling approach procedures, if circling approaches below 1000 ft-3 sm are conducted);
- (Note: Simulator shall be qualified for training/checking on the circling manoeuvre.)*
- (vii) missed approach from precision approach;
  - (viii) missed approach from non-precision approach; and
  - (ix) missed approach with powerplant failure;
- (8) landings –
- (i) normal with a pitch mistrim (small aircraft only);
  - (ii) normal from precision instrument approach;
  - (iii) from precision instrument approach with most critical engine inoperative;
  - (iv) with 50% loss of available power (2 engines inoperative on 3-engine aircraft, one of which is to be the centre engine and for 4-engine aircraft, the loss is to be on one side) (PIC only);
  - (v) with flap/slat malfunction;
  - (vi) rejected landings;
  - (vii) crosswind;
  - (viii) manual reversion/degraded control augmentation;
  - (ix) short/soft field (small aircraft only); and

- (x) glassy/rough water (seaplanes only);
  - (9) after landing –
    - (i) parking;
    - (ii) emergency evacuation; and
    - (iii) docking, mooring, and ramping (seaplanes only);
  - (10) other flight procedures during any airborne phase –
    - (i) holding;
    - (ii) TCAS alerts;
    - (iii) ice accumulation on airframe;
    - (iv) air hazard avoidance; and
    - (v) windshear/microburst;
  - (11) normal, abnormal and alternate systems procedures during any phase –
    - (i) pneumatic/pressurization;
    - (ii) air conditioning;
    - (iii) fuel and oil;
    - (iv) electrical;
    - (v) hydraulic;
    - (vi) flight controls;
    - (vii) anti-icing and de-icing systems;
    - (viii) autopilot;
    - (ix) flight management guidance systems and/or automatic or other approach and landing aids;
    - (x) stall warning devices, stall avoidance devices, and stability augmentation systems;
    - (xi) airborne weather radar;
    - (xii) flight instrument system malfunction;
    - (xiii) communications equipment; and
    - (xiv) navigation systems; and
  - (12) emergency systems procedures during any phase –
    - (i) aircraft fires;
    - (ii) smoke control;
    - (iii) powerplant malfunctions;
    - (iv) fuel jettison;
    - (v) electrical, hydraulic, pneumatic systems;
    - (vi) flight control system malfunction; and
    - (vii) landing gear and flap system malfunction.
- (b) Each AOC holder shall ensure that flight engineer flight training includes at least training and practice in procedures related to the carrying out of flight engineer duties and functions, including the appropriate items from paragraph (a) of this Appendix. This training and practice may be accomplished either in flight, in an aircraft simulator or a training device.

**APPENDIX 1 TO 14.100: INITIAL SPECIALIZED OPERATIONS TRAINING**

Each AOC holder shall provide initial and recurrent training and checks for those specialized operations approved in accordance with the *Manual of Special Operations Approvals* to ensure that each pilot and Flight Dispatcher is qualified in the type of operation in which he or she serves and in any specialized or new equipment, procedures and techniques, such as –

- (1) Class II navigation –
  - (i) knowledge of specialized navigation procedures, such as MNPS/BRNAV/RNP; and
  - (ii) knowledge of specialized equipment, such as INS, GPS, MLS;
- (2) CAT II and CAT III approaches –

- (i) special equipment, procedures and practice; and
  - (ii) a demonstration of competency;
- (3) lower than standard minimum takeoffs –
- (i) runway and lighting requirements;
  - (ii) rejected takeoffs at, or near,  $V_1$  with a failure of the most critical engine;
  - (iii) taxi operations; and
  - (iv) procedures to prevent runway incursions under low visibility conditions;
- (4) extended range operations with two engine aeroplanes (ETOPS);
- (5) precision runway monitored approaches (PRM); and
- (6) airborne radar approaches.

**APPENDIX 1 TO 14.110: USE OF SIMULATORS, TRAINING DEVICES AND CABIN EMERGENCY EVACUATION TRAINERS**

- (a) Flight Simulator Device (FSD). A FSD may have one of two classifications –
- (1) Flight Training Device (FTD); or
  - (2) Full Flight Simulator (FFS).
- (b) Turbo-jet aircraft initial, recurrent, requalification and upgrade flight training shall be completed in a FFS, or a combination of a FTD, FFS and the aircraft, or a combination of a FFS and the aircraft. Turbo-jet aircraft initial and recurrent PPCs shall be conducted in a FFS or a combination of a flight simulator and the aircraft.
- (c) Unless otherwise authorized by the Authority, an operator of large pressurized turbo-prop aeroplanes and aeroplanes authorized to carry more than 19 passengers shall conduct initial, recurrent, requalification and upgrade flight training in a FFS, or a combination of a FTD, FFS and the aircraft, or a combination of a FFS and the aircraft. The PPC following training shall be conducted in a FFS or a combination of a flight simulator and the aircraft.
- (d) Where a flight simulator, as required by (b) or (c) of this Appendix, is not physically available for the aircraft type or is temporarily not available due to unforeseen operational circumstances, the Authority may approve training and checking in the aircraft.
- (e) Approved Simulator Training Programme -
- (1) an air operator using an approved Level A, B or C FFS is permitted to conduct most initial, upgrade and recurrent training in that simulator. Additionally, flight training in an aircraft must be carried out for general handling and landing manoeuvres for initial and upgrade training;
  - (2) the following training in respect of SOPs for normal, abnormal and emergency operation of the aircraft systems and components shall be carried out in the FFS –
    - (i) use of aircraft checklists;
    - (ii) flight and cabin crew co-operation, command and co-ordination;
    - (iii) aircraft and cargo fire on the ground and while airborne;
    - (iv) engine fire and failure;
    - (v) effects of engine icing and anti-ice operations;
    - (vi) take-off, landing and flight with the critical engine inoperative, including drift-down and engine inoperative performance capabilities;
    - (vii) on 3- and 4-engine aircraft, inflight procedures, including approach and landing with 2 engines inoperative;
    - (viii) loss of pressurization and emergency descent (if applicable);
    - (ix) flight control failures and abnormalities;
    - (x) hydraulic, electrical and other system failures;
    - (xi) failure of navigation and communication equipment;
    - (xii) pilot incapacitation - recognition and response during various phases of flight;
    - (xiii) approach to the stall and recovery procedure with ground contact imminent and ground contact not a factor (clean, take-off and landing configuration);
    - (xiv) buffet boundary onset, steep turns ( $45^\circ$  of bank), and other flight characteristics such as

- unusual attitudes (as applicable for initial and upgrade only);
  - (xv) aircraft performance for climb, cruise, holding, descent and landing;
  - (xvi) normal, noise abatement and performance limited take-offs;
  - (xvii) take-off and landing data calculations;
  - (xviii) rejected take-off procedures and rejected landings;
  - (xix) passenger and crew evacuation;
  - (xx) FMGS, GPWS, TCAS and other specialized aircraft equipment (as applicable);
  - (xxi) one escape manoeuvre performed in VMC and one escape manoeuvre performed in IMC (if applicable) following a GPWS warning; and
  - (xxii) where the FFS is a level B device or higher, recovery from turbulence and windshear on take-off and approach.
- (3) where the air operator is authorized for flight in IMC, the following training in flight planning and instrument flight procedures shall be included –
    - (i) departure, enroute, holding and arrival; and
    - (ii) all types of instrument approaches and missed approaches in minimum visibility conditions using all levels of automation available (as applicable).
  - (4) in addition to the training in an approved Level A or B FFS, the following flight training on the aircraft type shall be carried out –
    - (i) interior and exterior aircraft pre-flight checks;
    - (ii) ground handling for P-I-C;
    - (iii) normal take-off, visual circuit (where possible) and landing;
    - (iv) a simulated engine inoperative approach and landing;
    - (v) simulated engine failure procedures during take-off and missed approach (at safe altitude and airspeed);
    - (vi) no electronic glide slope approach and landing; and
    - (vii) circling (if company has circling minima approved below 1000-3) and other approaches where the simulator lacks the capability.
  - (5) depending upon the fidelity of an approved Level C FFS, credit may be given for some of the items listed in paragraph (e) (4) of this Appendix.
  - (6) if a flight simulator has differences in performance, systems or cockpit layout and configuration from the air operator's aircraft, additional training on these differences shall be provided.
- (f) Conditional Zero Flight Time Simulator Training Programme -
- (1) an air operator may be approved for a zero flight time training programme using a Level C FFS for candidates with either PIC or SIC experience on a similar aeroplane with the same operator or verifiable line currency on a similar aeroplane within the previous two years;
  - (2) for the purpose of this provision, "similar aeroplane" means –
    - (i) turbo-jet to turbo-jet - provided both are certified as transport category aeroplanes;
    - (ii) turbo-prop to turbo-prop - provided both are certified as transport category aeroplanes; and/or
    - (iii) reciprocating to reciprocating - provided both are certified for 20 or more passenger seats.
  - (3) in addition to those items of training required in paragraphs (e)(1) and (2) of this Appendix, the training in an approved Level C flight simulator shall include –
    - (i) manoeuvring of the aeroplane on the ground;
    - (ii) crosswind take-offs and landings to 100% of the published crosswind component;
    - (iii) a visual training programme in the flight simulator to ensure VFR flight skills, covering scenarios of dusk and night with variable weather and visibilities. This programme shall include the following –
      - (A) normal and crosswind take-offs, visual circuits and landings with variable wind, runway illusion and surface conditions;
      - (B) engine inoperative approach and landing;
      - (C) engine failure procedures during take-off and missed approach;
      - (D) no electronic glideslope approach and landing; and
      - (E) approaches and landings with flight control failures and abnormalities; and

- (iv) a simulated line flight comprising at least 2 sectors (one as pilot flying and another as pilot not flying).
  - (4) if a Level C flight simulator has differences in performance, systems or cockpit layout and configuration from the air operator's aeroplane, additional training on these differences shall be provided.
  - (5) candidates who do not qualify in accordance with paragraph (f) (1) of this Appendix shall undergo aeroplane flight training consisting of at least those items listed in paragraphs (e) (4) (i-iv) of this Appendix.
- (g) Zero Flight Time Training Programme -
- (1) an air operator using an approved Level D FFS may be permitted a zero flight time training programme.
  - (2) in addition to the training required in paragraph (f) of this Appendix using a Level C FFS, the following FFS training shall be carried out at an appropriate point in the training programme –
    - (i) a VFR training programme in the Level D flight simulator of at least 4 hours per crew consisting of 2 hours as pilot flying and 2 hours of pilot not flying, to ensure visual flight skills to cover day, dusk and night with variable weather and visibility scenarios. This programme shall include the following –
      - (A) normal and crosswind take-offs and visual circuits and landings, with variable wind, runway illusion and surface conditions;
      - (B) engine inoperative approach and landing;
      - (C) engine failure procedures during take-off and missed approach;
      - (D) no visual aids approaches and landings; and
      - (E) approaches and landings with flight control failures and abnormalities;

*(Note: Where a pilot demonstrates a satisfactory level of performance in visual manoeuvres, the operator may use the time specified in paragraph (g) (2) (i) of this Appendix as additional training to that required by any of the Level C requirements.)*
    - (ii) Simulated line flights of at least 2 sessions (2 sectors as pilot flying and 2 sectors as pilot not flying) are required. Pilot flying duties shall be carried out from the appropriate seat.
  - (3) if a Level D flight simulator has differences in performance, system or cockpit layout and configuration from the air operator's aeroplane, additional training on these differences shall be provided.
- (h) The requirements for a cabin emergency evacuation trainer are as follows –
- (1) the aeroplane type(s) shall be accurately represented with respect to cabin layout and stowage for safety and emergency equipment in relation to the emergency exits provided. All features of the real aeroplane passenger and Cabin Attendant seats adjacent to the exits must be incorporated;
  - (2) each approved aeroplane exit type shall be capable of both normal and emergency operation and shall be representative in components, dimensions, weight and balance and method of operation, including extent of movement and forces. These specifications also apply to a free standing exit trainer;
  - (3) an appropriate surface area shall be provided outside each emergency exit to enable occupants to leave the trainer during evacuation drills;
  - (4) the trainer need contain only those items which are representative of the aeroplane type(s) operated by the air operator;
  - (5) a minimum of four (4) rows of cabin seats with a proportional aisle(s) will be installed, in order to simulate a realistic cabin layout for emergency evacuation exercise/drills;
  - (6) the trainer shall be equipped with –
    - (i) a minimum of two (2) operational emergency exits (one door and one alternate exit or two (2) doors, as applicable) – plus one operational window exit (where applicable). The air operator may choose to equip the trainer with doors representative of more than one aeroplane type. Trainers may be equipped with operational exits on either the left or right side or both;
    - (ii) at least one Cabin Attendant station located at an operational exit and additional Cabin Attendant stations may be required depending on the grouping of exits contained in the trainer;

- (iii) an operational PA/intercom system and appropriate Cabin Attendant panel(s) at each Cabin Attendant station;
  - (iv) safety and emergency equipment of a type currently required on the aeroplane in the appropriate brackets and locations;
  - (v) operational flight deck and cabin call chimes;
  - (vi) internal cabin markings, such as placards and exit markings;
  - (vii) normal and emergency cabin lighting, including fail features;
  - (viii) passenger service units (PSUs) with deployable oxygen masks for passenger and Cabin Attendant seats;
  - (ix) operation "No Smoking/Fasten Seat Belt" ordinance signs visible from each passenger seat and Cabin Attendant station/position;
  - (x) a method of simulating an unserviceable exit(s);
  - (xi) fire simulation at window and door exits;
  - (xii) simulated cabin windows and features necessary to darken the cabin;
  - (xiii) facilities and sufficient speakers to simulate sound effect/crash noises audible throughout the cabin; and
  - (xiv) smoke simulation capabilities.
- (i) Regulatory approval for use of training devices in lieu of an aeroplane will be contingent on the compatibility of the device to the related components of the training programme and issued in conjunction with programme approval.
  - (j) Where an air operator arranges to use the emergency evacuation trainer or free standing exit trainer owned by another air operator, the training shall comply with the approved training programme and operating procedures of the air operator whose crews are being trained. Items/equipment in the trainer shall be restricted if significant differences of cabin layout and equipment exist.

**APPENDIX 1 TO 14.120: AIRCRAFT AND INSTRUMENT PROFICIENCY CHECK: PILOT**

- (a) The PPC flight test requirements specified in the *Company Check Pilot Manual* shall be completed.
- (b) Satisfactory completion of a PPC, including the instrument portion, following completion of an approved air carrier training programme for the particular type aircraft, satisfies the requirement for an aircraft type rating practical test and an instrument rating.
- (c) A Chief Pilot conducting a PCC on pilots of turbine-powered single-engine aircraft must have accumulated a minimum of 500 hours on turbine-powered aircraft prior to conducting the PCC.
- (d) The oral and flight test phases of a proficiency check should not be conducted simultaneously.
- (e) When the examiner determines that an applicant's performance is unsatisfactory, the examiner shall so advise the applicant immediately but may, with the consent of the applicant, continue with the flight as a training flight.
- (f) If the check must be terminated (for mechanical or other reasons) and there are events which still need to be completed, the examiner shall issue a letter of discontinuance, valid for 60 days, listing the specific areas of operation that have been successfully completed and which need not be repeated.

**APPENDIX 1 TO 14.125: FLIGHT ENGINEER PROFICIENCY CHECKS**

Examiners shall include during proficiency checks for flight engineers an oral or written examination of the normal, abnormal and emergency procedures listed below –

- (1) normal procedures—
  - (i) interior pre-flight;
  - (ii) panel set-up;
  - (iii) fuel load;
  - (iv) engine start procedures;
  - (v) taxi and before takeoff procedures;

- (vi) takeoff and climb pressurization;
  - (vii) cruise and fuel management;
  - (viii) descent and approach;
  - (ix) after landing and securing;
  - (x) crew co-ordination;
  - (xi) situational awareness, traffic scan, etc.;
  - (xii) performance computations; and
  - (xiii) anti-ice, de-ice; and
- (2) abnormal and emergency procedures—
- (i) troubleshooting;
  - (ii) knowledge of checklist;
  - (iii) ability to perform procedures;
  - (iv) crew co-ordination;
  - (v) minimum equipment list (MEL) and configuration deviation list (CDL); and
  - (vi) emergency or alternate operation of aircraft flight systems.

**APPENDIX 1 TO 14.130: COMPETENCE CHECKS: CABIN ATTENDANTS**

- (a) Evaluators shall conduct competency checks for Cabin Attendants to demonstrate that the candidate's proficiency level is sufficient to successfully perform assigned duties and responsibilities.
- (b) A qualified supervisor or inspector, approved by the Authority, shall observe and evaluate competency checks for Cabin Attendants.
- (c) Evaluators shall include during each Cabin Attendant competency check a demonstrated knowledge of—
- (1) emergency equipment—
- (i) emergency communication and notification systems;
  - (ii) aircraft exits;
  - (iii) exits with slides or sliderafts (emergency operation);
  - (iv) slides and sliderafts in a ditching;
  - (v) exits without slides (emergency operation);
  - (vi) window exits (emergency operation);
  - (vii) exits with tailcones (emergency operation);
  - (viii) cockpit exits (emergency operation);
  - (ix) ground evacuation and ditching equipment;
  - (x) first aid equipment;
  - (xi) portable oxygen systems (oxygen bottles, chemical oxygen generators, protective breathing equipment (PBE));
  - (xii) fire fighting equipment;
  - (xiii) emergency lighting systems; and
  - (xiv) additional emergency equipment;
- (2) emergency procedures—
- (i) general types of emergencies specific to aircraft;
  - (ii) emergency communication signals and procedures;
  - (iii) rapid decompression;
  - (iv) insidious decompression and cracked window and pressure seal leaks;
  - (v) fires;
  - (vi) ditching;
  - (vii) ground evacuation;
  - (viii) unwarranted evacuation (i.e., passenger initiated);
  - (ix) illness or injury;
  - (x) abnormal situations involving passengers or crewmembers;

- (xi) turbulence; and
- (xii) other unusual situations;
- (3) emergency drills—
  - (i) location and use of all emergency and safety equipment carried on the aircraft;
  - (ii) the location and use of all types of exits;
  - (iii) actual donning of a lifejacket where fitted;
  - (iv) actual donning of protective breathing equipment; and
  - (v) actual handling of fire extinguishers.
- (4) Crew Resource Management—
  - (i) decision making skills;
  - (ii) briefings and developing open communication;
  - (iii) inquiry, advocacy, and assertion training; and
  - (iv) workload management;
- (5) dangerous goods —
  - (i) recognition of and transportation of dangerous goods;
  - (ii) package marking and labelling;
  - (iii) instructions regarding limitations for passengers and crewmembers; and
  - (iv) in-flight emergency response procedures.
- (6) security —
  - (i) flight deck security in-flight and communication;
  - (ii) hijacking procedures;
  - (iii) disruptive passengers handling procedures; and
  - (iv) handling suspicious objects or bomb.

**APPENDIX 1 TO 14.135: COMPETENCE CHECKS: FLIGHT DISPATCHERS**

- (a) Evaluators shall conduct competency checks for Flight Dispatchers to demonstrate that the candidate's proficiency level is sufficient to ensure the successful outcome of all dispatch operations.
- (b) A qualified supervisor, approved by the Authority, or inspector shall observe and evaluate competency checks for Flight Dispatchers.
- (c) Each competency check for Flight Dispatchers shall include –
  - (1) an evaluation of all aspects of the dispatch function;
  - (2) a demonstration of the knowledge and abilities in normal and abnormal situations; and
  - (3) an observation of actual flights being dispatched.
- (d) Each evaluator of newly hired Flight Dispatchers shall include during initial competency checks an evaluation of all of the geographic areas and types of aircraft the Flight Dispatcher will be qualified to dispatch.
 

*(Note: The evaluator may approve a competency check of representative aircraft types and routes when, in the supervisor's judgement, a check including all types is impractical or unnecessary.)*
- (e) Evaluators may limit initial equipment and transition competency checks solely to the dispatch of the types of aeroplanes on which the aircraft dispatcher is qualifying (unless the check is to simultaneously count as a recurrent check).
- (f) Each evaluator of Flight Dispatchers shall include, during recurrent and requalification competency checks, a representative sample of aircraft and routes for which the aircraft dispatcher maintains a current qualification.
- (g) The Authority requires special operations competency checks before an aircraft dispatcher is qualified in ETOPS or other special operations authorized by the Authority.

## APPENDIX 1 TO 14.140: SUPERVISED LINE FLYING REQUIREMENTS – PILOTS

- (a) Supervised line flying training is required for pilots who are assigned to duty on aircraft authorized for more than 9 passenger seats and on all aircraft before being assigned to international flight operations. Supervised line flying training shall be conducted over parts of the air operator's route structure that are typical of those over which the flight crew will be expected to fly. The following areas shall be covered during supervised line flying training and noted in records as having been completed –
- (1) command of the aircraft –
    - (i) crew management and discipline;
    - (ii) responsibilities of the pilot-in-command and other flight crew members; and
    - (iii) responsibilities of the cabin crew;
  - (2) aircraft and equipment –
    - (i) MEL policy and procedures;
    - (ii) C of A and other aircraft documentation;
    - (iii) deferred defects;
    - (iv) maintenance release;
    - (v) manuals and log books;
    - (vi) Flight Data Recorder and Cockpit Voice Recorder;
    - (vii) emergency exits - number, access, lighting and marking;
    - (viii) fire extinguishers;
    - (ix) fire axe; and
    - (x) oxygen and first aid equipment and survival equipment;
  - (3) dispatch –
    - (i) personnel, hours of operation, operational control; and
    - (ii) company fuel policy;
  - (4) aircraft servicing and ramp safety –
    - (i) fuelling procedures;
    - (ii) load security;
    - (iii) ground equipment and handling;
    - (iv) air operator's aircraft de-icing policy and procedures; and
    - (v) aircraft parking;
  - (5) reporting for duty;
  - (6) licence requirements;
  - (7) aircraft library;
  - (8) flight time, duty day limitations and rest requirements;
  - (9) pre-flight safety and crew briefings;
  - (10) ramp push back and starting engines;
  - (11) after-start checks;
  - (12) pre-flight checks and securing cabin;
  - (13) rejected take-off and brake cooling chart;
  - (14) departure sequence –
    - (i) lookout; and
    - (ii) after take-off checks;
  - (15) climb procedures;
  - (16) cruise –
    - (i) fuel management and checks; and
    - (ii) enroute diversion;
  - (17) approach procedures –
    - (i) organization and briefing of approach;
    - (ii) descent; and

- (iii) pre-landing check and cabin security;
  - (18) landing and taxiing –
    - (i) contaminated runway operations; and
    - (ii) after landing checks;
  - (19) shutdown;
  - (20) flight and maintenance logs and records;
  - (21) defect recording and clearing;
  - (22) emergency procedures –
    - (i) hi-jack bomb threat procedures;
    - (ii) aircraft evacuation;
    - (iii) airport emergency services; and
    - (iv) engine inoperative procedures; and
  - (23) special considerations such as significant terrain, noise abatement, unique SAR requirements, *etc.* (where applicable).
- (b) During supervised line flying training, a flight crewmember shall be given the following minimum experience while performing the duties appropriate to the crew station. Sectors/hours acquired during proving or ferry flights may be counted towards this requirement. The required number of flying hours and sectors apply to the PIC and the SIC –
- (1) for the purpose of line indoctrination aircraft are grouped as follows –
    - (i) reciprocating engine powered;
    - (ii) turbo-propeller powered; and
    - (iii) turbo-jet powered;
  - (2) for the purposes of supervised line flying training a sector is a flight composed of a take-off, departure, arrival and landing including at least a 25 nm enroute segment.
  - (3) general requirements for supervised line flying training are as follows –
    - (i) crewmembers who have not qualified and served in the same capacity on the same group of aircraft shall complete initial supervised line flying training;
    - (ii) crewmembers who have qualified and served in the same capacity on the same group of aircraft shall complete transition line indoctrination where applicable;
    - (iii) initial and transition supervised line flying training shall be conducted under the supervision of a training pilot or an approved CCP;
    - (iv) during initial supervised line flying training, the pilot-in-command and second-in-command shall perform the duties of the position, with the training pilot occupying the opposite pilot operating position; and
    - (v) during transition supervised line flying training, the pilot-in-command and second-in-command shall perform the duties of the position;

*(Note: The training pilot may occupy the jump seat if the transitioning pilot has completed at least 2 sectors as pilot flying and has satisfactorily demonstrated to the training pilot that he or she is qualified to perform the duties of the position.)*
  - (4) specific requirements for initial supervised line flying training on reciprocating-engine powered aircraft shall be as follows –
    - (i) each pilot shall perform or show knowledge of, as applicable, a mandatory list of operating manoeuvres and procedures and complete 12 flying hours and 6 mandatory sectors, a minimum of 2 sectors to be performed as pilot flying and 2 sectors as pilot not flying; and
    - (ii) after completing the 6 mandatory sectors, the remaining time may be reduced by 1 hour for each additional sector flown to a maximum 50% reduction of the original time requirement;
  - (5) specific requirements for initial supervised line flying training on turbo-propeller powered aircraft shall be as follows –
    - (i) each pilot shall perform or show knowledge of, as applicable, a mandatory list of operating manoeuvres and procedures as detailed in paragraph (a) of this Appendix and complete 10 flying hours in domestic operations or 20 flying hours in international operations and 6

- mandatory sectors, a minimum of 2 sectors to be performed as pilot flying and 2 sectors as pilot not flying; and
- (ii) after completing the 6 mandatory sectors, the remaining time may be reduced by 1 hour for each additional sector flown to a maximum 50% reduction of the original time requirement;
- (6) specific requirements for initial supervised line flying training on turbo-jet powered aircraft shall be as follows –
- (i) each pilot shall perform or show knowledge of, as applicable, a mandatory list of operating manoeuvres and procedures as detailed in paragraph (a) of this Appendix and complete 10 flying hours in domestic operations or 25 flying hours on international operations and 6 mandatory sectors, a minimum of 2 sectors to be performed as pilot flying and 2 sectors as pilot not flying; and
  - (ii) where operations are combined, a minimum of 25 flying hours shall be required;
- (7) specific requirements for transition supervised line flying training on reciprocating-engine powered aircraft shall be as follows –
- (i) each pilot shall perform or show knowledge of, as applicable, a mandatory list of operating manoeuvres and procedures as detailed in paragraph (a) of this Appendix and complete 8 flying hours and 6 mandatory sectors, a minimum of 2 sectors to be performed as pilot flying and 2 sectors as pilot not flying; and
  - (ii) after completing the 6 mandatory sectors, the remaining time may be reduced by 1 hour for each additional sector flown to a maximum 50% reduction of the original time requirement;
- (8) specific requirements for transition supervised line flying training on turbo-propeller powered aircraft shall be as follows –
- (i) each pilot shall perform or show knowledge of, as applicable, a mandatory list of operating manoeuvres and procedures as detailed in paragraph (a) of this Appendix and complete 10 flying hours and 6 mandatory sectors, a minimum of 2 sectors to be performed as pilot flying and 2 sectors as pilot not flying; and
  - (ii) after completing the 6 mandatory sectors, the remaining time may be reduced by 1 hour for each additional sector flown to a maximum 50% reduction of the original time requirement
- (9) specific requirements for transition supervised line flying training on turbo-jet powered aircraft shall be as follows –
- (i) each pilot shall perform or show knowledge of, as applicable, a mandatory list of operating manoeuvres and procedures as detailed in paragraph (a) of this Appendix and complete 10 flying hour during domestic operations or 25 flying hours during international operations, and 8 mandatory sectors, a minimum of 2 sectors to be performed as pilot flying and 2 sectors as pilot not flying; and
  - (ii) after completing the 8 mandatory sectors, the remaining time may be reduced by 1 hour for each additional sector flown to a maximum 50% reduction of the original time requirement; and
- (10) a flight crewmember who is qualified for domestic operations shall complete a minimum of 8 hours and 4 sectors transition supervised line flying training before being qualified in international flight operations.

**APPENDIX 1 TO 14.150: SUPERVISED LINE FLYING EXPERIENCE – CABIN ATTENDANTS**

- (a) Line flying under supervision (line indoctrination) shall be completed within ninety (90) days following the completion of the air operator's initial training on each aeroplane type that a person will be assigned a crewmember station within the following groupings –
  - (1) turbo-jet aeroplanes;
  - (2) pressurized propeller driven aeroplanes; or
  - (3) unpressurized propeller driven aeroplanes.
- (b) Where an air operator operates and a flight attendant is assigned to duty on more than one type of aeroplane in a grouping, line indoctrination may be completed on any one type in that grouping.

- (c) A record of training shall be kept for each trainee and shall be signed by the instructor certifying that line indoctrination has been completed. The record shall include the aeroplane type, date and flight number of the flight undertaken.
- (d) A Cabin Attendant trainee shall complete individual line indoctrination training on a revenue flight in accordance with the requirements set out in paragraph (e) of this Appendix.
- (e) A Cabin Attendant trainee shall –
  - (1) be assigned to two revenue flights with passengers onboard, each composed of a take-off and landing and at least 30 minutes at the normal cruising altitude for the aeroplane;
  - (2) be assigned a Cabin Attendant station and perform the duties of a Cabin Attendant under the supervision of a qualified flight attendant;
  - (3) be in addition to the number of required crewmembers for the operation of the flight and the aeroplane type with the ratio of trainees to qualified Cabin Attendants not greater than one to one; and
  - (4) participate in:
    - (i) reporting for duty;
    - (ii) pre-flight crew briefings;
    - (iii) pre-flight safety and emergency equipment checks;
    - (iv) passenger boarding procedures;
    - (v) door closing and, if applicable, associated slide arming procedures;
    - (vi) pre-flight passenger safety briefings/demonstrations;
    - (vii) pre-flight and pre-landing warnings and checks and securing of cabins and galleys;
    - (viii) silent review;
    - (ix) post take-off procedures;
    - (x) in-flight procedures pertaining to safety;
    - (xi) cabin unserviceabilities reporting/recording; and
    - (xii) a debriefing immediately following completion of line indoctrination.

**APPENDIX 1 TO 14.180: RECURRENT TRAINING CURRICULUM: FLIGHT CREW**

- (a) Each AOC holder shall establish a recurrent training programme for all flight crewmembers in the AOC holder's operations manual and shall have it approved by the Authority.
- (b) Each flight crewmember shall undergo recurrent training relevant to the type or variant of aircraft on which he or she is certified to operate and for the crewmember position involved.
- (c) Each AOC holder shall have all recurrent training conducted by suitably qualified personnel.
- (d) Each AOC holder shall ensure that flight crewmember recurrent ground training includes at least the following –
  - (1) general subjects –
    - (i) flight locating procedures;
    - (ii) principles and method for determining weight/balance and runway limitations;
    - (iii) meteorology to ensure practical knowledge of weather phenomena including the principles of frontal system, icing, fog, thunderstorms, windshear and high altitude weather situations;
    - (iv) ATC systems and phraseology;
    - (v) navigation and use of navigational aids;
    - (vi) normal and emergency communication procedures;
    - (vii) visual cues before descent to MDA;
    - (viii) accident/incident and occurrence review; and
    - (ix) other instructions necessary to ensure the pilot's competence;
  - (2) aircraft systems and limitations –
    - (i) normal, abnormal and emergency procedures;
    - (ii) aircraft performance characteristics;
    - (iii) engines and or propellers;

- (iv) major aircraft components;
  - (v) major aircraft systems (i.e., flight controls, electric, hydraulic and other systems as appropriate); and
  - (vi) ground icing and de-icing procedures and requirements;
- (3) emergency equipment and drills –
- (i) every 12 months—
    - (A) location and use of all emergency and safety equipment carried on the aircraft;
    - (B) the location and use of all types of exits;
    - (C) actual donning of a lifejacket where fitted;
    - (D) actual donning of protective breathing equipment; and
    - (E) actual handling of fire extinguishers;
  - (ii) every 3 years—
    - (A) operation of all types of exits;
    - (B) demonstration of the method used to operate a slide, where fitted; and
    - (C) fire-fighting using equipment representative of that carried in the aircraft on an actual or simulated fire;

*(Note: With halon extinguishers, an alternative method acceptable to the Authority may be used.)*

    - (D) effects of smoke in an enclosed area and actual use of all relevant equipment in a simulated smoke-filled environment;
    - (E) actual handling of pyrotechnics, real or simulated, where fitted;
    - (F) demonstration in the use of the liferaft(s), where fitted;
    - (G) an emergency evacuation drill;
    - (H) a ditching drill, if applicable; and
    - (I) a rapid decompression drill, if applicable;
  - (iii) Crew Resource Management—
    - (A) decision making skills;
    - (B) briefings and developing open communication;
    - (C) inquiry, advocacy and assertion training;
    - (D) workload management; and
    - (E) situational awareness;
  - (iv) dangerous goods—
    - (A) recognition of and transportation of dangerous goods;
    - (B) proper packaging, marking and documentation; and
    - (C) instructions regarding compatibility, loading, storage and handling characteristics; and
  - (v) security —
    - (A) hijacking;
    - (B) disruptive passengers; and
    - (C) the elements of Appendix 1 to 14.075.
- (e) Each AOC holder shall verify knowledge of the recurrent ground training by an oral or written examination.
- (f) Each AOC holder shall ensure that pilot recurrent flight training includes at least the following –
- (Note: Flight training may be conducted in an appropriate aircraft or adequate training simulator (simulator shall have landing capability).)*
- (1) preparation —
    - (i) visual inspection (use of pictorial display authorized); and
    - (ii) pre-taxi procedures;

- (2) surface operation—
  - (i) performance limitations;
  - (ii) cockpit management;
  - (iii) securing cargo;
  - (iv) pushback;
  - (v) powerback taxi;
  - (vi) starting;
  - (vii) taxi; and
  - (viii) pre take-off checks;
- (3) takeoff —
  - (i) normal;
  - (ii) crosswind;
  - (iii) rejected;
  - (iv) power failure after  $V_1$ ;
  - (v) powerplant failure during second segment; and
  - (vi) lower than standard minimum, if applicable;
- (4) climb—
  - (i) normal; and
  - (ii) one-engine inoperative during climb to enroute altitude;
- (5) enroute —
  - (i) steep turns;
  - (ii) approaches to stalls (takeoff, enroute and landing configurations);
  - (iii) inflight powerplant shutdown;
  - (iv) inflight powerplant restart; and
  - (v) high speed handling characteristics;
- (6) descent —
  - (i) normal; and
  - (ii) maximum rate;
- (7) approaches —
  - (i) VFR procedures;
  - (ii) visual approach with 50% loss of power (2 engines inoperative on 3-engine aircraft, with the centre engine being one of them and for 4-engine aircraft, failure of 2 engines on one side) (PIC only);
  - (iii) visual approach with slat/flap malfunction;
  - (iv) IFR precision approaches (ILS normal and GPS, if applicable, and ILS with one-engine inoperative);
  - (v) IFR non-precision approaches (NDB normal, VOR normal and GPS, if applicable);
  - (vi) non-precision approach with one engine inoperative (LOC backcourse, LDA, GPS and circling approach procedures, if approved below 1000 ft – 3 sm);

*(Note: Simulator shall be qualified for training/checking on the circling manoeuvre.)*

  - (vii) missed approach from precision approach;
  - (viii) missed approach from non-precision approach; and
  - (ix) missed approach with powerplant failure;
- (8) landings —
  - (i) with a pitch mistrim (small aircraft only);
  - (ii) normal from precision instrument approach;
  - (iii) from precision instrument approach with most critical engine inoperative;

- (iv) with 50% loss of power (2 engines inoperative on 3-engine aircraft, with the centre engine being one of them and for 4-engine aircraft, failure of 2 engines on one side) (PIC only);
  - (v) normal with flap/slat malfunction;
  - (vi) rejected landings;
  - (vii) crosswind;
  - (viii) short/soft field (small aircraft only); and
  - (ix) glassy/rough water (seaplanes only);
- (9) after landing —
- (i) parking;
  - (ii) emergency evacuation; and
  - (iii) docking, mooring, and ramping (seaplanes only);
- (10) other flight procedures during any airborne phase—
- (i) holding;
  - (ii) ice accumulation on airframe, if applicable;
  - (iii) air hazard avoidance; and
  - (iv) windshear/microburst.
- (11) normal, abnormal and alternate systems procedures during any phase—
- (i) pneumatic/pressurization;
  - (ii) air conditioning;
  - (iii) fuel and oil;
  - (iv) electrical;
  - (v) hydraulic;
  - (vi) flight controls;
  - (vii) anti-icing and de-icing systems;
  - (viii) flight management guidance systems and/or automatic or other approach and landing aids;
  - (ix) stall warning devices, stall avoidance devices and stability augmentation systems;
  - (x) airborne weather radar;
  - (xi) flight instrument system malfunction;
  - (xii) communications equipment;
  - (xiii) navigation systems;
  - (xiv) TCAS alerts;
  - (xv) auto-pilot;
  - (xvi) approach and landing aids; and
  - (xvii) flight instrument system malfunction; and
- (12) emergency systems procedures during any phase —
- (i) aircraft fires;
  - (ii) smoke control;
  - (iii) powerplant malfunctions;
  - (iv) fuel jettison;
  - (v) electrical, hydraulic, pneumatic systems;
  - (vi) flight control system malfunction; and
  - (vii) landing gear and flap system malfunction.
- (g) Each AOC holder shall ensure that flight engineer recurrent flight training includes at least the appropriate flight training from paragraph (f) of this Appendix.
- (h) Each AOC holder shall ensure that flight navigator recurrent training includes enough training and an in-flight check to ensure competency with respect to operating procedures and navigation equipment to be used and familiarity with essential navigation information pertaining to the AOC holder's routes that require a flight navigator.

- (i) Recurrent ground and flight training curricula may be accomplished concurrently intermixed, but completion of each of these curricula shall be recorded separately.

**APPENDIX 2 TO 14.180: RECURRENT GROUND AND FLIGHT TRAINING: FLIGHT CREW**

An AOC holder shall provide the following minimum recurrent ground and flight training instructional hours to flight crewmembers as applicable to the aircraft category –

	Ground Training (Hours)			Flight Training (PF Hours)				
	Basic	Pressurized	Turbine	Simulator and Aircraft			Simulator Only Level D	Aircraft Only
				Level A1	Level B/C	Aircraft		
<b>Single-Engine</b>	2.5		Add 1.0	2.0	2.0	1.0**		1.5
<b>Single-Engine Helicopters</b>	6.5		Add 1.0					2.0
<b>Multi-Engine 9 or Less*</b>	3.5	Add 1.0	Prop add 4.0 Jet add 1.0	2.0	2.0	1.0**	2.0	2.0
<b>Multi-Engine 10 to 19*</b>	6.5	Add 1.0	Prop add 7.5 Jet add 2.0	4.0	4.0	1.0**	4.0	3.0
<b>Multi-Engine 20+*</b>	7.5	Add 2.0	Prop and Jet add 7.5	4.0	4.0	2.0**	4.0	4.0***
<b>ME Helicopters</b>	7.5		Add 5.0	4.0	4.0	2.0 **	4.0	4.0

**Note:**

\* Denotes the number of passenger seats for which the aircraft was certified.

\*\* An OpSpec may be issued to give relief from the requirement to conduct training on the aircraft (applicable only if training completed on Level B or higher simulator).

\*\*\* Turboprop and jet aircraft-only training to be approved in exceptional instances only.

**APPENDIX 1 TO 14.185: RECURRENT EMERGENCY TRAINING: CABIN ATTENDANTS**

- (a) Each AOC holder shall establish and have approved by the Authority a recurrent training programme for all Cabin Attendants.
- (b) Each Cabin Attendant shall undergo recurrent training in evacuation and other appropriate normal and emergency procedures and drills relevant to their assigned positions and the type(s) and/or variant(s) of aircraft on which they operate.
- (c) Each AOC holder shall have all recurrent training conducted by suitably qualified personnel.
- (d) Each AOC holder shall ensure that, every 12 months, each Cabin Attendant receive recurrent training in at least the following –
  - (1) emergency equipment —
    - (i) emergency communication and notification systems;
    - (ii) aircraft exits;
    - (iii) exits with slides or sliderafts (emergency operation);
    - (iv) slides and sliderafts in a ditching;
    - (v) exits without slides (emergency operation);
    - (vi) window exits (emergency operation);
    - (vii) exits with tailcones (emergency operation);
    - (viii) cockpit exits (emergency operation);
    - (ix) ground evacuation and ditching equipment;
    - (x) first aid equipment;
    - (xi) portable oxygen systems (oxygen bottles, chemical oxygen generators, protective breathing equipment (PBE));
    - (xii) firefighting equipment;
    - (xiii) emergency lighting systems; and

- (xiv) additional emergency equipment;
- (2) emergency procedures—
  - (i) general types of emergencies specific to aircraft;
  - (ii) emergency communication signals and procedures;
  - (iii) rapid decompression;
  - (iv) insidious decompression and cracked window and pressure seal leaks;
  - (v) fires;
  - (vi) ditching;
  - (vii) ground evacuation;
  - (viii) unwarranted evacuation (i.e., passenger initiated);
  - (ix) illness or injury;
  - (x) abnormal situations involving passengers or crewmembers;
  - (xi) turbulence; and
  - (xii) other unusual situations;
- (3) emergency drills –
  - (i) every 12 months —
    - (A) location and use of all emergency and safety equipment carried on the aircraft;
    - (B) the location and use of all types of exits;
    - (C) actual donning of a lifejacket where fitted;
    - (D) actual donning of protective breathing equipment;
    - (E) actual handling of fire extinguishers;
    - (F) operation of all types of exits;
    - (G) demonstration of the method used to operate a slide, where fitted;
    - (H) fire-fighting using equipment representative of that carried in the aircraft on an actual or simulated fire;

*(Note: With halon extinguishers, an alternative method acceptable to the Authority may be used.)*

    - (I) effects of smoke in an enclosed area and actual use of all relevant equipment in a simulated smoke-filled environment;
    - (J) actual handling of pyrotechnics, real or simulated, where fitted;
    - (K) demonstration in the use of the life-raft(s), where fitted;
    - (L) an emergency evacuation drill;
    - (M) a ditching drill, if applicable; and
    - (N) a rapid decompression drill, if applicable;
- (4) Crew Resource Management —
  - (i) decision making skills;
  - (ii) briefings and developing open communication;
  - (iii) inquiry, advocacy, and assertion training; and
  - (iv) workload management;
- (5) dangerous goods —
  - (i) recognition of and transportation of dangerous goods;
  - (ii) proper packaging, marking and documentation; and
  - (iii) instructions regarding compatibility, loading, storage and handling characteristics; and
- (6) security —
  - (i) hijacking;
  - (ii) disruptive passengers; and
  - (iii) the elements referred to in Appendix 1 to 14.075.

- (e) An AOC holder may administer each of the recurrent training curricula concurrently or intermixed, but shall record completion of each of these curricula separately.

**APPENDIX 1 TO 14.190: RECURRENT TRAINING - FLIGHT DISPATCHER**

- (a) Each AOC holder shall establish and maintain a recurrent training programme, approved by the Authority and established in the AOC holder's Operations Manual, to be completed annually by each Flight Dispatcher.
- (b) Each Flight Dispatcher shall undergo recurrent training relevant to the type(s) and/or variant(s) of aircraft and operations conducted by the AOC holder.
- (c) Each AOC holder shall conduct all recurrent training by suitably qualified personnel.
- (d) An AOC holder shall ensure that, every 12 months, each Flight Dispatcher receive recurrent training in at least the following –
  - (1) aircraft-specific flight preparation;
  - (2) emergency assistance to flight crews;
  - (3) crew resource management; and
  - (4) dangerous goods.
- (e) An AOC holder may administer each of the recurrent ground and flight training curricula concurrently or intermixed, but shall record completion of each of these curricula separately.

**APPENDIX 1 TO 14.194: AIRCRAFT DIFFERENCES – FLIGHT DISPATCHER**

Each AOC holder shall provide aircraft differences training for Flight Dispatchers when the operator has aircraft variances within the same or similar type of aircraft, which includes at least the following –

- (1) operations procedures—
  - (i) operations under adverse weather phenomena conditions, including clear air turbulence, windshear and thunderstorms;
  - (ii) weight and balance computations and load control procedures;
  - (iii) aircraft performance computations, to include takeoff weight limitations based on departure runway, arrival runway and enroute limitations, and also engine-out limitations;
  - (iv) flight planning procedures, to include route selection, flight time and fuel requirements analysis;
  - (v) dispatch release preparation;
  - (vi) crew briefings;
  - (vii) flight monitoring procedures;
  - (viii) flight crew response to various emergency situations, including the assistance that the Flight Dispatcher can provide in each situation;
  - (ix) MEL and CDL procedures;
  - (x) manual performance of any required procedures in case of the loss of automated capabilities;
  - (xi) training in appropriate geographic areas;
  - (xii) ATC and instrument procedures, to include ground hold and central flow control procedures; and
  - (xiii) radio/telephone procedures; and
- (2) emergency procedures—
  - (i) actions taken to aid the flight crew; and
  - (ii) AOC holder and Authority notification.

**APPENDIX 1 TO 14.195: COMPANY CHECK PILOT QUALIFICATIONS AND TRAINING**

- (a) No person may use a person, nor may any person serve as a CCP (aircraft) or CCP (simulator) unless that person has met the requirements specified in the *Company Check Pilot Manual* and has been approved by the Authority.

- (b) Each AOC holder shall ensure that the CCP has received the initial ground training for a Flight Instructor as specified in paragraph (c) of Appendix 1 to 14.200.
- (c) Transition ground training for all CCPs shall include the approved methods, procedures and limitations for performing the required normal, abnormal and emergency procedures applicable to the aircraft to which the company check pilot is in transition.
- (d) Each AOC holder shall ensure that the initial and transition flight training for CCP (aircraft) includes –
  - (1) training and practice in conducting flight evaluations (from the left and right pilot seats for pilot check airmen) in the required normal, abnormal and emergency procedures to ensure competence to conduct the flight checks;
  - (2) the potential results of improper, untimely or non-execution of safety measures during an evaluation; and
  - (3) the safety measures (to be taken from either pilot seat for CCP for emergency situations that are likely to develop during an evaluation.
- (e) Each AOC holder shall ensure that the initial and transition flight training for CCP (simulator) includes –
  - (1) training and practice in conducting flight checks in the required normal, abnormal and emergency procedures to ensure competence to conduct the evaluations/checks required by this Schedule (this training and practice shall be accomplished in a flight simulator or in a flight training device); and
  - (2) training in the operation of flight simulators or flight training devices, or both, to ensure competence to conduct the evaluations required by this Schedule.
- (f) An AOC holder may accomplish flight training for CCP in full or in part in an aircraft, in a flight simulator or in a flight training device, as appropriate.

**APPENDIX 1 TO 14.200: FLIGHT INSTRUCTOR TRAINING**

- (a) No person may use a person, nor may any person serve as a flight instructor in a training programme unless –
  - (1) that person has satisfactorily completed the company's initial or transition flight instructor training or has a Flight Instructor rating; and
  - (2) within the preceding 24 calendar months, that person satisfactorily conducts instruction under the observation of an inspector from the Authority or an AOC holder's CCP.
- (b) An AOC holder may accomplish the observation check for an instructor pilot or instructor flight engineer, in part or in full, in an aircraft, a flight simulator or a flight training device.
- (c) Each AOC holder shall ensure that initial ground training for flight instructors includes the following—
  - (1) flight instructor duties, functions and responsibilities;
  - (2) applicable Schedules and the AOC holder's policies and procedures;
  - (3) appropriate methods, procedures and techniques for conducting the required checks;
  - (4) proper evaluation of student performance including the detection of –
    - (i) improper and insufficient training, and
    - (ii) personal characteristics of an applicant that could adversely affect safety;
  - (5) appropriate corrective action in the case of unsatisfactory checks;
  - (6) approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency procedures in the aircraft;
  - (7) except for holders of a Flight Instructor rating –
    - (i) the fundamental principles of the teaching-learning process;
    - (ii) teaching methods and procedures; and
    - (iii) the instructor-student relationship.
- (d) Each AOC holder shall ensure that the transition ground training for flight instructors includes the approved methods, procedures and limitations for performing the required normal, abnormal and emergency procedures applicable to the aircraft to which the flight instructor is in transition.

- (e) Each AOC holder shall ensure that the initial and transition flight training for instructor pilots (aircraft) includes the following –
  - (1) the safety measures for emergency situations that are likely to develop during instruction;
  - (2) the potential results of improper, untimely or non-execution of safety measures during instruction;
  - (3) for instructor pilot (aircraft) –
    - (i) inflight training and practice in conducting flight instruction from the left and right pilot seats in the required normal, abnormal and emergency procedures to ensure competence as an instructor; and
    - (ii) the safety measures to be taken from either pilot seat for emergency situations that are likely to develop during instruction; and
- (f) An AOC holder may accomplish the flight training requirements for instructor pilots in full or in part in flight, in a flight simulator or in a flight training device, as appropriate.
- (g) An AOC holder shall ensure that the initial and transition flight training for flight instructors (simulator) includes the following –
  - (1) training and practice in the required normal, abnormal and emergency procedures to ensure competence to conduct the flight instruction required by this Subpart. This training and practice shall be accomplished in full or in part in a flight simulator or in a flight training device; and
  - (2) training in the operation of flight simulators or flight training devices, or both, to ensure competence to conduct the flight instruction required by this Schedule.