Transports Canada Transport Canada

TP 4711-2E
(12/2023)

# TP 4711

# Air Operator Certification Manual

**Volume 1 – General Matters**

**Volume 2 – Commercial Air Operations**

**Volume 3 – Operations Specifications**

TC-1006733

Canada

Transports Canada Transport Canada

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Canada

# TP4711 VOLUME 2 – COMMERCIAL AIR OPERATIONS

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## 1.1 Volume 2 – Commercial Air Operator Certificate

### 1.1.1 Purpose

(1) The purpose of this volume of the TP 4711 manual series is to provide a national standard, consistent with regulatory requirements for issuing, amending, suspending or cancelling a domestic commercial air operator certificate (AOC), including all its associated permissions.

(2) This publicly available volume is applicable to all TCCA employees, operators, training providers, operator employees, and to individuals or organizations exercising privileges granted to them under an External Ministerial Delegation of Authority.

(3) In a commercial air service, the relationship between the operator and the persons carried is generally one of contract, and therefore an impersonal one. There must be some guarantee not only that all operator personnel will be competent and the aircraft airworthy, but also that the operator's equipment will be suitable for the proposed service.

(a) Civil Aviation Safety CASIs (CASI), through review and approval of submitted documentation, in conjunction with verification inspections, will make recommendations on the issuance of an AOC. These recommendations must be based on a determination as to whether or not the applicant/operator meets the regulatory requirements and standards set forth in the CARs relative to the type of service proposed.

(b) The operator must demonstrate the ability to operate the service safely, properly and in accordance with the prescribed regulating standards and procedures of the Canadian Aviation Regulations (CARs).

(4) The public's protection is safeguarded by the Aeronautics Act, the CARs, and the Commercial Air Service Standards (CASS).

(a) The statutory requirements set out in these documents are the main instruments by which aircraft operations are conducted safely, with the operator certificates and operations specifications being the tangible documents issued to the operator certifying that the operator is qualified to conduct an air transport or aerial work service.

(5) It is a CASI's duty to be familiar with all statutory requirements and to check, during the course of his/her inspections that they are complied with. No deviation from essential air safety regulations and standards can be permitted.

(a) Where an operator proposes an alternate means of conforming with a regulation or standard, it will be assessed for acceptability against the following criteria:

i. Does it provide an acceptable level of safety?

ii. Is it less or more restrictive than the "normal" means of compliance?

iii. Does it address the same intent and issues as the "normal" means of compliance?

iv. Does it utilize the most advanced or proven information available?

The above list may not be appropriate in some circumstances. For further guidance, please consult AARTF – Commercial Flight Standards.

(b) Under certain circumstances, deviations from prescribed standards and procedures may be authorized through operations specifications/authorizations. These types of authorities may be directly associated with the AOC (e.g.; Operations Specifications), or may be issued separately (e.g.; Authorizations, Exemptions).

### 1.1.2 Application

(1) This volume applies to:

(a) all applicants requesting a new domestic commercial AOC; and

(b) all certified domestic commercial operators (holding a certificate issued pursuant to Subparts 702, 703, 704 and/or 705 of the CARs), requesting:

i. a change to their existing certificate; or

ii. a new Subpart or category to be added to their certificate.

Note: An operator operating a flight with only company personnel on board may operate in accordance with Subpart 604. However, that operator must hold a Subpart 604 Private Operator Registration Document (PORD).

(2) The instructions and guidance in this volume are to be applied in conjunction with those contained in the other volumes of the TP4711 manual series and other current guidance documents.

(3) Considering the broad scope of operations covered by this manual and the many variables involved, it is not possible to provide detailed procedures and guidance for all requirements.

(a) Sound judgement must be applied in the use of this manual.

(b) TCCA inspectors (CASIs) should have a thorough knowledge of the content of this manual and adhere to the policies, procedures and guidelines contained herein.

(c) When a situation is encountered that goes beyond the scope of this manual series, and further guidance is desired, please contact AARTF – Commercial Flight Standards.

### 1.1.3 Structure of this Volume

(1) Chapter 1 – Introduction

- Provides an overview of this volume.
- Describes the typographic conventions used.
- Explains how to interpret the guidance provided in this volume.

(2) Chapter 2 – Commercial AOC Application

- Gives an overview of the domestic AOC application process.
- Lists the types of applications that can be submitted.
- Describes the forms and tools that are to accompany an application package.
- Reviews the general application process, and explains how the forms and tools fit into this process.

(3) Chapter 3 – Information on Core Processes

- Supplies background information on a number of core subjects related to operator certification.
- Covers subjects directly related to the application package forms and documents.

(4) Chapter 4 – Manuals & Documents – Contents & Review

- Deals with topics related to preparation of a Company Operations Manual (COM), Aircraft Operating Manual (AOM), Standard Operating Procedures manual (SOP), Flight Attendant Manual (FAM), and Minimum Equipment List document (MEL).

Note: Although training programs are part of the COM requirement, due to the fact that training programs are significantly detailed, and also that they can follow a slightly different process for review and approval, the training programs have been placed in chapter 6.

- Places subjects in an order that matches how they are listed in the applicable CAR Standard related to that manual/document.
- Provides references for other programs and documents (e.g.; Ground Icing Program, letters from local airport authorities, aircraft registrations).

(5) Chapter 5 – Training Programs – Content & Review

- Covers guidance on the preparation and review of training programs.
- Includes an overview of the training program approval process, to be used as:
  i. part of an initial application; or
  ii. the process to follow when reviewing an operator's stand-alone submission for amending their training program (i.e.; when they already possess an approved training program and an AOC).
- Presents subjects in an order that matches how they are listed in the applicable CAR training standard.

(6) Chapter 6 - Inspections

- Covers guidance on the requirements for, and conduct of, pre-certification inspections.

(7) Chapter 7 - Demonstrations

- Provides details on topics related to demonstrations that an applicant/operator must conduct, and that inspectors must evaluate for effectiveness at the pre-certification stage.

(8) Chapter 8 – Aircraft Maintenance Requirements

- Supplies guidance on matters related to maintenance requirements associated with a domestic AOC application.

(9) Chapter 9 – Administrative Functions

- Summarizes information related to administrative functions that follow the successful application for a domestic AOC.

(10) Chapter 10 – Other Applicable Legislation

- Provides a summary of other applicable legislation related to the AOC application process.
- Includes procedural details on how an applicant/operator can satisfy the requirements within these other legislative documents.

(11) Appendices

- Includes a representative sample of the format of a domestic AOC, along with a brief description of all possible fields where the AOC can contain information.
- Provides supplementary material for both the applicant/operator and TCCA staff members.

## 1.1.4 Typographic Conventions Used

### 1.1.4.1 Reference Box

(1) Reference boxes regularly appear throughout the volume.

(2) The reference box serves as a summary of:

(a) whether the subject is applicable to the reader (based on CAR Subpart);

(b) what regulatory references are applicable to the subject; and

(c) guidance documents that already exist on the subject.

(3) **Thoroughly review the reference box and associated reference materials listed within it before proceeding on to the guidance provided below the reference box.**

(a) This volume is designed to provide assistance to both the applicant/operator and the CASI that goes beyond what is provided in current regulations, standards and published guidance documents.

(b) This volume will not restate or contradict any regulatory reference or published guidance material.

#### 1.1.4.1.1 How to Interpret the Reference Box:

Figure 1 - EXAMPLE REFERENCE BOX

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | 702.22(3)(a) | | N/A | N/A |
| **CASS:** | 722.22 | | N/A | N/A |
| **DOC(s):** | AC 702-191 | | | |

(1) Subpart column check:

(a) If there is a CAR and/or a CASS listed for a Subpart, then the subject of this section must be covered in the applicable manual/document.

i. Applicant/operators must describe how it is being met.

ii. CASIs must verify it has been met.

(b) If there is no CAR and/or CASS listed for a Subpart, and the box is left blank, then the subject of this section would be helpful to review.

i. Applicant/operators may find it beneficial to cover this subject in their procedures, but they are not required to do so.

1. This should be considered as an example of adopting “best practices”.

ii. CASIs going over a document and seeing this subject covered can review it for acceptability, but are not in a position to approve or deny it (i.e.; it is not a regulatory requirement for this Subpart).

1. If what is described in the applicant/operators submission on this subject is not acceptable, then the inspector is required to inform the applicant/operator accordingly (i.e.; it will need to be revised, or removed from the document).

(c) CAR and/or CASS Boxes that are greyed out with "N/A" in them indicate that this subject is not applicable for that Subpart operation.

i. This subject should not be addressed in an applicant/operator's submissions/procedures (i.e.; skip this section).

ii. Inspectors should not see this subject addressed in an applicant/operator's submissions.

1. If it is, it must be removed by the applicant/operator.

(2) CASS reference location:

(a) A letter before a CASS reference denotes that the reference is specific to a particular type of operation, as follows:

A – Aeroplanes

AV – Day VFR Aeroplanes

AI – IFR and Night VFR Aeroplanes

H – Helicopters

HV – VFR Helicopters

HI – IFR Helicopters

Note: As mentioned previously, it may be helpful to consider guidance provided on a subject even if it is not specifically required for your operation (e.g.; even though a CASS may be indicated as "AI", there may be helpful information in that section for Aeroplane Day VFR operations).

(3) Existing guidance documents:

(a) The "**DOC(s):**" box lists any current reference documents that the reader should review.

i. These documents provide material/guidance/interpretation that goes beyond the CAR or CASS they are related to.

### 1.1.4.2 Applicant/Operator Submissions Box

(1) TEXT in the smaller box with striped edging appearing below the reference box will list forms, manuals or documents the applicant/operator must include with their submissions. E.g.:

**Applicant/Operator to submit:**
**COM**
**CR COM 70X**

Note: Abbreviations used to list forms and/or documents can be found in Appendix B of this volume.

- Where an "X" is included in the document number, the applicant/operator should use the appropriate Subpart form.
- Where an "A" is included in the document number, the document is applicable to all Subparts (i.e.; there is only one document for all Subparts)
- The "E" denotes this is the English version of the form.

### 1.1.4.3 Inspectors Tools List

(1) Inverse TEXT under the smaller box with striped edging shows that there are tools that the CASI must complete that will assist him/her in the review/inspection/assessment. E.g.:

**TCCA to complete:**
**PA BASE 70A**

Note: Abbreviations used to list forms and/or documents can be found in Appendix B of this volume.

- Where an “X” is included in the document number, the CASI should use the appropriate Subpart form.
- Where an “A” is included in the document number, the document is applicable to all Subparts (i.e.; there is only one document for all Subparts)
- The “E” denotes this is the English version of the form.

## 1.1.5 Revisions

(1) This document, along with all volumes in the TP 4711 manual series, are intended to be revised as required, based on user feedback. The goal is to provide a mechanism for continual improvement of not only the guidance contained within the series, but also of the tools provided that are meant to simplify/improve/speed up the application process.

(a) Transport Canada welcomes feedback regarding the processes, procedures and tools contained in this volume.

Please send feedback to:

TP4711@tc.gc.ca

(2) As this volume (and the whole manual series) will be revised regularly, please make sure to be using the most current version.

(a) The latest revision can be found on the TCCA website, at:

https://tc.canada.ca/en/aviation/publications/air-operator-certification-manual-tp-4711

(3) The expected revision cycle for the TP 4711 manual series will be each successive 365 day period.

### 1.1.5.1 Changes found in this Revision

(1) Changes to the content in this volume are accompanied by a bold vertical line found in the right-hand margin of the affected pages.

(2) The following sections contain material that has changed:

(a) Table of Contents

(b) 1.1.5 Revisions

(c) 1.2.3 Definitions

(d) 2.2.1 Addition of reference to Transportation of Dangerous Goods Form 16-0090

(e) 2.2.2.4.2.1 Addition of Passenger Safety Features Card under addition of new aircraft

(f) 3.2.2 Removed statement regarding expected hours required for Chief Pilot

(g) 4.2.7.8.4.1 Addition of reference to gender "x" to Air Operator Standard Weights (Survey)

(h) 4.2.15.6 Amended wording to reflect regulatory requirements

(i) 4.2.26 Addition of reference to AC 700-047

(j) 4.2.27 Removed reference to AC 700-047

(k) 4.2.29.2 Added reference to AC 700-002 and additional content to First Aid Oxygen

(l) Chapter 5 Added option to communicate via e-mail in addition to letters

(m) 6.4.3.1 Amended Flight Crew Records table with new regulatory references

(n) 6.4.3.2 Amended Flight Crew Personal Records table with new regulatory references

(o) Chapter 9 Added option to communicate via e-mail in addition to letters

(p) 10.1.3 Amended guidance for submission and review of Applicant/Operator documentation related to security

(q) 10.2.1 Added reference to submitting completed TDGD Form 16-0090

(r) Multiple sections - Replaced wording of special authorization/specific approval with SA

## 1.2 References and Requirements

### 1.2.1 Reference Documents

(1) AC 107-001 - *Guidance on Safety Management Systems Development*

(2) AC 107-002 - *Safety Management System Development Guide for Smaller Aviation Organizations*

(3) AC 302-019 - *Methodology for the Identification of the Aircraft Group Number*

(4) AC 307-001 - *Canadian Aviation Regulation 307 – Aerodromes – Consultations*

(5) AC 500-011 - *Restricted Category Certification of Small Aeroplanes and Helicopters for Special Purpose Operations*

(6) AC 525-014 - *Certification of Transport Category Aeroplanes On Narrow Runways*

(7) AC 602-005 - *Publication Enhancements to Airport Information in the Aeronautical Publications*

(8) AC 700-001 - *Dangerous Goods Special Authorization*

(9) AC 700-002 - *Carriage of Medical Oxygen Cylinders or Portable Oxygen Concentrators for Passenger Use on Board Aircraft*

(10) AC 700-004 - *Airborne Collision Avoidance System Advisory Material*

(11) AC 700-005 - *Use of Transmitting and Non-Transmitting Portable Electronic Devices*

(12) AC 700-006 - *Required Navigation Performance 4 (RNP 4) and Required Navigation Performance 10 (RNP 10) Airspace*

(13) AC 700-010 - *Unruly Passengers and Incidents of Interference with a Crew Member*

(14) AC 700-011 - *Operations on Runways with Unpaved Surfaces*

(15) AC 700-012 - *Passenger Safety Briefings*

(16) AC 700-013 - *Procedures and Training for the Preservation of Aircraft Recorded Data*

(17) AC 700-016 - *Compliance with Regulations and Standards for Engine-Inoperative Obstacle Avoidance*

(18) AC 700-017 - *Flight Crew Member Qualifications – Sections 702.65 and 703.88 of the CARs – Grouping Method for Recurrent PPC Purposes of Aeroplanes with a MCTOW of 7,000 Pounds and Less, Operating Pursuant to Subparts 702 and 703 of the CARs*

(19) AC 700-018 - *Flight Crew Member Qualifications – Sections 702.65 and 703.88 of the CARs – List of Approved and Cancelled Groupings for Recurrent PPC Purposes of Aeroplanes Operating Pursuant to Subparts 702 and 703 of the CARs*

(20) AC 700-020 - *Electronic Flight Bags*

(21) AC 700-022 - *Operator Weight and Balance Control Procedures – Subparts 704 And 705 Of The Canadian Aviation Regulations*

(22) AC 700-028 - *Vertical Path Control on Non-Precision Approaches*

(23) AC 700-030 - *Electronic Holdover Time (eHOT) Applications*

(24) AC 700-031 - *Prevention and Recovery from Aeroplane Stalls*

(25) AC 700-032 - *Protective Breathing Equipment*

(26) AC 700-039 - *Requirements to Obtain Reduced Vertical Separation Minimum (RVSM) Special Authorization*

(27) AC 700-042 - *Crew Resources Management (CRM)*

(28) AC 700-045 - *Exemption and Safety Case Process for Fatigue Risk Management Systems*

(29) AC 700-046 - *Fatigue Risk Management System Requirements*

(30) AC 700-047 - *Flight Crew Member Fatigue Management – Prescriptive Regulations*

(31) AC 700-049 - *Missed Approaches with Published Climb Gradients: Special Authorization and Guidance*

(32) AC 700-056 - *Pilot Egress Training (Seaplane)*

(33) AC 700-061 – *Degree-Specific Holdover Times*

(34) AC 703-004 - *Use of Segmented Passenger Weights by Commercial Operators under Subpart 703 of the Canadian Aviation Regulations*

(35) AC 704-002 - *Guidance Regarding Amendment to Subpart 704 of the CARs, Division IV - Aircraft Performance Operating Limitations*

(36) AC 705-002 - *Approval Process Of Initial Flight Attendant Training Programs For Use By Multiple Operators*

(37) AC 705-007 - *Bounced Landing Training for 705 Operators*

(38) AC 705-009 - *Demonstration of Emergency Evacuation and Ditching Procedures – Airline Operations*

(39) AC 705-011 - *Process for the Approval of a Flight Attendant Manager*

(40) *Aeronautics Act* (R.S., c. A-2)

(41) *Airworthiness Manual Chapter 551*

(42) *Canadian Aviation Regulations* (CARs) and associated Standards (CASS)

(43) *Canadian Aviation Security Regulations* (CASRs 2012)

(44) CAP GEN - *NAV CANADA, Canada Air Pilot – General Pages*

(45) CBAAC No. 0102R - *Stowage of Disposable In-flight Service Waste in Aircraft Lavatories*

(46) HOLDOVER TIME (HOT) GUIDELINES – https://www.tc.gc.ca/en/services/aviation/general-operating-flight-rules/de-icing-aircraft/hold-over-guidelines.html

(47) ICAO Doc 9137 - *Airport Services Manual*

(48) ICAO Doc 9284 - *Technical Instructions for the Safe Transport of Dangerous Goods by Air*

(49) NFPA 407 - *Standard for Aircraft Fuel Servicing*

(50) Policy Letter 173 - *Flight Crew Member Qualification Credits for Transition Programs and Mixed Fleet Flying Programs*

(51) SI 700-006 - *Protective Breathing Equipment*

(52) SI 725-001 - *Flight Dispatcher Generic Examinations*

(53) SI SUR-001 - *Surveillance Procedures*

(54) TP 312 - *Aerodrome Standards and Recommended Practices – Land Aerodromes*

(55) TP 4711 - *Air Operator Certification Manual*, Volume 1 & 3

(56) TP 6327 - *Safety Criteria for Approval of Extended Range Twin-Engine Operations (ETOPS)*

(57) TP 6533 – *Approved Check Pilot Manual*

(58) TP 9155 - *Master Minimum Equipment List / Minimum Equipment List Policy and Procedures Manual*

(59) TP 9685 - *Aeroplane and Rotorcraft Simulator Manual*

(60) TP 11524 – *Foreign Air Operator Certification Manual*

(61) TP 12295 - *Flight Attendant Manual Standard*

(62) TP 12296 - *Flight Attendant Training Standard*

(63) TP 12513 - *Study and Reference Guide – Flight Dispatchers*

(64) TP 13094 - *Maintenance Schedule Approval Policy and Procedures Manual*

(65) TP 14052 - *Guidelines for Aircraft Ground Icing Operations*

(66) TP 14114 - *Approved Check Dispatcher Manual*

(67) TP 14371 - *Transport Canada Aeronautical Information Manual (TC AIM)*

(68) TP 14408 - *Transport Canada Civil Aviation Guidelines: Maintenance Control Manuals | MCM Guidelines*

(69) TP 14427 - *Air Operator Maintenance Control Manual (MCM)*

(70) TP 14572 - *Fatigue Risk Management System for the Canadian Aviation Industry – An Introduction to Managing Fatigue*

(71) TP 14573 - *Fatigue Risk Management System for the Canadian Aviation Industry – Fatigue Management Strategies for Employees*

(72) TP 14574 - *Fatigue Risk Management System for the Canadian Aviation Industry – Employee Training Assessment*

(73) TP 14575 - *Fatigue Risk Management System for the Canadian Aviation Industry – Developing and Implementing a Fatigue Risk Management System*

(74) TP 14576 - *Fatigue Risk Management System for the Canadian Aviation Industry – Policies and Procedures Development Guidelines*

(75) TP 14577 - *Fatigue Risk Management System for the Canadian Aviation Industry – Introduction to Fatigue Audit Tools*

(76) TP 14578 - *Fatigue Risk Management System for the Canadian Aviation Industry – Trainer's Handbook*

(77) *Transportation of Dangerous Goods Regulations - Part 2*

### 1.2.2 Cancelled Documents

(1) By default, it is understood that the publication of a new edition of a document automatically renders any earlier editions of the same document null and void.

### 1.2.3 Definitions and Abbreviations

(1) Definitions for various terms can be found in the "Interpretation" sections of:

(a) CAR 101, at:

https://lois-laws.justice.gc.ca/eng/regulations/SOR-96-433/FullText.html#s-101.01

(b) CAR 700, at:

https://lois-laws.justice.gc.ca/eng/regulations/SOR-96-433/FullText.html#s-700.01

(2) Further, Transport Canada has published a glossary of terms, definitions and abbreviations (AC 100-001 – *Glossary for Pilots and Air Traffic Personnel*). Please consult that document for definitions of terms commonly used in this manual series and other TCCA documents.

(a) AC 100-001 can be found at:

https://tc.canada.ca/en/aviation/reference-centre/advisory-circulars/advisory-circular-ac-no-100-001

(3) For the purposes of this volume, to supplement those provided in the above sources, the following definitions are supplied:

(a) **Acceptance**: An implicit acknowledgement by TCCA to an applicant/operator of a matter submitted by, or on behalf of, that applicant/operator.

Acceptance by TCCA may be implied through the absence of the operator receiving any notification to the contrary, and ultimately, by the issuance of the Certificate for which the application was made.

Although the mechanism of Acceptance may differ from Approval, for all intents and purposes, Acceptance by TCCA carries the same meaning (rights/obligations/liabilities) as Approval.

(b) **Aerial Work**: Aerial work operations are conducted by aeroplanes or helicopters, under one of the following four categories (with sub-categories, as listed on legacy AOC's):

i. The carriage on board of persons other than flight crew members;

1. **Aerial Inspection and Surveillance**
2. **Aerial Mapping**
3. **Aerial Photography**
4. **Aerial Surveying**
5. **Forest Fire Management**
6. Flight Testing: Flight testing of avionic systems, navigation systems and other aircraft equipment.
7. **Parachute Jumping**
8. Wildlife Management: The capturing of animals, the collecting of samples from animals, and the placing of telemetry equipment on animals.

ii. The carriage of helicopter Class B, C or D external loads;

1. **Aerial Construction**

2. Aerial Harvesting: The harvesting of articles such as pinecones from tree tops.
3. External Load: The transportation of an external load.
4. **Heli-logging**
5. Wildlife Management: The slinging carriage of animals to trailers for relocation.

iii. The towing of objects; or

1. Airborne Support
2. **Aerial Advertising**
3. **Glider Towing**

iv. The dispersal of products.

1. **Aerial Advertising**
2. **Aerial Spraying**
3. **Fire Fighting**
4. **Forest Fire Management**
5. Wildlife Management: The dropping of bait.

Note: The transportation services for the retrieval of human organs for human transplants (previously listed as “Human Organs”) are no longer considered an Aerial Work activity.

Note: Some legacy Aerial Work types (indicated in bold print, above) are defined under the definition of Specialty Air Services (see item “hh” below), as were agreed upon by the CAA’s who were party to the CUSMA.

(c) **Air Carrier**: A CAR Part VII certificate holder that operates a commercial air service.

(d) **Air Operator**: The holder of an air operator certificate.

(e) **Air Operator Certificate**: A certificate issued under Part VII of the CARs that authorizes the holder of the certificate to operate a commercial air service.

(f) **Aircraft Maintenance Engineer**: A person who is a holder of an AME license that provides for the privilege of signing a maintenance release in respect of maintenance performed on an aircraft or component thereof in accordance with the requirements of CAR 571.

(g) **Approval**: A formal act by TCCA to approve an application or a proposed change submitted by, or on behalf of, an applicant/operator. The Approval attests to compliance by the applicant/operator with all applicable provisions.

(h) **Approved Maintenance Organization**: An organization that meets the requirements of CAR 573, providing maintenance services.

(i) **Built-up Area**: A group of structures that are erected or built by people, and their surroundings, especially those features that are necessary for the use and enjoyment of a structure, such as roads, driveways, yards and parking lots. (The determination of a built-up area shall be via checklist evaluation of the take-off and landing area. See Advisory Circular AC 307-001).

(j) **Certification Project Manager**: The CASI placed in charge of a Certification Team, tasked with completing a certification activity in response to an operator’s application.

(k) **Charter**: A non-scheduled, commercial air service that is operated for the purpose of transporting persons, personal belongings, baggage, goods or cargo in an aircraft between two points.

(l) **Conformance Report**: A form created to collect information on a manual, procedure or list submitted with an application; to be completed by the operator and TCCA separately.

(m) **Crew Resource Management**: The effective utilization of all available resources including crew members, aircraft systems, supporting facilities and persons to achieve safe and efficient operations. The objective of CRM is to enhance communication, interaction, human factors and management skills of the crew members concerned. Emphasis is also on the non-technical aspects of crew performance.

(n) **Domestic Service**: An air service between points in Canada, from and to the same point in Canada, or between Canada and a point outside Canada that is not in the territory of another country, as defined in section 55 of the *Canada Transportation Act*.

(o) **Flight Attendant**: means a crew member, other than a flight crew member, who has been assigned duties to be performed in the interest of passengers in a passenger-carrying aircraft.

(p) **International Service**: An air service between Canada and a point in the territory of another country, as defined in section 55 of the *Canada Transportation Act*.

(q) **Lease**: A contractual arrangement whereby a properly licensed operator gains commercial control of an entire aircraft without the transfer of ownership (i.e.; requirement of obtaining a new certificate of registration).

(r) **Legal Custody and Control**: The right to exclusive possession and use of the aircraft. This includes aircraft owned or leased by an operator.

(s) **Legal Entity**: A proprietorship, partnership, or corporation.

(t) **Line Station**: A type of maintenance base.

(u) **Maintenance Base**: A location where regular, scheduled maintenance is performed.

(v) **Maintenance Control Manual**: The manual established and maintained by an air operator and approved by a CASI-Airworthiness that describes how maintenance functions will be handled for the operator.

(w) **Non-Scheduled International Service**: An international service other than a scheduled international service, as defined in section 55 of the *Canada Transportation Act*.

(x) **Operations Personnel**: Includes any person whose duties and responsibilities involve elementary work, loading, unloading, dispatching, servicing, weight and balance, and passenger handling (involved with passenger boarding), and includes flight crew members, flight attendants, schedulers, flight dispatchers, de-icing crews, ramp personnel and anyone else whose position has an effect on the aircraft operation or the safety of the flight.

(y) **Operations Specifications**: The approvals, conditions and limitations associated with the operator certificate and subject to the conditions in the operations manual. These include the Mandatory Approvals, and the Special Authorizations/Specific Approvals (as detailed in Volume 3 – Operations Specifications, of this manual series).

(z) **Operator Standard Weight**: Approved standard weights determined by the operator through an approved survey and statistical computation in accordance with this guidance. They are applicable only to that operator and may be used in lieu of published standard weights in circumstances consistent with those under which the survey was conducted.

(aa) **Maintenance Manager**: For the purposes of brevity and clarity, in this volume the position of Maintenance Manager shall refer to all of the following post holder designations listed in the applicable CARs Subparts:

i. Maintenance Manager

ii. Person Responsible for Maintenance

iii. Person responsible for maintenance control system

(bb) **Process Aid**: Type of checklist and guidance on requirements to complete a certificate action reflecting regulatory references, forms, record of completion, etc.

(cc) **Published Standard Weight**: The weights published by TCCA as the standard weight of passengers, including carry-on baggage and/or checked baggage, for use by operators in weight and balance calculations, where actual weights or segmented weights are not available/used.

(dd) **Scheduled Air Service**: A publicly available air transport service that provides transportation for passengers between points and serves those points in accordance with a published schedule at a charge per seat.

(ee) **Scheduled International Service**: An international service, as defined in section 55 of the *Canada Transportation Act*, which is a scheduled service pursuant to:

i. an agreement or arrangement for the provision of that service to which Canada is a party, or

ii. a determination made under section 70 of the Canada Transportation Act.

(ff) **Scheduled Point**: Specific aerodrome where an operator arrives or departs with passengers and/or cargo, for remuneration according to a published timeline, or so regular or frequent as to constitute a recognizably systematic series.

(gg) **Special Authorization**: Specific type of operations specification. Also known as Specific Approval.

(hh) **Specialty Air Services**: For the purposes of defining specialty air services under the CUSMA, the following list of types of service is provided:

i. Aerial Advertising: The operation of an aircraft for the purpose of skywriting, banner towing, displaying airborne signs, dispensing leaflets, and making public address announcements.

ii. Aerial Construction: The operation of a helicopter for the purpose of conducting external load operations in support of construction, hoisting of utilities, power line construction, and erection of special purpose towers.

iii. Aerial Inspection and Surveillance: The operation of an aircraft for the purpose of conducting aerial observation and patrols for surface events and objects.

Note: This activity includes inspection and surveillance of animals.

iv. Aerial Mapping: The operation of an aircraft for the purpose of mapping by use of a camera, or other measuring and recording devices.

v. Aerial Photography: The operation of an aircraft for the purpose of taking photographs or recording information by use of a camera, or other measuring and recording device.

vi. Aerial Sightseeing: The operation of an aircraft for the purpose of providing recreation to passengers. This flight originates and terminates at the same airport or the same aerodrome.

Note: Aerial Sightseeing cannot be conducted under CAR Subpart 702. Operators wishing to conduct this activity under CUSMA must do so under a CAR Subpart 703, 704 or 705 AOC, or under a CAR Part IV Flight Training Unit Operator Certificate.

vii. Aerial Spraying: The operation of an aircraft for the dispersal of products.

Note: This does not include the dispensing of live insects.

viii. Aerial Surveying: The operation of an aircraft for the purpose of surveying by use of a camera, or other measuring and recording devices.

ix. Fire-fighting: The operation of an aircraft for the purpose of dispensing water, chemicals, and fire retardants intended for suppressing a fire.

Note: This includes the carrying of firefighters from base camp to the work zone.

x. Flight Training: Training provided by certified flight schools and flight training operators who follow an approved ground and flight syllabus that permits students to meet all certification requirements for obtaining an airman certificate or rating. Flight training also includes operational training provided by SAS operators.

Note: Operators wishing to conduct this activity under CUSMA must do so under a CAR Part IV Flight Training Unit Operator Certificate. See Chapter 10 and Volume 3 of TP 4711.

xi. Forest Fire Management: The operation of an aircraft for the purpose of fire detection and control, as well as for the purpose of dispensing any substance intended for forest fire suppression and prevention. This does include carrying fire fighters, fire bosses and/or managers from the base camp into the fire area, or to the actual fire site, as well as within the fire zone.

xii. Glider Towing: The towing of a glider by a powered aircraft equipped with a tow hitch.

xiii. Heli-logging: The operation of a helicopter for the purpose of transporting timber suspended from the fuselage of a helicopter.

xiv. Parachute Jumping: The operation of an aircraft for the purpose of allowing a person to descend from an aircraft in flight using a parachute during all or part of that descent.

(ii) **Specific Approval**: Specific type of operations specification. Also known as Special Authorization.

(jj) **Staff Instruction**: TCCA internal document, issued to provide guidance to staff on specific processes.

(kk) **Synthetic Training Device**: refers to full flight simulators and flight training devices.

(4) The following abbreviations are used in this volume:

(a) **AARTF**: TCCA, Commercial Flight Standards

(b) **AC**: Advisory Circular

(c) **ADO**: Associate Director, Operations

(d) **AME**: Aircraft Maintenance Engineer

(e) **AMO**: Approved Maintenance Organization

(f) **AOC**: Air Operator Certificate

(g) **AOHS**: Aviation Occupational Health and Safety

(h) **AOHSR**: Aviation Occupational Health and Safety Regulations
(i) **ATC**: Air Traffic Control
(j) **ATPL**: Airline Transport Pilot Licence
(k) **ATS**: Air Traffic Service
(l) **AVSEC**: Aviation Security Directorate
(m) **CAR**: Canadian Aviation Regulation
(n) **CASI**: Civil Aviation Safety Inspector
(o) **CASR**: Canadian Aviation Security Regulations
(p) **CASS**: Commercial Air Service Standard
(q) **CDL**: Configuration Deviation List
(r) **COM**: Company Operations Manual
(s) **CPM**: Certification Project Manager
(t) **CR**: Conformance Report
(u) **CRM**: Crew Resource Management
(v) **CRP**: Cruise Relief Pilot
(w) **CTA**: Canadian Transportation Agency
(x) **CUSMA**: Canada-United States-Mexico Agreement
(y) **FTA**: Foreign Trade Agreement
(z) **JA**: Job Aid
(aa) **LAA**: Local Airport Authority
(bb) **MCM**: Maintenance Control Manual
(cc) **MEDEVAC**: Air Ambulance
(dd) **NACIS**: National Aviation Company Information Management System
(ee) **PA**: Process Aid.
(ff) **PORD**: Private Operator Registration Document
(gg) **PRM**: Precision Runway Monitor
(hh) **QA**: Quality Assurance.
(ii) **RDIMS**: Records, Document and Information Management System.
(jj) **SA**: Special Authorization or Specific Approval.
(kk) **SI**: Staff Instruction.
(ll) **SOI**: Statement of Intent.
(mm) **TCC**: Transport Canada Centre.
(nn) **TCCA**: Transport Canada Civil Aviation.
(oo) **TDG**: Transportation of Dangerous Goods.
(pp) **TDGD**: Transportation of Dangerous Goods Directorate.
(qq) **TDGR**: Transportation of Dangerous Goods Regulations
(rr) **TI**: Technical Instruction.
(ss) **TP**: Technical Publication.
(tt) **TTL**: Technical Team Lead.

# Chapter 2 – Commercial AOC Application

## 2.1 General

### 2.1.1 Purpose

(1) This chapter contains an overview of the application process for a domestic commercial air service operation, as regulated under Subpart 702, 703, 704 and/or 705 of the CARs.

*(a)* For domestic operations of a Foreign Air Carriers, see TP 11524 – *Foreign Operator Certification and Inspection Manual.*

### 2.1.2 Application for a Commercial Air Operator Certificate (AOC)

#### 2.1.2.1 Application Requirements

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.07 | 703.07 | 704.07 | 705.07 |
| CASS: | 722.07 | 723.07 | 724.07 | 725.07 |
| DOC(s): | | | | |

(1) All applicants or operators are required to demonstrate to TCCA that they are adequately equipped for the proposed operation and that they have the ability to operate safely, properly and in accordance with prescribed standards and procedures.

(a) The certification process is meant to assess an applicant or operator against these regulatory requirements.

(2) The certification process is initiated by completing and submitting the appropriate application form:

(a) For Initial applications, this would be the Statement of Intent form (#26-0380).

(b) For an amendment application, the appropriate form should be chosen based on what type of change is being requested:

i. For name, contact information, or personnel changes, use the form # 26-0047.

ii. For aircraft addition, changes or removal, use form # 26-0046.

iii. For base/sub-base/schedule point additions, changes or removals, use form # 26-0045 and form #26-0048.

iv. For maintenance arrangement changes, use form # 26-0048.

Note: If an amendment request involves more than one of the above options, or includes multiple options, include more than one application form (as appropriate).

(3) Operator certification involves a comprehensive TCCA program of review, inspection and assessment, which can be expected to take significant time (at least 60 days) from the time of making a formal application.

(a) A formal application is considered to have been made when all required documentation has been submitted to TCCA, and is complete and accurate.

(4) Applicant/operators for an AOC under Subparts 703, 704 and/or 705 must also apply for a licence from the Canadian Transportation Agency (CTA).

(a) Further details can be found in Section 10.3 of this Volume.

Note: This requirement does not apply to Subpart 702 (Aerial Work) applications.

(5) Applicants/operators are responsible for determining their obligations under other applicable legislation, where those responsibilities relate to the operation of a domestic commercial air service.

(a) Reference material found in the following chapters of TP 4711 provides guidance on some, but not all, of these regulatory references:

i. Volume 1, Chapter 6

ii. This volume, Chapter 10

### 2.1.2.2 CAR Requirements

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | 702.07(2) | 703.07(2) | 704.07(2) | 705.07(2) |
| **CASS:** | | | | |
| **DOC(s):** | | | | |

(1) The following table summarizes what an applicant or operator has to have in place, per the CAR requirements:

| Item / Subpart: | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| Management organization capable of exercising operational control | √ | √ | √ | √ |
| Appropriate management personnel: | √ | √ | √ | √ |
| Operations manager | √ | √ | √ | √ |
| Chief pilot(s) | √ | √ | √ | √ |
| Maintenance manager /person responsible for maintenance /person responsible for maintenance control system | √ | √ | √ | √ |
| Flight attendant manager | | | | √ |
| Safety management system | | | | √ |
| Operational support services and equipment | √ | √ | √ | √ |
| Aircraft that are properly equipped | √ | √ | √ | √ |
| MEL for each aircraft type operated (as applicable) | | | √ | √ |
| Crew members that are qualified | √ | √ | √ | √ |

| | | | | |
|---|---|---|---|---|
| Operational control system | √ | √ | √ | √ |
| Training program | √ | √ | √ | √ |
| Legal custody and control of at least one aircraft of each category planned/operated | √ | √ | √ | √ |
| Company operations manual | √ | √ | √ | √ |
| Maintenance control system | √ | √ | √ | √ |
| Emergency response plan | | | | √ |

#### 2.1.2.3 CASS Required Forms and Documents

(1) The following provides a summary of the forms and documents commonly associated with Subpart 7 applications:

(a) Form 26-0380 – *COMMERCIAL AIR SERVICE STATEMENT OF INTENT*:

- The form should be used for:
  - All Initial Applications, or
  - All applications from an existing operator where the operator wishes to request privileges under a new Part and/or Subpart of the CARs (ie; not on their existing certificate).

(b) Form 26-0045 – *OPERATOR CERTIFICATE APPLICATION – AIRPORT – AERODROME*:

- The form should be used for:
  - All Initial Applications, to supply information on all requested locations the applicant wishes to use, or
  - All Amendment applications when an operator is requesting the addition, change or removal of a Base, Sub-base or Scheduled Point.

(c) Form 26-0046 – *OPERATOR CERTIFICATE APPLICATION – AIRCRAFT*:

- The form should be used for:
  - All Initial Applications, to supply information on specific aircraft the applicant wishes to operate, or
  - All amendment applications where:
    - the operator is requesting the addition or removal of an aircraft to/from their AOC, and/or
    - the operator is requesting a change to the associated operating conditions or SAs for an aircraft that is registered to them.

(d) Form 26-0047 – *OPERATOR CERTIFICATE APPLICATION – PERSONNEL*:

- The form should be used for:
  - All Initial Applications, to specify what their contact information is, and to confirm their appointed management personnel.

- All amendment applications where:
  - the operator is requesting a change to their contact information, or
  - the operator is appointing a new person to a management position.

(e) Form 26-0048 – *AIR OPERATOR CERTIFICATE APPLICATION – MAINTENANCE*:

- The form should be used for:
  - All Initial Applications.
  - All amendment applications, where:
    - the operator is requesting a change to their maintenance arrangements,
    - there was an absence of a maintenance arrangement, and/or
    - the operator is adding a base/sub-base/scheduled point, where the maintenance facilities/capabilities need to be confirmed for that point.

(f) Nomination of Company Check Pilot:

- Regional operations: This document is no longer required; the nomination process is handled through the ACP program.
  - Nominations are coordinated in conjunction with an applicant supplying a request for ACP status directly to TCCA, outside of the Operator certification process.
- National Operations: The nomination document continues to be part of this group's process
  - Applicants should contact National Operations for direction on how to provide this information.

(g) Form 26-0462 – *CIVIL AVIATION CONFIRMATION OF INSPECTION REQUEST/COSTS*:

- The form should be used for:
  - All Initial Applications, or
  - All Amendment applications when TCCA estimates that there will be associated costs incurred for processing the application.
- The form is initially filled out by the responsible TCCA Manager, and is then confirmed/accepted by the applicant/operator.

(h) Form 26-0622 – *AGREEMENT FOR RECOVERING THE INCREMENTAL COSTS OF PROVIDING SERVICES INSIDE/OUTSIDE CANADA (COST RECOVERY)*:

- The form should be used for:
  - All Initial Applications, or
  - All Amendment applications when TCCA estimates that there will be associated costs incurred for processing the application.
- The form should accompany form 26-0462, and must be signed by the applicant and the responsible TCCA Manager.

# 2.2 Types of AOC Applications

## 2.2.1 Initial Applications

(1) The following is a non-exhaustive list of forms, documents and manuals that should be provided by the applicant/operator (as applicable) and are evaluated by TCCA during the initial application process:

- Form 26-0380 – Statement of Intent
- Form 26-0047 – Contacts and Personnel
- Form 26-0046 – Aircraft
- Form 26-0045 – Bases, Sub-bases and Scheduled Points
- Form 26-0048 – Maintenance Arrangements
- Form 26-0055x – Maintenance Schedule
- Management personnel résumés providing qualifications, aviation experience and compliance histories
- Company Operations Manual (COM), and associated Conformance Report
- Aircraft flight manuals (AFM)
- Aircraft loading and handling manual or ground handling manual (considered part of the COM)
- Dangerous goods manual and training program (considered part of the COM)
- Form 16-0090 Application for the review of dangerous goods policies & procedures and training programs
- Training Program, and associated Conformance Report
- Maintenance Control Manual (MCM)
- Maintenance schedules
- Standard Operating Procedures (SOP), and associated Conformance Report(s)
- Aircraft operating manual (AOM), and associated Conformance Report(s)
- Minimum equipment list(s) (MEL), and associated Conformance Report(s)
- Configuration deviation list (CDL)
- Passenger safety features cards
- Safety Management System (SMS) manual section, including a description of the flight safety document system
- Emergency Response Plan

(2) The specific list of documents an applicant/operator has to supply will be reviewed and agreed upon between TCCA and the applicant/operator during the pre-application meeting.

## 2.2.2 Amendment Applications

### 2.2.2.1 Amendment Requirements:

(1) The following is a a list of types of amendment applications that can be expected, along with the anticipated forms, documents and manuals that will need to be submitted to support the process:

(a) Operators should anticipate that their application package will need to contain at least the following items bulleted under each amendment type.

(b) The specific list of documents an operator has to supply will be reviewed and agreed upon between TCCA and the operator during the pre-application meeting.

### 2.2.2.2 Change of ownership:

(1) Guidance on ownership changes can be found in Volume 1 of this manual series.

(2) Operator document submissions will have to include:

- Form 26-0380 – Statement of Intent
- Certificate of Incorporation
- Inclusion of notification to CTA
- Associated Fee

### 2.2.2.3 Changes to AOC Part I – GENERAL

#### 2.2.2.3.1 Change of name:

##### 2.2.2.3.1.1 Legal name change:

- Form 26-0047 – Contacts and Personnel
- Certificate of Incorporation
- Manuals, and associated Conformance Reports
- Aircraft Registrations
- Inclusion of notification to CTA
- Associated Fee

##### 2.2.2.3.1.2 Trade name(s) change:

- Form 26-0047 – Contacts and Personnel
- Official documentation substantiating the Trade Name use (e.g.: Certificate of Incorporation, Registration Certificate, etc.)
- Manuals, and associated Conformance Reports
- Inclusion of notification to CTA
- Associated Fee

#### 2.2.2.3.2 Change of address or contact information:

- Form 26-0047 – Contacts and Personnel
- COM (& other applicable manuals), and associated Conformance Report(s)
- Associated Fee

#### 2.2.2.3.3 Change of personnel:

Note: Changes to personnel will not be reflected on the AOC; no AOC re-issuance is required for this change.

##### 2.2.2.3.3.1 Accountable Executive:

- Form 26-0047 – Contacts and Personnel
- Résumé
- Forms in the Appendices in Volume 1
- COM, and associated Conformance Report

##### 2.2.2.3.3.2 Operations manager / chief pilot / flight attendant manager:

- Form 26-0047 – Contacts and Personnel
- Résumé
- COM, and associated Conformance Report

##### 2.2.2.3.3.3 Maintenance manager /person responsible for maintenance /person responsible for maintenance control system:

- Form 26-0047 – Contacts and Personnel
- Résumé
- COM (& other applicable manuals), and associated Conformance Report(s)
- MCM

#### 2.2.2.4 Changes to AOC Part II – OPERATIONS SPECIFICATIONS

##### 2.2.2.4.1 Add a new aircraft type – Make/Model (ICAO CAST):

###### 2.2.2.4.1.1 Identification:

- Form 26-0046 – Aircraft
- Form 26-0045 – Bases, Sub-bases and Scheduled Points (to indicate what bases the aircraft will be operating into/from)
- Form 26-0048 – Maintenance Arrangements
- Registration Documents
- COM, and associated Conformance Report
- Training Program, and associated Conformance Report
- AFM, as applicable
- MEL(s), as applicable, and associated Conformance Report(s)
- SOP(s), as applicable, and associated Conformance Report(s)
- Passenger safety features cards
- Flight Attendant Manual (FAM), as applicable, and associated Conformance Report
- Ground Icing Program (GIP), as applicable, and associated Conformance Report
- MCM
- Maintenance Schedule
- Associated fee
- Notification of CTA

###### 2.2.2.4.1.2 Mandatory Approvals:

- Form 26-0046 – Aircraft
- COM, and associated Conformance Report
- Training Program, and associated Conformance Report
- AFM, as applicable
- MEL(s), as applicable, and associated Conformance Report(s)
- SOP(s), as applicable, and associated Conformance Report(s)
- FAM, as applicable, and associated Conformance Report
- GIP, as applicable, and associated Conformance Report
- MCM
- Maintenance Schedule
- Associated fee
- Notification of CTA

###### 2.2.2.4.1.3 SA(s):

- Form 26-0046 – Aircraft
- COM, and associated Conformance Report
- Training Program, and associated Conformance Report
- AFM, as applicable
- MEL(s), as applicable, and associated Conformance Report(s)
- SOP(s), as applicable, and associated Conformance Report(s)
- FAM, as applicable, and associated Conformance Report
- MCM, as applicable
- Maintenance Schedule, as applicable
- Associated Fee

**2.2.2.4.2 Add another aircraft of the same type:**

**2.2.2.4.2.1 Identification:**

- Form 26-0046 – Aircraft
- Registration Documents
- COM, and associated Conformance Report
- Passenger safety features cards (if required)
- MCM
- Maintenance Schedule
- Associated Fee

**2.2.2.4.2.2 Mandatory Approvals:**

- Form 26-0046 – Aircraft
- COM, and associated Conformance Report
- Training Program, and associated Conformance Report
- AFM, as applicable
- MEL(s), as applicable, and associated Conformance Report(s)
- SOP(s), as applicable, and associated Conformance Report(s)
- MCM
- Maintenance Schedule
- Associated Fee

**2.2.2.4.2.3 SA(s):**

- Form 26-0046 – Aircraft
- COM, and associated Conformance Report
- Training Program, and associated Conformance Report
- AFM, as applicable
- MEL(s), as applicable, and associated Conformance Report(s)
- SOP(s), as applicable, and associated Conformance Report(s)
- MCM, as applicable
- Maintenance Schedule, as applicable
- Associated Fee

**2.2.2.4.3 Add/Change aircraft Operations Specifications:**

**2.2.2.4.3.1 Mandatory Approvals:**

- Form 26-0046 – Aircraft
- COM, and associated Conformance Report
- Training Program, and associated Conformance Report
- AFM, as applicable
- MEL(s), as applicable, and associated Conformance Report(s)
- SOP(s), as applicable, and associated Conformance Report(s)
- GIP, as applicable, and associated Conformance Report
- MCM, as applicable
- Maintenance Schedule, as applicable
- Associated Fee

**2.2.2.4.3.2 SA(s):**

- Form 26-0046 – Aircraft
- COM, and associated Conformance Report
- Training Program, and associated Conformance Report
- AFM, as applicable

- MEL(s), as applicable, and associated Conformance Report(s)
- SOP(s), as applicable, and associated Conformance Report(s)
- GIP, as applicable, and associated Conformance Report
- MCM, as applicable
- Maintenance Schedule, as applicable
- Associated Fee

**2.2.2.4.4 Remove aircraft:**

**2.2.2.4.4.1 Identification:**

- Form 26-0046 – Aircraft
- COM, and associated Conformance Report
- Training Program, and associated Conformance Report
- AFM, as applicable
- MEL(s), as applicable, and associated Conformance Report(s)
- SOP(s), as applicable, and associated Conformance Report(s)
- FAM, as applicable, and associated Conformance Report
- GIP, as applicable, and associated Conformance Report
- MCM, as applicable
- Maintenance Schedule, as applicable
- Associated fee

**2.2.2.4.4.2 Mandatory Approvals:**

- Form 26-0046 – Aircraft
- COM, and associated Conformance Report
- Training Program, and associated Conformance Report
- AFM, as applicable
- MEL(s), as applicable, and associated Conformance Report(s)
- SOP(s), as applicable, and associated Conformance Report(s)
- MCM, as applicable
- Maintenance Schedule, as applicable
- Associated Fee

**2.2.2.4.4.3 SA(s):**

- Form 26-0046 – Aircraft
- COM, and associated Conformance Report
- Training Program, and associated Conformance Report
- AFM, as applicable
- MEL(s), as applicable, and associated Conformance Report(s)
- SOP(s), as applicable, and associated Conformance Report(s)
- MCM, as applicable
- Maintenance Schedule, as applicable
- Associated Fee

**2.2.2.5 Changes to AOC Part III – BASES AND SCHEDULED POINTS**

**2.2.2.5.1 Add base / sub-base / scheduled point:**

- Form 26-0045 – Bases, Sub-bases and Scheduled Points
- Form 26-0048 – Maintenance Arrangements
- COM, and associated Conformance Report
- Training Program, and associated Conformance Report
- FAM, as applicable, and associated Conformance Report

- GIP, as applicable, and associated Conformance Report
- MCM, as applicable
- Local Airport Authority (LAA) letter(s)
- Authorization from Foreign Civil Aviation Authority, as applicable
- Associated Fee

**2.2.2.5.2 Change aircraft make / model operations at base / sub-base / scheduled point:**

- Form 26-0045 – Bases, Sub-bases and Scheduled Points
- Form 26-0048 – Maintenance Arrangements
- COM, and associated Conformance Report
- Training Program, and associated Conformance Report
- FAM, as applicable, and associated Conformance Report
- GIP, as applicable, and associated Conformance Report
- MCM, as applicable
- Associated Fee

**2.2.2.5.3 Remove base / sub-base / scheduled point**

- Form 26-0045 – Bases, Sub-bases and Scheduled Points
- COM, and associated Conformance Report
- Training Program, and associated Conformance Report
- FAM, as applicable, and associated Conformance Report
- GIP, as applicable, and associated Conformance Report
- MCM, as applicable
- Associated fee

## 2.3 Ability to Operate Aircraft Under Multiple Parts or Subparts

### 2.3.1 Ability to Operate Aircraft Under Multiple Part VII Subparts

(1) Operators may conduct flight operations using the same aircraft under multiple Subparts of CAR Part VII.

(a) The aircraft type needs to be authorized on the AOC for each Subpart.

(b) The aircraft would need to be operated in such a manner that all requirements of each Subpart are satisfied.

(2) There must be an established safety management process that:

(a) determines under what Subpart the aircraft is operating on any particular flight;

(b) confirms that flight crew members are properly trained and qualified for whatever Subpart they are flying under; and

(c) confirms the crew can satisfy the applicable flight and duty time requirements for that Subpart.

(3) The process for operating under multiple Subparts must be defined in the COM, which must also contain unambiguous direction to flight crews on how operations under multiple Subparts will be controlled.

(4) The Operational Flight Plan (OFP) for each flight needs to clearly indicate under which Subpart the flight is being operated.

(5) If an aircraft normally operated under Subpart 704 is to be operated under Subpart 703, it must have a seating configuration excluding pilot seats for nine or less passengers.

(a) For operators that routinely add or remove seats to adjust loads, the procedure to comply will continue to be seat removal.

Note: There must be an entry in the Journey Log signed by an appropriately authorized person whenever seats are removed or installed.

(b) Operators who use aircraft that cannot easily be reconfigured may develop an alternate procedure to make seats unavailable to passengers.

i. Such a procedure may involve cargo netting or simply a placard on the individual seats.

ii. The CASI will evaluate the procedure for compliance, taking into account the type of operation, and reject or approve it, as necessary.

(6) Pilots who have a valid Pilot Proficiency Check (PPC) on type will be considered qualified to act in the same crew position in Subpart 702, 703 or 704, provided in the case of Subpart 704 that the required Line Indoctrination training has been completed.

(7) Pilots who hold only a Pilot Competency Check (PCC) may operate in the same crew position in Subpart 702 and 703, but may not fill a crew position in Subpart 704.

(8) Pilots who conduct single pilot IFR operations under Subpart 703, must have completed a single-pilot IFR PPC, even if they hold a valid PPC on type that was conducted in a multi-crew environment.

(9) The flight and duty time and rest period associated with a particular flight or series of flights need to be in accordance with the Subpart under which the flight is operated.

(a) When the flight time limits of the most restrictive Subpart have been reached, operations may continue under a less restrictive Subpart.

(10) The applicable time free from duty requirements pertaining to Subpart 704 or Subpart 702/703 need to be completed prior to commencing operations in the other Subpart.

### 2.3.2 Ability to Operate Aircraft Under Part VII and Part VI

(1) Operators may conduct flight operations using the same aircraft under CAR Part VII and Part VI, however they must hold the applicable Subpart certificate or registration document to operate that aircraft, and must do so in accordance with those regulations.

(a) If the operator wishes to operate under the Subpart 604 rules, they will have to hold a Private Operator Registration Document (PORD).

i. This document will specify the conditions under which they must operate.

(b) If the operator wishes to operate under any CAR Part VII Subpart regulations, they must possess that specific Subpart certificate.

i. The certificate will contain detailed conditions under which the operator may utilize their aircraft.

(c) Conditions or privileges specified in one document do not allow a similar operation under the other document.

i. An operator must take care to only utilize the aircraft under the conditions that are specified under the document they are using at the time of the flight.

(2) In order to obtain separate certificates, the operator must apply through separate application processes:

(a) The applications will be processed using current business practices followed by TCCA.

i. The operator will have to meet all associated requirements before the certificate is issued.

ii. Guidance on applying for a Subpart 604 PORD can be found in AC 604-004.

(b) All certificate applications will require the operator to pay the associated fees, in accordance with Subpart 104.

## 2.4 The Certification Process – review

(1) The procedure for the application, review and granting of a domestic AOC follows the same five phases as detailed in Volume 1 of this manual series:

(a) Phase 1 – Pre-Application;

(b) Phase 2 – Formal Application;

(c) Phase 3 – Design Assessment;

(d) Phase 4 – Performance Assessment; and

(e) Phase 5 – Administrative Functions.

(2) For details on the complete process, review Volume 1 prior to utilizing this volume.

## 2.5 How to Use This Volume

### 2.5.1 Documents

(1) Applicant/operators need to develop a complete application package that will vary in its content based upon the type of application being submitted.

(a) An expected document list can be found for both initial and amendment applications in section 2.2, above.

(b) Guidance on the content for forms is supplied on the instruction sheets that accompany those forms.

i. Forms can be found in the TCCA forms catalogue, or on the web using the following page:

https://wwwapps.tc.gc.ca/Corp-Serv-Gen/5/Forms-Formulaires

(c) Guidance on subjects to be covered in an applicant/operator's manuals is provided in this volume.

i. Details on how to interpret the presented material in this volume is provided in 1.14 *Typographic Conventions*.

ii. It is EXTREMELY important that both the applicant/operator and the CASI understand that this manual is designed to supply guidance to the reader, but NOT to repeat any guidance available in any other regulatory source or existing published document.

1. The material supplied within this volume is supplementary to all other guidance currently available.

2. As mentioned in 1.1.4, the reader is strongly advised to read the following, in this order:

a. The CAR regulatory reference (if one is provided);

b. The CASS that explains how the regulatory reference should be met;

c. Any documents listed for the section; and then

d. Material provided below the reference box.

i. This material is being provided to clarify anything provided in a, b and/or c.

ii. If nothing is listed in a, b or c, then this material is advisory in nature, and should be considered, but does not have to be followed/met.

(d) Conformance reports have been developed for all manuals required by regulation. These CR's:

i. provide a listing of the applicable CAR/Standards that applicant/operator needs to conform to in the content of their manuals.

ii. contain a portion to be completed by:

1. the applicant/operator.

a. Space is provided for the applicant/operator to identify how they have met each item.

2. The CASI;

a. Space is provided for the CASI to confirm that the applicant/operator has met each requirement.

iii. are produced as Excel files; they must be requested by the applicant/operator, and will be supplied by TCCA.

1. CR's contain interactive content that is revised based on the applicant/operator selected options.

a. These types of documents cannot be hosted on TC webpages or in the CADC catalogue.

(e) A list of all forms and documents associated with Subpart 7 certificate applications can be found in Appendix B

i. The table also contains the form and document abbreviations referred to in this volume, where listing.

### 2.5.2 Job Aids

(1) Job aids are a form of "checklist".

(a) They are structured to follow, in chronological order, the certification process from beginning to end.

(b) They contain a list of steps that have to be:

i. Completed by the applicant/operator; and

ii. Confirmed by the CASI.

(c) They also contain critical junctures in the process where decisions need to be made, and approvals or acceptances have to be confirmed and documented.

(d) They give direction within the process as to what party is responsible for completing what step.

(2) Once a job aid has been completed, the document is finalized as the last step in the certification process.

(a) The job aid acts as a tracking tool for the certification process.

(3) Applicant/operators may be provided with a copy of the Job Aid, to help them in following the process.

### 2.5.3 Tools List

(1) A list of all documents associated with the certification process is contained in a spreadsheet “TP 4711 – Tools List – All Volumes”

(a) This Tools List is only available to TCCA staff, and can be found in RDIMS # 13610357

(b) The spreadsheet contains “hot links” to all current documents.

## 2.6 Operations Specifications

### 2.6.1 General

(1) Operations Specifications are the regulatory instrument that is attached to an AOC that provides approval to the operator to conduct various types of services.

(2) Operations Specifications include:

(a) Mandatory Approvals

(b) Special Authorizations/Specific Approvals

(3) Details on Operations Specifications are contained in Volume 3 of this manual series.

### 2.6.2 Mandatory Approvals

(1) Mandatory Approvals define the core authorities contained in the AOC.

(a) They are required on every AOC issued.

(2) They include:

(a) CAR Rule – what regulatory Subpart the operator is authorized to conduct their service under.

(b) Aircraft – the category of aircraft the operator will utilize for the service.

(c) Types of Operation – whether the service will include aerial work, passenger carrying, or cargo.

(d) Types of Service – whether the service will be scheduled or not, or be for aerial work.

(e) Types of Aerial Work – to define what kind of aerial work will be done.

(f) Area of Operation – where the operator will be operating, based on the ICAO regions of the world.

(g) Special Limitations – under what atmospheric conditions the operator will be restricted to fly.

(3) Details on the mandatory approval options, and how an operator can obtain them, can be found in the appropriate sections in Volume 3 of this manual series.

### 2.6.3 Special Authorizations/Specific Approvals

(1) Special Authorizations/Specific Approvals (SA) form part of the AOC.

(a) A list of currently available SAs can be found in Volume 3 of this manual series.

(2) Except for the Dangerous Goods SA, SAs are optional and can be added to an AOC to provide the applicant/operator with greater operational capabilities.

(a) For a full description of the SAs available, and the requirements that need to be met to obtain them, review Volume 3 of this manual series.

(3) As an Initial AOC application, and an amendment application to add a SA, will need to be accompanied by all the required documentation for the SAs, both the applicant/operator and the CASI need to have a good understanding of what is expected when seeking SAs on an AOC.

(4) The applicant/operator should discuss with the CASI which of the SAs would be most beneficial for the applicant/operator to have.

(a) Prior to the pre-application meeting, a draft list of the requested SAs should be prepared by the applicant/operator.

(b) During the Pre-application meeting, this draft will be edited by the operator and the TCCA certification team to finalize the necessary authorizations, conditions and limitations.

i. The applicant/operator shall use this finalized list to help them prepare a complete application package.

# Chapter 3 – Information on Core Processes

## 3.1 General

(1) The following sections of this chapter cover background information on core processes relevant to domestic operators.

(2) The material in this chapter covers some subjects that can also be found in Section 4.2 (Company Operations Manual).

(a) Chapter 3 information is provided for the purposes of setting a common level of knowledge, from which applicant/operators can develop related documents, and CASIs can review and assess those documents for compliance.

(b) Section 4.2 lists required content subjects that must be part of the COM, along with guidance material that directly supplements the requirements as stated in the relevant CARs, standards, and published guidance material.

## 3.2 Organizational Structure

### 3.2.1 Operations Manager

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.07(2)(b)(i) | 703.07(2)(b)(i) | 704.07(2)(b)(i) | 705.07(2)(b)(i) |
| CASS: | 722.07(2) | 723.07(2) | 724.07(2) | 725.07(2) |
| DOC(s): | | | | |

**Applicant/operator to submit:**
**Form 26-0047 – Contact and Personnel**
**Candidate's resume**

(1) An applicant/operator must designate a person to this position whose qualifications, responsibilities and functional duties encompass those that are set out in the applicable paragraph of the CASS.

(2) An applicant/operator may use a different nomenclature for this position. However, the position shall be identified to TCCA as the operations manager.

(3) An applicant/operator may have one individual filling the roles of both operations manager and chief pilot as long as all required duties and responsibilities for both positions are assumed by the designated individual.

(4) For Subpart 703, 704, and 705 operators:

(a) The candidate's level of knowledge will be assessed during an oral interview conducted by TCCA.

i. Sample questions used for this interview can be found in Appendix C of this volume.

(b) Once satisfied that the candidate meets all regulatory requirements, TCCA will issue an Approval Letter.

### 3.2.2 Chief Pilot

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.07(2)(b)(ii) | 703.07(2)(b)(ii) | 704.07(2)(b)(ii) | 705.07(2)(b)(ii) |
| CASS: | 722.07(2)(b) | 723.07(2)(b) | 724.07(2)(b) | 725.07(2)(b) |
| DOC(s): | | | | |

**Applicant/operator to submit:**
**Form 26-0047 – Contact and Personnel**
**Candidate's resume**

(1) An applicant/operator must designate a person as chief pilot, whose responsibilities and functional duties encompass those set out in the CASS.

(2) An applicant/operator may use a different title for this position; however, the position shall be identified to TCCA as the chief pilot.

(3) An applicant/operator may have more than one chief pilot if desired, as long as the requisite duties and responsibilities are assumed in totality by each designated individual.

(a) If more than one chief pilot is identified, there must be a clear delineation of responsibility (i.e. a chief pilot may be responsible for a specific geographic region, aircraft type, etc.).

(4) For Subpart 703, 704, and 705 operators:

(a) The candidate's level of knowledge will be assessed during an oral interview conducted by TCCA.

i. Sample questions used for this interview can be found in Appendix C of this volume.

(b) Once satisfied that the candidate meets all regulatory requirements, TCCA will issue an Approval Letter.

### 3.2.3 Maintenance Manager

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.07(2)(b)(iii), 706.03 | 703.07(2)(b)(iii), 706.03 | 704.07(2)(b)(iii), 706.03 | 705.07(2)(b)(iii), 706.03 |
| CASS: | 722.07(2)I, 726.03 | 723.07(2)I, 726.03 | 724.07(2)I, 726.03 | 725.07(2)I, 726.03 |
| DOC(s): | | | | |

**Applicant/operator to submit:**
**Form 26-0047 – Contact and Personnel**
**Candidate's resume**

(1) Dependent upon which Subpart of the CARs is being reviewed, the reader will find this position listed under one of the three titles of:

(a) Maintenance Manager (CAR 705)

(b) Person Responsible for Maintenance (CAR 703, CAR 704)

(c) Person responsible for maintenance control system (CAR 702, 706)

All of these names refer to the same person, who will be referred to in this volume as the "Maintenance Manager".

(2) An applicant/operator must designate a person as maintenance manager, whose responsibilities and functional duties encompass those set out in the above noted CAR and CASS.

(3) The appointment of a maintenance manager by the applicant/operator does not remove the applicant/operator from holding ultimate responsibility for the maintenance control system and the safety of the operation.

(4) If the intended maintenance manager is not the holder of an aircraft maintenance engineer (AME) license, his/her regulatory knowledge must be evaluated through a written exam administered by TCCA.

(a) The intended maintenance manager will be interviewed by TCCA to demonstrate his/her knowledge of the topics set out in Standard 726.03(1).

### 3.2.4 Flight Attendant Manager

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | 705.07(2)(b)(iv) |
| CASS: | | | | 725.07(2)(d) |
| DOC(s): | AC 705-011, TP 12295, TP 12296 | | | |

**Applicant/operator to submit:**
**Form 26-0047 – Contact and Personnel**
**Candidate's resume**

(1) An applicant/operator shall, where flight attendants are required for the operation, designate a person as the flight attendant manager, whose responsibilities and functional duties encompass those set out in the CASS.

(2) An applicant/operator may use a different title for this position. However, the position shall be identified to TCCA as the flight attendant manager.

(3) The candidate's level of knowledge will be assessed during a written exam and oral interview

### 3.2.5 Absence from Duty: Operations Manager, Chief Pilot, Flight Attendant Manager or Maintenance Manager

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.07(2) | 723.07(2) | 724.07(2) | 725.07(2) |
| DOC(s): | | | | |

(1) There must be a mechanism to allow delegation of authority for the position when the operations manager, chief pilot, flight attendant manager, or maintenance manager is off duty or unable to exercise their authority in any other way.

(a) This would apply for both short term and long-term absences.

(2) The individual assuming the duty must be competent and capable of carrying out the responsibilities assigned to the position. The individual must also be qualified in accordance with the applicable standards.

(3) The intent is to ensure that a capable person is in charge at any time that flight operations are being conducted.

(4) The operations manager, chief pilot, flight attendant manager, or maintenance manager need not be physically present at the company but must be able to fully exercise his/her authority as required.

### 3.2.6 Company Check Pilot

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.07(1)l | 723.07(1)(h) | 724.07(1)(i) | 725.07(1)(i) |
| DOC(s): | TP 6533 | | | |

(1) This position is optional, and is controlled through the Approved Check Pilot program.

(a) The current term for this function is Approved Check Pilot (ACP).

(b) Companies can sponsor an applicant for the ACP position, and can administratively support the functions of a company associated ACP, but the ACP remains an independent External Delegate of the Minister.

(2) Refer to TP 6533 *Approved Check Pilot Manual* for procedure in obtaining ACP status for an individual.

## 3.3 Operational Control Systems

### 3.3.1 General

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.12 | 703.16 | 704.15 | 705.20 |
| CASS: | 722.12 | 723.16 | 724.15 | 725.20 |
| DOC(s): | | | | |

(1) For reference, figure 3-1 provides a representative example of complex operational control system**.**

(a) Applicants/Operators should review this figure when considering what elements of an operational control system are relevant to their operation, and how they should describe these elements in their manuals.

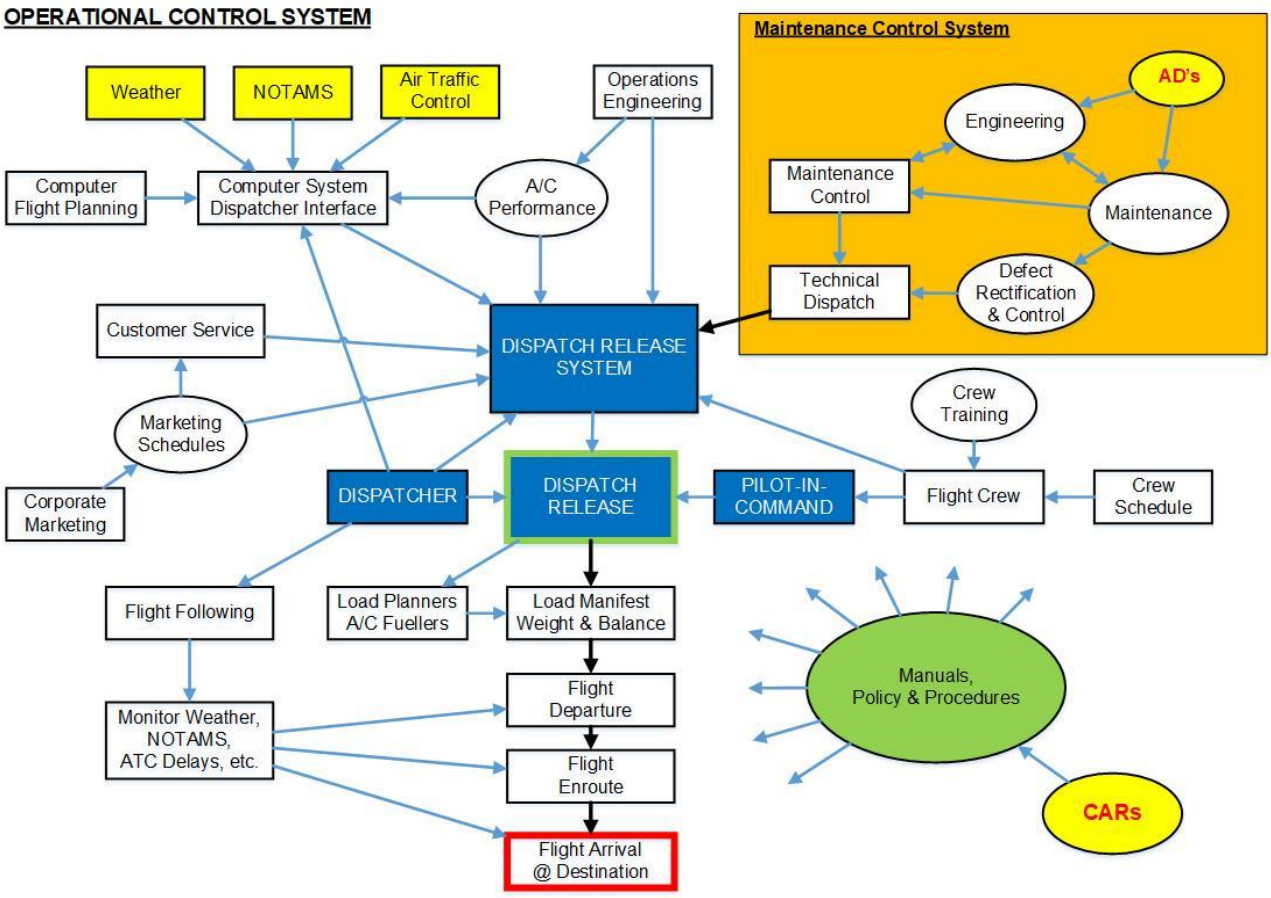
(2) As a required item to be included in the company operations manual, the operational control system needs to be approved in the certification process.

(a) Where a new applicant has been unable to provide on-the-job-training (OJT) for dispatchers prior to receiving their AOC, CASS 725.124(21)(g)(ii) provides TCCA with the ability to issue an Interim Approval of their operational control system, to allow them to conduct operations for up to 6 months following AOC issuance.

i. Operators are expected to have their dispatchers complete all required OJT and competency checks in this period.

ii. If dispatcher training and checks are not completed within the 6-month period, TCCA would be expected to initiate suspension/cancellation action on the operator's AOC.

Figure 3-1 – Operational Control System




## 3.3.2 Operational Control Systems Where an Operator has Operations Under More Than One Subpart

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.12 | 703.16 | 704.15 | 705.20 |
| CASS: | 722.12 | 723.16 | 724.15 | 725.20 |
| DOC(s): | | | | |

(1) Although an applicant/operator may have multiple Subpart authorities on their AOC, TCCA recommends that an applicant/operator uses only one type of operational control system.

(a) Where this is not possible for an applicant/operator, TCCA will also approve "multiple" operational control systems, based on the applicant/operator providing the following details:

i. The applicant/operator must clearly define the type of operational control system that applies to each individual Subpart (702, 703, 704 or 705) of their operation in the COM.

ii. The COM must have a section providing an overview of the operational control system, with separate sections for each type of operational control system.

1. Each section must outline the responsibilities and accountability of the personnel operating within that system.

E.g.: operations under co-authority dispatch (Types A and/or B) must be clearly addressed in one section of the COM and operations under pilot self-dispatch (Types C and/or D) must be in a separate section.

iii. The applicant/operator's training program must detail the responsibilities of pilots and dispatchers/flight followers under each type of operational control system stated in the COM.

1. This training must be part of the Company Indoctrination Training.

(2) When an aircraft is operated under multiple Subparts, it shall be operated in such a manner that all requirements of each Subpart are satisfied.

(a) There must be an established safety management process that:

i. determines under what Subpart the aircraft is to be operated on any particular flight;

ii. confirms that flight crew members are properly trained and qualified; and

iii. confirms the crews satisfy the applicable flight and duty time requirements.

(b) The process must be defined in the COM, which must also contain unambiguous direction to flight crews on how operations under multiple Subparts will be controlled.

(c) The Operational Flight Plan for each flight shall clearly indicate under which Subpart the flight will be operated.

(d) If an aircraft normally operated under Subpart 704 is to be operated under Subpart 703, it must have a seating configuration excluding pilot seats of nine or less.

i. For operators that routinely add or remove seats to adjust loads, the procedure to comply will continue to be seat removal.

1. There must be an entry in the Journey Log signed by an appropriately authorized person whenever seats are removed or installed.

ii. Operators who use aircraft that cannot easily be reconfigured may develop an alternate procedure to make seats unavailable to passengers.

1. The procedure may involve cargo netting or simply a placard on the individual seats.

iii. The CASI will evaluate the procedure for compliance taking into account the type of operation and reject or approve it as necessary.

(3) Pilots who:

(a) have a valid Pilot Proficiency Check (PPC) on type will be considered qualified to act in the same crew position in Subpart 702, 703, 704 or 705.

i. The validity period of the PPC varies dependent upon the Subpart a pilot is conducting operations under.

E.g.: 16 months after passing the PPC, a pilot is valid for Subpart 702 operations, but not valid for Subpart 704 operations.

ii. In the case of Subpart 704 or 705 operations, the required Line Indoctrination training must have been completed.

(b) hold only a PCC on type may operate in the same crew position in Subpart 702 and 703, but may not fill a crew position in Subpart 704.

(c) conduct single pilot IFR operations under Subpart 703 must have completed a single-pilot IFR PPC, even if they hold a valid PPC on type that was conducted in a multi-crew environment.

(4) Operators shall establish and use Standard Operating Procedures (SOPs) for each aircraft in which multi-crew operations are conducted.

(5) When the flight time limits of the most restrictive Subpart have been reached, operations may continue under a less restrictive Subpart.

(a) The flight and duty time and rest period associated with a particular flight or series of flights shall be in accordance with the Subpart under which the flight was operated.

(6) The applicable time free from duty requirements pertaining to applicable Subpart shall be completed prior to commencing operations in another Subpart.

### 3.3.3 Reporting Structure

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.20 |
| DOC(s): | | | | |

(1) It is important that the reporting structure of the operator make clear the line of authority affecting operational control.

(a) Operational Control shall report directly to the operations manager.

(b) Where an operator has an Operations Co-ordination division, this division does not interfere with operational control.

i. Operations co-ordination is most often the commercial / marketing side of the operator. This division:

1. exercises authority of an operator over its operating activities, excluding operational control; and

2. makes decisions that will best serve the commercial needs of the operator.

## 3.3.4 Types of Operational Control Systems

### 3.3.4.1 Type A System

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | A724.15 (Only for *No Alternate IFR*) | 725.20<br>Application (2)<br>System Description Type A System |
| DOC(s): | | | | |

#### 3.3.4.1.1 Responsibility – The Concept of Co-authority Dispatch (or Co-dispatch)

(1) Operational control begins with the formulation of the operational flight plan (at the beginning of flight planning, normally two to three hours prior to the arrival of the flight crew at the flight dispatch centre) and continues until the termination of the flight.

(2) The responsibility for operational control changes depending upon which phase the flight is in:

(a) Pre-flight phase of the flight:

i. the responsibility for operational control is shared between the flight dispatcher and the PIC:

1. Flight dispatcher's tasks include all items required in preplanning a flight.

a. The flight dispatcher must take into consideration weight and balance, aircraft performance, MEL items, weather, NOTAMS or any other restriction that may affect the safety of the flight;

2. Although the operational flight plan is prepared by the flight dispatcher, the flight dispatcher and the PIC do share equal responsibility for the planning of the flight.

a. Both must agree on the operational flight plan before the aeroplane leaves the ramp.

b. In case of disagreement on the operational flight plan, the disagreement must be resolved before the flight proceeds.

ii. The shared responsibility is applicable until the pilot releases brakes for take-off at the beginning of the take-off run.

1. Prior to this point, the flight dispatcher and the PIC do have to agree on decisions affecting the safety of the flight;

iii. a procedure for resolving disagreement between the PIC and the flight dispatcher during the flight planning phase should be contained in the COM.

(b) Airborne phase of the flight:

i. The responsibility for operational control is the PIC's, based upon considerations of safety, and taking into account inputs from the flight dispatcher:

1. The flight dispatcher has responsibility for monitoring the flight's progress and to forward any information related to the safety of the flight to the PIC.
    a. Events like enroute turbulence, thunderstorms, terminal weather, changes to weather forecasts or pertinent NOTAMs must all be relayed to the PIC;
2. the PIC is equally responsible for transmitting to the flight dispatcher any flight plan change, flight conditions or other safety related information.
    a. These communications should be done promptly, as time and workload permits.

(3) If dispatchers and pilots plan multiple flight legs under one operational flight plan, the operator must specify in their COM the procedures required when transiting a through each stop.

i. A simple station procedure with verbal confirmation of the original flight plan is acceptable.
    1. The station confirms with the pilot that the original flight plan remains valid.

ii. If dispatch issues a new flight plan, the pilot will confirm acceptance or rejection of the new plan.
    1. The rejection of the plan will require further discussions between the PIC and dispatcher, and both must again agree on the subsequent operational flight plan.

(4) Flight Planning and Flight Watch can be separated into two functions:

(a) Each function will require qualified dispatchers.

(b) The operator must specify in the COM the procedures expected to complete hand-over from flight planning to flight watch.

(c) The dispatcher planning flights must communicate with the dispatch performing flight watch to assure alternates and routes are mutually acceptable.

(d) The dispatchers must agree prior to presenting the flight plan to the PIC.

(e) The operator must designate the dispatcher of record and responsibility. The signing dispatcher is responsible for all revisions to the operational flight plan.

#### 3.3.4.1.2 Communication Requirements

(1) The communication requirements for Type A operational control systems are very complex. The intent of the CASS is to maintain direct communication between the flight dispatcher and the PIC. The ability to maintain direct communications is not always available. Operators involved in operations where direct communications cannot be provided must clearly define in the COM how the necessary information will be exchanged between the flight dispatcher and the PIC.

(2) In the case were ground communication at a remote destination is not available even with cellular phones, the COM should outline specific procedures that will be carried out at the last available communication facility. Specific procedures can be as simple as: "the flight dispatcher or/and PIC must establish contact through the last available radio facility, and from this time plus three hours, information must be received with regard to the departure". It is intended that after the stipulated time period certain procedures will be initiated by the flight dispatcher.

(3) The following is an example to illustrate the options available:

(a) An operator is operating into a remote destination in South America on weekend flights during the winter months:

i. the cost of full direct radio communications would be prohibitive for this type of operation;

ii. the operator may contract a third party for communications enroute and/or at the remote destination, but must be assured that personnel at the remote destination have the ability to communicate in the common language of the operator;

iii. the operator may indicate in the COM how communications for remote destinations will be handled and that an operating document will be provided to the PIC and to the flight dispatcher when operating to these destinations;

iv. the procedure in the COM and the content of the operating document may include airport radio frequencies (ground and tower), radio frequencies and phone numbers of handling agencies and, if a contract radio agency is used, how and when it will be used;

v. example of an operating document issued for operations to remote destinations:

a. flight 123 operating Ottawa – Baranquilla on Nov. 16;

b. will use Houston Radio frequency XXX.XX to provide dispatch with a progress report over the following position(s) ...;

c. upon arrival in Baranquilla, the PIC will ensure that the handling agent has forwarded the arrival times to the flight dispatcher (or the captain will call the flight dispatcher with the arrival times),

d. departure times will be forwarded to dispatch by the handling agent immediately on receipt of the departure times from the flight crew,

e. the flight crew will also send the departure times to dispatch through Houston Radio no more than one hour after takeoff.

#### 3.3.4.1.3 Flight Dispatch Center – Physical Setup

(1) The following is a list of items that should be placed in a central location within easy access to the flight dispatcher's position:

(a) communication/electronic equipment (phone, radios, fax, teletypes, computers, etc.);

(b) filing system for information on individual flights (PIREPS, dispatch release information, operational flight plans, fuel calculation sheets, messages sent to the PIC as advice on changes to the flight, etc.);

(c) display system for weather information and NOTAM; and

(d) office furniture for storage of all required documentation, publications and equipment.

#### 3.3.4.1.4 Additional Information Needed for Flight – Planning and Flight Watch

(1) Additional informative documentation or equipment within the flight dispatch center will vary depending on the size and sophistication of the operation. The following is a suggested list of items that may be additional to basic requirements of the CASS (electronic data is acceptable where applicable):

(a) a system for timely dissemination of general operational information or changes in policies from the operator or TCCA that includes a means for the flight dispatcher to acknowledge receipt of such information;

(b) computer flight plans that meet CARs requirements with regard to the information required;

(c) a handheld computer to aid in fuel calculations, conversions, cross wind calculations, etc.;

(d) worksheets or running logs of operations. The worksheet or log should have space to record MTOW, minimum fuel, alternates, captain's name, delays, MEL item on the aircraft planned for that flight, an area for remarks, etc.;

(e) a log or file listing the MEL items on aircraft with proposed repair dates;

(f) a procedure for checking off MEL items;

(g) the operator emergency procedures with call lists and any additional items such as sheets covering threatening calls to the operator (example: male, female, accent, stress levels, etc. These sheets are readily available through security agencies and can be modified to the operator's needs);

(h) CANUTEC, security and rescue phone numbers;

(2) To be able to perform his/her tasks, documentation must be made available to the flight dispatcher. The following is a guide of what TCCA is expecting to see in a flight dispatch center (electronic data is acceptable):

(a) Manuals that shall be readily available to the flight dispatcher:

i. route manuals;

ii. fuel calculation charts; and

iii. airport charts.

(b) Manuals that should be placed in a central position within the flight dispatch center:

i. MEL:

ii. AOM;

iii. COM; and

iv. CARs and CASS as appropriate for operation.

v. Manuals that are used on occasion should be available promptly on request from a company library.

(c) Other manuals that should be available, depending on the complexity of operations:

i. Canadian AIP;

ii. Canada Air Pilot;

iii. foreign AIP (if applicable);

iv. IATA dangerous good manual;

v. operator's emergency procedures manual;

vi. radio and communications manuals;

vii. copy of the FAR's (if applicable); and

viii. airport emergency manuals.

#### 3.3.4.1.5 Flight Watch – "Off" and "On" times

(1) For flight watch purposes, the dispatcher must be aware of when the aircraft becomes airborne and when it lands.

(2) The "off" and "on" times are transmitted to the flight dispatcher so that flight watch may begin and terminate. Additionally, any unexpected mechanical or meteorological phenomena should be transmitted at this time. At no time should this report take precedence over SOPs and proper traffic lookout.

(3) The "off" and "on" times may be transmitted to the company via radio, data link, or any other means that satisfies the requirement. In some circumstances, it may be necessary to relay times via a government or other agency. This report should take place as soon as safely possible but in no cases later than one hour after takeoff.

### 3.3.4.2 Type B System

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | A724.15 (Only for *No Alternate IFR*) | 725.20 Application (3), System Description Type B System |
| DOC(s): | | | | |

#### 3.3.4.2.1 Communication Facilities Missing

(1) Where a flight has to depart as a pilot self-dispatch flight because of lack of communication facilities, the flight needs to undergo detailed planning:

(a) operational flight plans should be calculated and recorded on a form provided by the operator, in the same detail as if the flight was a co-dispatch flight;

(b) enroute and terminal weather, NOTAMS, MEL considerations and all other pertinent data should be assessed by the flight crew;

(c) weight and balance information should also be shown on the operational flight plan or a form provided by the operator;

(d) a copy of the entire flight planning package should be left at a point of departure or communicated to a responsible company authority for retention and action as may be required; and

(e) the PIC should signify approval of the operational flight plan by attaching his/her signature to the form used for flight planning.

### 3.3.4.3 Type C System

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | 704.15 | |

| | | | | |
|---|---|---|---|---|
| **CASS:** | | | 724.15 | 725.20<br>Application (4)<br>System Description Type C System (3) |
| **DOC(s):** | | | | |

#### 3.3.4.3.1 Flight Following

(1) The Standard for a Type C Operational Control System calls for an individual to be "on duty" and able to provide, among other things, uninterpreted meteorological information to the PIC.

(a) Certain operations, such as charters involving multiple stops over several days, necessitate some flexibility in the interpretation of "on duty".

i. Where a flight is operating self-dispatch, the flight follower need not be physically present on company premises to be considered "on duty". Effective flight following could be provided by using:

1. A contracted third party (e.g. ARINC), with company contacts in the event of an emergency;

2. Reduced or remote Flight Following using company personnel, such as permitting a Flight Follower to note flight details only, and referring the crew to Flight Service Stations for weather and NOTAM information.

Note: When operating with reduced Flight Following, the Flight Follower remains the first point of contact for the crew passing information to the company. Under these conditions it is imperative that the Follower be reachable with a single step. Pagers or voice mail would not be acceptable under these conditions for two reasons:

a. In event of an emergency there may be no way for the Flight Follower to re-establish contact with the crew or initial caller; and

b. Pagers and voicemail do not provide positive confirmation that the message has been passed.

#### 3.3.4.4 Type D System

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | 702.12 | 703.16 | 704.15 | |
| **CASS:** | 722.12 | 723.16 | 724.15 | |
| **DOC(s):** | | | | |

(1) Type D operational control systems exist in 702, 703 and 704 as an option (not in 705) and are essentially a pilot self-dispatch system with the requirement for flight followers.

## 3.4 Emergency Response Plans

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | 705.07(2)(l) |

| | | | | |
|---|---|---|---|---|
| **CASS:** | | | | 725.07(3) |
| **DOC(s):** | | | | |

(1) The Emergency Response Plan is an internal company or organization plan which is used in conjunction with existing airport emergency response plans or municipal or regional disaster plans.

(a) The Emergency Response Plan is designed to be used by company management in case of emergencies.

(2) The Emergency Response Plan is not required to be part of the COM; however, there should be adequate guidance to operations personnel to ensure that they are aware of who to contact in the event of an emergency.

(3) All 705 operators must submit an emergency response plan that has the components set out in subsection 725.07(3) of Standard 725.

## 3.5 Safety Management Systems

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | 107.01(1)(b), 107.02-04, 705.07(2)(c), 705.151-154, 706.15 |
| **CASS:** | | | | 725.135(oo) |
| **DOC(s):** | AC 107-001, AC 107-002, SI SUR-001 | | | |

(1) All new Subpart 705 applicant/operators are required to have a complete SMS in place prior to issuance of the AOC.

(a) Flight Operations and Airworthiness CASIs, working cooperatively, will be responsible for assessing the SMS documents, policies and processes of the applicant/operator.

i. Certification and validation of an operator's SMS will be accomplished through a review of documents, processes and policies only, as the company cannot demonstrate effective use of the processes until they are in operation.

(2) The applicant/operator will have one year to apply, review, and redesign their SMS prior to a full SMS process inspection by TC. This period will allow the operator time to ensure that their data collection, documentation, record keeping, training, and the other various processes required in an SMS are effective.

(a) The full SMS process inspection will determine the effectiveness of their SMS and will be assessed in accordance with SI SUR-001.

(3) For existing 705 operators, a copy of the companies Safety Case/Risk Assessment for the addition of new aircraft type or destination, or a change in management personnel will need to be provided to TCCA.

(4) Guidance can be found in AC 107-001 *Guidance on Safety Management Systems Development*, and AC 107-002 *Safety Management System Implementation Procedures for Operators*.

https://tc.canada.ca/en/aviation/reference-centre/advisory-circulars/advisory-circular-ac-no-107-001

https://tc.canada.ca/en/aviation/reference-centre/advisory-circulars/advisory-circular-ac-no-107-002

(5) Further guidance can be found on the Transport Canada website, at:

https://tc.canada.ca/en/aviation/general-operating-flight-rules/aviation-safety-management/safety-management-systems-aviation

(6) CAR 573 Approved Maintenance Organizations (AMO) authorized to perform maintenance on aircraft operated under Subpart 705, and in accordance with Subpart 107, shall establish and maintain a Safety Management System.

(7) If the holder of an AOC is also the holder of an AMO certificate, the Maintenance Manager of the AOC shall have control of the SMS for both organizations.

# Chapter 4 – Manuals & Documents – Content & Review

## 4.1 General

(1) The applicant/operator is required to develop manuals to describe process and procedures they will use in operating their business.

(a) These manuals will need to contain certain subjects, as detailed in the applicable regulatory requirements.

(b) Conformance Reports have been created to aid the applicant/operator in meeting these regulatory requirements. These conformance reports:

i. must be used to aid the applicant/operator in producing manuals; and

ii. must accompany the manuals when the applicant/operator submits new or amended manuals.

(2) Information regarding procedures or equipment may be provided in more than one publication or document, such as the COM, AOM, FAM, SOP, MEL and MCM.

(a) Established procedures found in various publications must be compatible and not conflict. It is the responsibility of the applicant/operator to verify that all parts of applicable manuals are consistent and compatible in accordance with regulatory requirements.

(3) The applicant/operator is permitted to have a separate Operational Control Manual, but this manual will be considered as part of the COM.

(a) New or revised Operational Control Manuals must ensure that the information in the appropriate sections are cross-referenced to other applicable parts of the COM.

(4) In reviewing submitted manuals, CASIs should utilize the accompanying conformance reports to guide them in confirming that the regulatory requirements have been met by the applicant/operator.

(5) CASIs are to stop the review/approval process upon finding significant errors in a submitted manual or document and return the manual or document to the originator for further action.

(a) Significant errors shall be identified to the originator of the manual or document by quoting the Regulatory requirement and deficiency (e.g.: *"Section XX of the submitted manual does not meet the requirement of paragraph c of the Standard 725.135 in that it does not contain a list of effective pages"*.).

(b) If the originator then re-submits the manual or document and significant errors are found, the manual or document is to be returned again to the originator for further action.

Note: Significant errors to manuals or documents are considered to be errors where compliance with the *Canadian Aviation Regulations* and Standards has not been achieved. Significant errors are not instances of spelling, grammar or formatting mistakes. However, poor organization or presentation of material is a significant error.

(6) During the review of manuals or documents, CASIs are to refrain from making significant corrections on behalf of the applicant/operator. At no time are CASIs to rewrite or add to a submitted manual or document.

(7) In the case of persistent errors, or for situations where errors are so numerous as to be impossible to deal with, the CPM will have the final authority in terminating the procedure of review, and will return the document to the client.

(8) During this manual review process, the CASI should be assessing whether the content reflects the requirements of the CARs and any associated standard, and not an assessment of whether the processes or procedures established by the applicant/operator are effective or efficient.

(a) The effectiveness of the procedures established by the operator may be evaluated during ongoing surveillance activities.

(9) Ministerial approval of a COM or MCM includes all portions that relate to flight operations that addresses regulatory requirements.

(a) Should there be content that proves to be more stringent than what is called for by Regulation, this material will be reviewed and accepted, if applicable.

(10) TCCA cannot direct operators to:

(a) add items that are not required by Regulation; or

(b) prohibit removal of items that are not required by Regulation.

### 4.1.1 Manual Approval Process

(1) General guidance on the approval process for manuals is contained in Chapter 5 of Volume 1 of this manual series.

### 4.1.2 Approval of Information Related to Security

(1) The guidelines for the submission, review and approval of the security portion of operators' documentation is outlined in Section 10.1 of this Volume.

## 4.2 Company Operations Manual

### 4.2.1 General

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.81, 702.82, 702.83 | 703.104, 703.105, 703.106 | 704.120, 704.121, 704.122 | 705.134, 705.135, 705.136 |
| CASS: | 722.82 | 723.105 | 724.121 | 725.134 |
| DOC(s): | | | | |

**Applicant/operator to submit:**
**COM**
**CR COM 70X**

**TCCA to complete:**
**CR COM 70X**

(1) The COM should accurately reflect how operations are performed within the company.

(2) The COM shall be reviewed by TCCA and its content found acceptable or be approved, as applicable, prior to being provided for the use of operator personnel.

(3) The objective of TCCA's review of the COM is to ensure that the policies and procedures contained in the manual:

(a) implement the regulations of Canada;

(b) cover all required items listed in the applicable CARs, Commercial Air Service Standards (CASS), and guidance documents;

i. Fully describes these items, as specific to the companies' operational procedures.

ii. Is not a "cut-and-paste" of the contents of the applicable CARs, CASS, or guidance document(s).

(c) provide clear, complete and detailed operating instructions so that operational personnel are fully informed of what is required of them.

(d) represent sound safety philosophy and be capable of being accomplished;

(e) contain provisions for revision to ensure that the information contained therein is kept up to date;

(f) present the necessary guidance and instructions to personnel in a suitable and convenient format; and

(g) outline standardized procedures for all crew member functions.

#### 4.2.1.1 Titles

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | 702.82(1) | 703.105(1) | 704.121(1) | 705.135(1) |
| **CASS:** | | | | |
| **DOC(s):** | | | | |

(1) The applicant/operator may title this manual anyway that they see fit. If titled differently, then an instruction in the preface or introduction of the manual must state that this manual is the COM.

(2) If the contents of the COM are located in more than one manual, then each of these manuals must indicate the areas of the COM that they address and where the other areas of the COM can be found.

#### 4.2.1.2 Terminology

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | 702.82(2)(a) | 703.105(2)(a) | 704.121(2)(a) | 705.135(2)(a) |
| **CASS:** | | | | |
| **DOC(s):** | | | | |

(1) The COM will facilitate standardization between flight crew members, flight attendants, flight dispatchers, maintenance and ground personnel in the use of identical terminology when referring to situations or procedures that require, or may require, coordinated action (e.g.; the use of "evacuation" and "deplane"). This is to preclude the possibility of misunderstandings.

#### 4.2.1.3 Organization

(1) The overall manual system may be organized in any manner which adequately provides guidance concerning all important aspects of the operation.

(2) In order to meet the Regulatory requirements and effectively organize policy and instructions, that portion of an applicant/operator's overall manual system which applies specifically to operations personnel is frequently divided into separate volumes (e.g.: COM, AOM, SOP, etc.).

(3) The size, as well as the number of volumes of the COM will depend upon the size and complexity of the proposed operations.

### 4.2.2 Authority of the COM

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | 702.09(a) | 703.09(a) | 704.09(a) | 705.09(a) |
| **CASS:** | 722.82(1)(a), (2) & (4)(a) | 723.105(1)(a)&(2)(a) | 724.121(a) | 725.135(a) |
| **DOC(s):** | | | | |

(1) Operators are expected to comply with all portions of their COM that relate to Flight Operations.

(a) Flight Operations means any activity that is part of the flight of the aircraft, including training.

(b) Flight Operations would not include items contained in a COM that relate to company policies or directives, such as dress codes, personal conduct, crew scheduling, etc.

(2) Ministerial approval of a COM includes all portions that relate to flight operations, as mandated through applicable regulatory requirements.

(a) Portions of the COM that are in excess of those mandated by regulation are accepted by the Minister (but are not approved).

(b) Once a manual has been submitted by the operator, and approved by TCCA, an operator is expected to follow the policies, procedures and guidance found within it.

### 4.2.3 COM Structure and Table of Contents

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | 702.82 | 703.105 | 704.121 | 705.135 |
| **CASS:** | 722.82(1)(b), (3)(a) & (4)(b) | 723.105(1)(b)& (3)(a) | 724.121(b) | 725.135(b) |
| **DOC(s):** | | | | |

(1) There are many ways of structuring a COM. Although the content, order, and volume of information is ultimately up to the applicant/operator to decide upon, the CASS provides the minimum requirements that need to be met in order to satisfy the regulations.

(2) Conformance reports have been provided to help both the applicant/operator in creating an acceptable COM, and the CASI in reviewing the submission for acceptability, in regards to the regulations and standards.

(3) As applicant/operators are required to submit a conformance report to accompany any COM submission (Initial or Amendment), it would be most practical to follow the order set out in the CASS and Conformance Report when structuring the COM.

(4) For the purposes of finding material easily in the COM, a detailed Table of Contents will prove very effective. This table of contents is required by regulation.

### 4.2.4 COM Amendments

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | 703.07(2)(b) | 704.122 | |
| CASS: | 722.82(1)I, (2), (3)(b)&(4)(c) | 723.105(1)I, (2)I&(3)(b) | 724.121I | 725.135I |
| DOC(s): | | | | |

(1) When there is a requirement for amending a particular procedure within the operation, it is imperative that a manual amendment be submitted and approved before the actual change of procedures is implemented.

(2) To be able to effectively control the amendment procedure, the COM must adequately describe how amendments will be handled, and how personnel will be made aware of the changes.

### 4.2.5 Management Organization

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.82(1)I&(2) | A723.105(1)I&(2)I, H723.105(1)(f)&(2) | 724.121I | 725.135I |
| DOC(s): | | | | |

(1) There must be an appropriate management structure defined in the COM. This management structure must have:

(a) clear lines of authority;

(b) specific duties and responsibilities; and

(c) defined mechanisms for delegation of duties to subordinates.

### 4.2.6 Management Duties & Responsibilities

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 106.02, 706.03 | 106.02, 706.03 | 106.02, 706.03 | 106.02, 706.03 |
| CASS: | 722.07(2)(a), (b)&(c) 722.82(1)(f)&(2) 726.03 | 723.07(2)(a), (b)&(c), A723.105(1)(f)&(2)(f), H723.105(1)(g)&(2), 726.03 | 724.07(2)(a), (b)&(c), 724.121(f) 726.03 | 725.07(2), 725.135(f) 726.03 |
| DOC(s): | | | | |

*Reserved*

## 4.2.7 Operational Control System

### 4.2.7.1 General

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.07(2)l, 702.12 | 703.07(2)l, 703.16 | 704.07(2)(f), 704.15 | 705.07(2)(g), 705.20 |
| CASS: | 722.12, 722.14, 722.82(1)(g) | 723.16, A723.105(1)(g)&(2)(g), H723.105(1)(h)&(2) | 724.15, 724.121(g) | 725.20, 725.135(g) |
| DOC(s): | | | | |

(1) General information on operational control systems can be found in section 3.3 of this volume.

(2) In evaluating an operational control system, the CASI should confirm that the applicant/operator has:

(a) clearly defined the responsibility for operational control in the COM, including a statement that the applicant/operator (i.e. the corporate entity named on the AOC) is ultimately responsible for operational control;

(b) outlined the duties and responsibilities of each personnel member in the operational control organization;

(c) included policies regarding operational control in the COM;

(d) defined the PIC and dispatcher co-authority relationship, and has a disagreement procedure in place;

(e) established the communications capabilities as required in the CASS;

(f) formulated and published emergency procedures and contingency plans in the COM, and has in place an occurrence reporting procedure for internal and TSB reporting;

(g) described a training program as outlined in the Commercial Air Service Standards that stipulates the curriculum and syllabus for initial and annual recurrent specific operational control training;

(h) designed a system to verify whether or not dangerous goods are on board an aircraft, and that dispatchers can access this information during emergency situations;

(i) provided procedures for handling the transportation of deportees, prisoners, carrying of weapons, etc. The easy access to this information by the dispatcher should be addressed in the operational control portions of the COM;

(j) outlined a process in the COM indicating how daily operations information is sent through the company to the flight dispatcher, and a check in place to insure the information is received by the flight dispatcher;

(k) included procedures on how MEL items are to be handled by the flight dispatch centre, including record keeping and forwarding of information to flight crew members

i. For example: technical dispatch should be required to advise the flight dispatcher well in advance that a weather radar is unserviceable rather than maintenance personnel advising the flight crew members when passengers are boarding;

(l) described how direct communications with ATC (enroute and control tower) will be established, including special procedures if applicable (e.g. code word used to talk with a tower operator); and

(m) incorporated a system to ensure mechanical defects are forwarded to the flight dispatcher.

i. This maintenance function (commonly known as Technical Dispatch) must be documented in the operational control system detailed in the COM.

(3) For evaluation/guidelines for approval of an operator's Maintenance Control System, per CAR 706.06, at the main base and outstations, see Chapter 8 of this volume.

#### 4.2.7.2 Flight Authorization

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.13 | 703.17 | 704.16 | 705.21 |
| CASS: | 722.82(1)(g)i)&(2)(g) | A723.105(1)(g)(i)&(2(g)((i), H723.105(1)(h)(i)&(2) | 724.121(g)(i) | 725.135(g)(i) |
| DOC(s): | | | | |

(1) For Cargo operators, and for all operations at locations where a lack of communications facilities prevents co-authority dispatch, authorization may come from the operations manager, chief pilot or the PIC.

(a) For the PIC to be designated to authorize a flight, COM procedures should include, at minimum:

i. the operations manager issuing to the PIC a written delegated authority for this task, including the conditions and limits of this authority; and

ii. the operations manager, chief pilot or his/her delegate are unavailable to authorize the flight.

##### 4.2.7.2.1 Technical Dispatch

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 706.06 | 706.06 | 706.06 | 706.06 |
| CASS: | 726.06 | 726.06 | 726.06 | 726.06 |
| DOC(s): | | | | |

(1) The COM should contain procedures to describe how operations personnel will liaise with persons responsible for Technical Dispatch (i.e.: Maintenance), in order to verify that the aircraft is ready for flight.

(2) The technical dispatch procedures must also include procedures for accurate empty weight and balance data to be available to the flight crew of the aircraft prior to each flight.

### 4.2.7.3 Operational Flight Plans

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.14 | | 704.17 | 705.22 |
| CASS: | 722.82(i)ii)&(2)(b) | 723.18, A723.105(1)(ii)&(2)(ii) | 724.17, 724.121(g)(ii) | 725.22, 725.135(g)(ii) |
| DOC(s): | | | | |

*Reserved*

#### 4.2.7.3.1 Issuance of a Revised Operational Flight Plan for Late Load

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | 705.22(1) |
| CASS: | | | | |
| DOC(s): | | | | |

(1) A flight may depart when the aeroplane take-off weight is higher than the planned take-off weight on the operational flight plan provided the following procedures are in place:

(a) the difference in weight is not greater than an amount previously approved by TCCA for a specific aeroplane type;

i. Industry has been using, as a guide, an amount close to 1.25% of the aeroplane maximum take-off gross weight.

(b) the operator develops a chart showing additional fuel required for significant increments in aeroplane weight;

(c) the PIC ensures, in accordance with this chart, that the extra fuel required is on board and take-off data is corrected accordingly;

(d) ,being advised of the revised take-off weight after take-off, the flight dispatcher completes a revised operational flight plan to ensure the flight may safely proceed to destination; and

(e) this procedure, including the maximum acceptable change in load and the chart in (b) for each aeroplane type operated, is specified in the COM.

(2) A revised operational flight plan must be issued to the flight crew when values in (1)(a) above are exceeded.

#### 4.2.7.3.2 Copy of the Operational Flight Plan at a Point of Departure

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | 703.18(2) | 704.17(2) | 705.22(2) |
| CASS: | | | | |
| DOC(s): | | | | |

(1) The pertinent details of each flight must always be in the possession of, and available to, a responsible ground-based authority.

(2) This operational flight plan may be:

(a) electronic or a printed copy; and

(b) left at a departure aerodrome or stored in a central location.

(3) The operational flight plan is to be immediately available for reference, should it be required by anyone involved in flight watch, operational control or emergency response, in connection with the flight.

#### 4.2.7.3.3 Operational Flight Plan Routing

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | A724.17(13) | 725.22(13) |
| DOC(s): | | | | |

(1) The PIC and flight dispatcher shall be aware of:

(a) the track to successive waypoints;

(b) the IAS required to achieve the filed TAS; and

(c) the forecast groundspeed.

(2) The above information must be available and utilized during the flight planning process and in flight.

(a) Where this information is included and utilized in computer flight planning calculations and is also available for in-flight use, TCCA may approve alternate methods for presentation of this information.

#### 4.2.7.3.4 Record of Persons on Board

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | A724.17(30), H724.17(2)(q) | 725.22(30) |
| DOC(s): | | | | |

(1) The PIC and flight dispatcher, or a responsible person at the point of departure (or other responsible ground-based party), shall have in their possession a record of the number of persons on board the aircraft, including passengers and crew members.

(a) The record shall be readily available for transmission to an appropriate agency in the event of an accident, incident or as otherwise required, and will include the names of the passengers;

(2) The PIC should be aware of the number of crew members on board and their respective positions.

(3) The flight crew must possess actual load data prior to departure, part of which is the actual number of persons on board. The persons-on-board count may, or may not, include crew members.

(a) If crew members are not included in the persons-on-board count, the flight dispatcher or other responsible ground-based authority must be aware of the number of crew members on board.

(4) The record shall show the number of infants carried on board and will indicate whether the infants are travelling on their own ticket or that of the accompanying parent/guardian.

(5) In order to ensure a consistent passenger count procedure for infants, the inclusion of infants in the passenger count conducted on board Canadian commercial aircraft is as follows:

(a) An infant secured in a lap-held position by a parent or guardian passenger is not counted as a passenger for purposes of determining the minimum number of flight attendants required on board an aircraft, and the maximum number of occupants authorized to be on board an aircraft.

Note: The infant is counted as a passenger for purposes of applying regulatory requirements such as those pertaining to oxygen, life preservers, survival equipment, and liability insurance (CAR 606.02).

(b) An infant secured in a restraint system is counted as a passenger for purposes of determining the minimum number of flight attendants required on board an aircraft, determining the maximum number of occupants authorized to be on board an aircraft, and applying regulatory requirements such as those pertaining to oxygen, life preservers, survival equipment, and liability insurance.

#### 4.2.7.3.4.1 Commuter Operations

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | N/A | N/A | 704.01 | N/A |
| CASS: | N/A | N/A | | N/A |
| DOC(s): | | | | |

#### 4.2.7.3.4.1.1 Aeroplanes

(1) Aircraft such as the DHC-6 Twin Otter weigh less than 19,000 pounds and were certified to carry more than 19 passengers, but are not configured for 20 or more seats in Canadian commercial air service.

(a) Provided the operator configures the aircraft to have no more than 19 seats (excluding pilot seats), DHC-6 operations may be considered under Commuter rules. (The 19,000 pound limit comes from the certification basis for 14 CFR Part 23 / section 523 of the CARs)

(b) There may be circumstances where the operator may want to restrict the number of passenger seats to nine or fewer. This would reduce performance requirements under some circumstances.

i. To take full advantage of this performance benefit, the operator should also consider changing their AOC to account for operations of this aircraft under Subpart 703 regulations.

#### 4.2.7.3.4.1.2 Helicopters

(1) All single-engine helicopters are to be operated under Subpart 703, regardless of the number of passenger seats.

(2) If an operator restricts the number of passenger seats to nine or fewer in a multi-engine helicopter, the operator may utilize that aircraft under a Subpart 703 certificate.

### 4.2.7.4 Flight Crew Awareness of Deferred Defects

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | 605.06-10, 706.05-06 | 605.06-10, 706.05-06 | 605.06-10, 706.05-06 | 605.06-10, 705.23, 706.05-06 |
| **CASS:** | 625.07-10, 722.82(1)(g)(iii) | 625.07-10, A723.105(1)(g)(iii) | 625.07-10, 724.121(g)(iii) | 625.07-10, 725.124(25), 725.135(g)(iii) |
| **DOC(s):** | | | | |

*Reserved*

### 4.2.7.5 Flight Watch / Flight Following Requirements

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | 702.13 | | | 705.20 |
| **CASS:** | 722.82(1)(g)(iv) &(2)(a) | 723.16(1)(d)&(2), A723.105(1)(g)(iv)&(2)(g)(iii), H723.105(1)(h)(iii)&(iii) & (2) | 724.15(1)(d), 724.121(g)(iv) | 725.20, 725.135(g)(iv) |
| **DOC(s):** | | | | |

(1) Both IFR and Night VFR operations require flight following.

### 4.2.7.6 Dissemination of Operational Information

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | | 703.07(2)l | 704.13 | 705.18 |
| **CASS:** | 722.82(1)(g)(v) &(2)(d) | A723.105(1)(g)(v)&(2)(g)(v), H723.105(1)(h)(iv)&(2) | 724.121(g)(v) | 725.135(g)(v) |
| **DOC(s):** | | | | |

(1) Dissemination of information may be done in any way that allows crews to receive it in a timely manner.

(a) If it is necessary for the safe conduct of the flight, it must be received prior to flight time.

(2) The distribution of information can be done through computer, manual amendments, flight dispatch, bulletin board notices, telephone calls etc.

(a) The method(s) must be outlined in the COM and, where flight attendants are carried, in the FAM.

(3) The procedure for acknowledgement of this information shall also be outlined in the COM.

(a) It can be accomplished in writing, verbally to a responsible company person who records the acknowledgement, or through other approved procedures.

(b) This could also be the pilot's signature on an operational flight plan, if SOPs require the pilot to check certain sources of information prior to the flight.

#### 4.2.7.7 Fuel & Oil Requirements

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 602.88 | 602.88, 703.20 | 602.88, 704.20 | 602.88, 705.25 |
| CASS: | 722.82(1)(g)(vi) & (2)I | 723.18(3) A723.105(1)(g)(vi)&(2)(g)(vi), H723.105(1)(h)(v)&(2)(h)(v) | 724.17(27), 724.121(g)(vi) | 725.25, 725.135(g)(vi) |
| DOC(s): | | | | |

*Reserved*

#### 4.2.7.7.1 Flight Planning Contingencies

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | 703.20 | 704.20 | 705.25 |
| CASS: | | | | |
| DOC(s): | | | | |

(1) Among contingencies, operators of pressurized aircraft must consider a loss of pressurization at any point along the route.

(a) The aircraft must be able to reach the origin, destination, or an enroute alternate after the completion of an emergency descent to 13,000 feet, cruise at 13,000 feet for 30 minutes and at 10,000 feet thereafter.

(b) If the single engine service ceiling is less than either 13,000 or 10,000 feet, then it must be used as the planned altitude for diversion.

i. Upon completion of the low-altitude cruise, the aircraft must have fuel sufficient to complete an approach and missed approach plus holding reserve.

(2) In the event that an operator wishes to use a higher altitude for diversion and can demonstrate that aircraft performance and passenger safety considerations can be met, the operator may be granted an exemption permitting the use of a higher altitude for diversion.

#### 4.2.7.7.2 Fuel Requirements to Alternate Aerodrome

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 602.88 | 602.88, 703.20 | 602.88, 704.20 | 602.88, 705.25(1) |
| CASS: | | | | 725.25(1) |
| DOC(s): | | | | |

(1) Fuel requirements in the applicable Part VII CAR and CASS are additional requirements to CARs section 602.88.

(2) Where fuel is required to "fly to and land at the alternate aerodrome", without specifying requirements to conduct an approach, the fuel on board should allow the flight to proceed to alternate considering known conditions at time of pushback.

(a) If the alternate aerodrome is forecast for VFR conditions at the time of arrival, no fuel is required for an approach at alternate.

(b) If the forecast weather is for IFR conditions and a full approach procedure is anticipated, fuel to carry out an approach at alternate shall be on board at take-off.

(3) Caribbean areas, as described in CASS 725.25(1)(b), have been illustrated in Appendix C of this volume.

#### 4.2.7.7.3 Fuel Requirements to Cruise at 10,000 ft Following Depressurization

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | 703.20(a)(i)(B) | 704.20(a)(i)(B) | 705.25(1)I(i)(B) |
| CASS: | | | | |
| DOC(s): | | | | |

(1) Requirements to carry the necessary fuel for diversion in case of cabin depressurization must be based on calculations at 10,000 feet altitude;

(2) Where an operator wishes to divert at an altitude higher than 10,000 feet, fuel requirements may be based on that altitude provided it may be demonstrated to TCCA that:

(a) the selected altitude is not above the aeroplane single-engine service ceiling;

(b) the cabin is capable of providing an adequate supply of heat and oxygen to all occupants for the duration of the diversion; and

(c) The determination of the suitability of an oxygen delivery systems will have to be coordinated with the Airworthiness Branch of TCCA.

#### 4.2.7.7.4 Computation of Distance to Take-Off Alternates

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | 703.30 | 704.26 | 705.34 |
| CASS: | | 723.30 | 724.26 | 725.34 |

| DOC(s): | |
|---|---|

(1) All computations of distances to take-off alternates referred to in the CARs and the CASS may be performed in still air conditions, not taking into account the effect of wind.

#### 4.2.7.8 Weight & Balance System

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | 703.37 | 704.32 | 705.39 |
| CASS: | 722.82(1)(g)(vii), (2)(f), (3)I, & (4)(f) | 723.37, A723.105(1)(g)(vii), (2)(g)(vii) & (3)I<br>H723.105(1)(h)(vi), (2) & (3)I | 724.32, 724.121(g)(vii) | 725.39, 725.135(g)(vii) |
| DOC(s): | AC 700-022, AC 703-004 (Segmented Weights), TP 14371 (RAC 3.4) | | | |

*Reserved*

##### 4.2.7.8.1 General

(1) Weight and balance can be manually or automatically derived.

- (a) When an operator elects to implement an automatic weight and balance system, it should be implemented as detailed in the COM, and in a representative part of the operation.
  - i. The previous method of weight and balance should be run as a shadow operation until the operator is satisfied that the new system is safe and meets the applicable requirements of the CARs.

(2) The operator can meet the requirements of the regulation and standard through various options. Some suggested methods are:

- (a) A complete weight and balance calculation.
- (b) The construction of tables that address the various possible passenger, fuel and cargo loadings.
- (c) Pre-calculated weight and balances for various configurations.

(3) C of G “location” may refer to a range of safe values contained in pre-calculated weight and balances.

- (a) The range of values should cover C of G at:
  - i. maximum permissible fuel; and
  - ii. minimum fuel.

##### 4.2.7.8.2 Duties and Responsibilities

(1) The operator should establish and describe in their COM the chain of responsibility for the loading and establishment of the weight and balance of the aeroplane for every flight.

(2) The operator should include technical dispatch procedures in accordance to their approved MCM to meet the requirements for the weight and balance program.

- (a) Refer to Chapter 8 of this volume for more details.

(3) Individuals, being either operator personnel or other personnel authorized by the operator to act on their behalf, must be accountable and identifiable, whether by signature or computer input identification, for load data or services provided in accordance with their duties and responsibilities as detailed in system.

#### 4.2.7.8.3 Operational Requirements

(1) The weight and balance system shall identify the following:

(a) How, before each flight, the operator will establish the accuracy of items listed in the applicable subsections of the CASS.

(b) The method of preparation and disposition of all required documentation, whether completed by the operator or other qualified personnel authorized by the operator to act on his behalf.

(c) Where suitable, the use of a load manifest:

i. containing, as a minimum, the following:

1. aeroplane registration and type;
2. flight number and date;
3. name of the PIC;
4. name of the person(s) who prepared the document;
5. aeroplane operational empty weight and centre of gravity;
6. weight of the fuel;
7. weight of consumables other than fuel;
8. components of the load including passengers, baggage, freight and ballast;
9. aeroplane zero fuel weight, take-off weight and landing weight;
10. load distribution and center of gravity position; and
11. names of passengers.

Note: All load manifest information need not appear on one individual document where such information is maintained by other means by the operator. All pertinent information must be retained for a period specified in the COM.

(d) The procedure to establish the maximum allowable weight for the flight, which must not exceed the lessor of the following weights:

i. maximum allowable take-off weight to meet performance requirements of the CARs; or

ii. maximum design take-off weight specified in the Aircraft Flight Manual.

(e) The procedure for the issuance of a revised weight and balance in situations of a “late load” (same procedure as operational flight plan in the CARs):

i. A flight may depart when the aeroplane take-off weight is higher than the planned take-off weight provided the following conditions are in place:

1. the difference in weight is not greater than an amount previously approved by TCCA for a specific aeroplane type (Industry has been using, as a guide, an amount close to 1.25% of the aeroplane maximum take-off gross weight but the specific amount in all cases must be approved by TC);

2. the PIC ensures the extra fuel required is on board and take-off data are corrected accordingly;
3. the flight dispatcher is advised of the revised take-off weight after take-off, and he/she completes a revised operational flight plan to ensure the flight may safely proceed to destination; and
4. this procedure and, for each aeroplane type operated, the maximum acceptable change in load in situations of a "late load" are specified in the COM.

ii. A revised weight and balance must be issued to the flight crew when values in (i)(1.) above are exceeded.

(f) Storage of weight and balance documentation (same procedure as operational flight plan in the applicable sections of the CARs):

i. TCCA shall be able to recreate the weight and balance data for the purpose of audit, inspection, investigation and flight safety.

ii. The operator is required to retain a copy of the weight and balance.

iii. Period of retention of weight and balance:

1. An operator shall retain a copy of the weight and balance forms, including amendments to the forms, for a period of not less than six months. The period of retention of weight and balance will be designated in the COM.
2. Consideration will be given to the volume of data and to the operator ability to comply with the regulation. For example, a new operator or an operator often found in non-compliance with the regulation may be obliged to have a retention period of one year to ensure data is available for conducting follow-up audits. A larger operator that is compliant with the regulation may be obliged to have a retention period of 6 months.

iv. Electronic storage of operational flight plan must meet the following criteria:

1. The operator must show that he has a system for safe storage of electronic data.
2. A hard copy must be retained for documents that require verification by signature, except where the operator has an approved system of electronic signature verification and document authenticity.
3. The operator shall have a documented plan detailing procedures for the recovery of all stored data. The operator's plan shall provide a list of the stored information pertinent to a flight and examples of the form and content of the data that can be recovered.
4. Retrieval of stored data must be presented in a format that is acceptable to TCCA, within 48 hours from the time of a request.

(g) Computerized systems:

i. Where load data are generated by a computerized weight and balance system, the operator must verify the integrity of the output data by a check to be performed at intervals not exceeding 6 months.

ii. There must be a means in place to identify the person inputting the data for the preparation of every load manifest and the identity must be retained in the system.

(h) On-board weight and balance systems – an operator must obtain approval to use an onboard weight and balance computer system as a primary source for dispatch.

(i) Datalink – when load data are sent to the aeroplane via datalink, a copy of the final data as accepted by the PIC must be available on the ground.

#### 4.2.7.8.4 Passenger and Baggage Weights

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR** | | 703.37 | 704.32 | 705.39 |
| **CASS** | | A723.37(3)<br>H723.37(2) | A724.32(3)<br>H724.32(b) | 725.39(3) |
| **DOC(s)** | AC 700-022, AC 703-004, TP 14371 (RAC 3.4) | | | |

(1) The methods used by the operator to compute the weight of passengers, carry-on baggage and checked baggage should be detailed in the COM.

(a) Options for passenger and carry-on weights are:

i. Actual weights

ii. Published Standard weights (NOT for 703 aeroplane operations)

iii. Survey weights / Air Operator Standard weights (NOT for 703 aeroplane operations)

iv. Segmented weights (Subpart 703 aeroplane operations only)

(b) Checked baggage should always be weighed.

(2) Details on the above methods can be found in AC 700-022, AC 703-004 and TP 14371.

#### 4.2.7.8.4.1 Air Operator Standard Weights (Survey)

(1) Operators have the option to submit operator standard passenger weights for approval and subsequently be authorized to use standard weights different from the published standard weights.

(2) The operator standard weights must be derived via an approved weighing survey and the statistical analysis method detailed in this guidance.

(a) After verification and approval by the Minister, the revised standard weights, applicable only to that operator, may be used in circumstances consistent with those under which the survey was conducted.

(3) Where operator standard weights exceed those published by the Minister, then such higher values must be used.

(4) Operator standard weights must be reviewed at intervals not exceeding five years.

(5) All adult standard weights must be based on a (male/gender x)/female ratio of 80/20 in respect of all flights except holiday charters which are 50/50.

(a) If an operator wishes to obtain approval for use of a different ratio on specific routes or flights, data from the weighing survey must be submitted on a flight by flight or route basis to support such a variation.

(6) Detailed weight survey plan:

(a) The operator should submit a detailed weight survey plan prior to conducting a weight survey.

i. The survey must be fully representative of the operation (i.e.; the network or route, time of year, in/outbound, etc.) for which the standard weights are intended to be used.

(b) The detailed plan must be specific in terms of weighing locations, dates, flight numbers and number of passengers/bags to be weighed in the survey.

(c) The actual survey must then be conducted in accordance with the plan and any deviations explained and the potential impact of the deviations on the survey results addressed.

(7) Passenger weight survey:

(a) Weight sampling method:

i. The average weight of passengers and their carry-on baggage must be determined by random sample weighing.

ii. The selection of random samples must, by nature and extent, be representative of the passenger volume, considering the type of operation, the frequency of flights on the routes, in/outbound flights, applicable season and seat capacity of the aircraft.

(b) Sample size – the survey plan must cover the weighing of at least the greatest of:

i. a number of passengers calculated from a sample survey of two weeks, using normal statistical procedures and based on a relative confidence range (accuracy) of 1% for all adult and 2% for separate average passenger weights (see paragraph c below); or

ii. for aeroplanes with a passenger seating capacity of:

1. 40 or more, a total of 2,000 passengers; or

2. less than 40, a total number of 50 x (the passenger seating capacity).

(c) Collecting data for passenger weights:

i. Adults and children:

1. Adults are defined as persons 12 years of age and above.

2. Adults are further classified as male, female or gender x.

3. No differentiation according to sex shall be made for children who are defined as persons from two years of age up to and including 11 years of age.

4. Passenger weights include the weight of their belongings which are carried onto the aircraft.

ii. Infants are defined as persons less than two years of age.

1. When taking random samples of passenger's weights, infants shall be weighed together with the accompanying adult.

iii. Weighing location:

1. The location for the weighing of passengers shall be selected as close as possible to the aircraft, at a point where a change in the passenger

weight by disposing of or by acquiring more personal belongings is unlikely to occur before the passengers board the aircraft.

iv. Weighing scales:

1. The scales to be used for passenger weighing shall have a capacity of at least 150 kilograms or 300 pounds;
2. The weight shall be displayed at minimum intervals of 500 grams or 1.0 pound; and
3. The scales must be accurate to within 0.5%, or 200 grams or 0.5 pounds, whichever is the greater.

v. Recording of data:

1. For each flight the weight of the passengers, the corresponding passenger category (i.e. male/female/gender x/children), the date and the flight number must be recorded.

(8) Baggage weight survey:

(a) Sampling size and sampling method:

i. The statistical procedure for determining operator standard baggage weights based on average baggage weights of the minimum required sample size is the same as for passengers as specified in subparagraph (3) above.

ii. For baggage, the relative confidence range (accuracy) is 1%.

iii. A minimum of 2,000 pieces of checked baggage or all the checked baggage associated with a passenger survey, whichever is greater, must be weighed.

(9) Statistical evaluation of passenger and checked baggage weight data:

(a) General:

i. To ensure that the use of operator standard weights for passengers and checked baggage does not adversely affect operational safety, a statistical analysis must be carried out.

1. Such an analysis will generate average weight values for passengers and baggage;
2. The analysis will, in addition, validate the values by establishing a statistical accuracy (confidence range) of the sample mean (standard weight);

(b) Consult with TCCA for guidance on the statistical method to be used to estimate the average passenger and checked baggage weights.

**4.2.7.8.4.2 Cargo Weights**

(1) Operators are requested to verify that the actual weights of cargo are used as intended in the standard, in their approved weight and balance system:

(a) The actual weight of cargo includes the weight of the contents, the packing material, the packaging, the pallet or unit load device (ULD), the strapping, the wrapping and any other device or material being transported with the cargo is accounted for in the total weight of the cargo.

i. This weight may be obtained by:

1. weighing each built pallet or ULD at the point of loading; or
2. adding the actual weight of all the components of each pallet or ULD.

(b) It is not acceptable to use the advertised weight of the product inside a box as the actual weight of the box.

i. The weight of the packaging and the box itself must be considered in addition to the weight of the product inside

### 4.2.7.9 Accident / Incident and Overdue Aircraft Reporting

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR** | 602.79 | 602.79 | 602.79 | 602.79 |
| **CASS** | 722.82(1)(g)(viii), (2)(g), (3)(g)&(i), & (4)(h)&(i) | A723.105(1)(g)(viii), (2)(g)(ix) & (3)(j)&(h)<br>H723.105(1)(h)(viii), (2) & (3)(j)&(h) | 724.121(g)(viii) | 725.135(g)(viii) |
| **DOC(s):** | TP 14371 (GEN 3.0) | | | |

*Reserved*

### 4.2.7.10 Use of Checklists

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | 602.60(1)(a) | 602.60(1)(a), 703.107 | 602.60(1)(a), 704.19 | 602.60(1)(a), 705.24 |
| **CASS:** | 722.82(1)(g)(ix) & (2)(h) | A723.105(1)(g)(ix), & (2)(g)(x)<br>H723.105(1)(h)(ix), & (2), 723.107 | 724.121(g)(ix) | 725.135(g)(ix) |
| **DOC(s):** | | | | |

(1) Checklists may be contained in the COM, or may be compiled in a separate document (for ease of use), and then referenced appropriately in the COM.

(2) The requirement to “follow” the checklist means “taken as a guide”.

(a) TCCA is expecting operators to comply with this requirement by having pilots read the appropriate checklist.

(b) Where this procedure is included in SOPs, checklist items may be accomplished through a flow or scan at first, followed by a reading of the checklist.

(3) The checklists referred to in the regulations can include placarded or memory items and use any method which complies with the approved aircraft flight manual or operations manual.

#### 4.2.7.11 Maintenance Discrepancy Reporting

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR** | 605.06-10, 706.05-06 | 605.06-10, 706.05-06 | 605.06-10, 706.05-06 | 605.06-10, 706.05-06 |
| **CASS** | 722.82(1)(g)(x) & (2)(i), 726.05-06 | A723.105(1)(g)(x), & (2)(g)(xi), H723.105(1)(h)(x), & (2) 726.05-06 | 724.121(g)(x) 726.05-06 | 725.135(g)(x) 726.05-06 |
| **DOC(s):** | TP 9155 | | | |

*Reserved*

#### 4.2.7.12 Sample OFP & Retention Periods

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | | | | |
| **CASS:** | 722.82(1)(h) | A723.105(1)(h) H723.105(1)(i) | 724.121(h) | 725.135(g)(xi) |
| **DOC(s):** | | | | |

*Reserved*

##### 4.2.7.12.1 OFP Document Retention

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | | 703.18(3), 703.87(2) | 704.17(3), 704.107(2) | 705.22(3) |
| **CASS:** | 722.82(1)(g)(xi) | A723.105(1)(g)(xi) & (2)(g)(viii) H723.105(1)(h)(vii) & (2) | 724.121(g)(xi) | 725.135(g)(xi) |
| **DOC(s):** | | | | |

(1) TCCA must be able to recreate the operational flight data for the purpose of audit, inspection, or investigation.

(2) The minimum details of the actual flight to be included on an operational flight plan are:

(a) the route flown;

(b) fuel on board at departure and landing; and

(c) times (out, off, on and in).

See the specific Subpart CASS for required elements of an operational flight plan.

(3) The period of retention of operational flight plans shall be:

(a) no less than 90 days for Subpart 705 operators; and

(b) no less than 180 days for Subpart 704 and 703 operators.

Consideration should be given to extending the period based on the operator's circumstances:

(a) Large operators may have significant volumes of data, making retention periods in excess of 90 days burdensome.

(b) Operators who show a lack of willingness to comply with the regulations may need enhanced monitoring, which would benefit from extended record keeping.

(c) New operators, not having an established record of operations will need to retain records for at least as long as to the first TCCA inspection, in order to facilitate a proper TCCA review.

(4) Electronic storage of operational flight plans is permitted as long as the following criteria are met:

(a) the operator must show that they have a system for safe storage of electronic data;

(b) a hard copy must be retained for documents that require verification by a signature, unless the operator has an approved system of electronic signature verification and document authenticity;

(c) the operator should have a documented plan detailing procedures for the recovery of all stored data. The operator's plan should provide a list of the stored information pertinent to a flight, and examples of the form and content of the data that can be recovered;

(d) the operational flight plan used by the operating crew (master) must be retained; and

(e) retrieval of stored data must be presented in a format that is acceptable to TCCA within 48 hours from the time of a request.

### 4.2.7.13 Sample Weight and Balance & Retention Periods

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR** | | | | 705.39 |
| **CASS** | 722.82(1)(h) | A723.105(1)(h)& (2)(g)(vii)<br>H723.105(1)(i)&(2) | 724.121(h) | 725.39,<br>725.135(h) |
| **DOC(s)** | | | | |

*Reserved*

### 4.2.7.13.1 Weight and Balance Document Retention

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR** | | | | 705.39(3) |
| **CASS** | 722.82(1)(g)(xi) | A723.105(1)(h)& (2)(g)(vii)<br>H723.105(1)(i)&(2) | 724.121(h) | 725.135(h) |

| DOC(s) | |
|---|---|

(1) The operator is required to retain copies of the weight and balance documentation when not incorporated in the operational flight plan.

(a) the period of retention of weight and balance will be designated in the COM and will be at least equal to the retention time for the operational flight plan.

(2) weight and balance data may be stored electronically if the criteria for OFP retention, as specified above in 4.2.7.12.1(4), are met.

## 4.2.8 Flight Data Recorder / Cockpit Voice Recorder Use

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 605.07(3), 605.33, 605.34 | 605.07(3), 605.33, 605.34 | 605.07(3), 605.33, 605.34 | 605.07(3), 605.33, 605.34 |
| CASS: | 722.82(1)(i) | A723.105(1)(i)<br>H723.105(1)(j) | 724.121(i) | 725.135(i) |
| DOC(s): | 551.101 of the *Airworthiness Manual Chapter 551*, AC 700-013, http://www.gazette.gc.ca/rp-pr/p2/2019/2019-05-29/html/sor-dors130-eng.html | | | |

(1) Changes to the requirements for and use of Flight Data Recorder (FDR) and Cockpit Voice Recorder (CVR) have been published in the Canada Gazette Part II.

(a) Sections 1, 2, 4, 7 & 8 are in effect as of May 29, 2019.

(b) Changes to the definitions of FDR and CVR, along with the requirement to have an operable recorder for Data Link Communications (if DLC is installed) took effect on May 29, 2023. (Sections 3, 5 & 6)

(2) The regulatory changes can be reviewed in the below webpage:

http://www.gazette.gc.ca/rp-pr/p2/2019/2019-05-29/html/sor-dors130-eng.html

## 4.2.9 Operating Weather Limits

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 602.96(2)(b), 602.114-117, 602.121-122, 602.131<br>702.17-18 | 602.96(2)(b), 602.114-117, 602.121-122, 602.131<br>703.27-34 | 602.96(2)(b), 602.114-117, 602.121-122, 602.131,<br>704.23-29 | 602.96(2)(b), 602.114-117, 602.121-122, 602.131,<br>705.32-37 |
| CASS: | 722.17-18, 722.82(1)(i) | A723.105(1)(j)&(2)(h)<br>H723.105(1)(k)&(2)(i) | 724.121(j) | 725.135(j) |
| DOC(s): | CAP GEN: Aerodrome Operating Restrictions | | | |

*Reserved*

#### 4.2.9.1 Requirements Concerning Operations in Night Visual Flight Rules (NVFR)

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 602.114-115, 602.117, 702.18 | 602.114-115, 602.117, 703.27(a), 703.34 | 602.114-115, 602.117, 704.23(a), 704.29 | 602.114-115, 602.117, 705.32(b), 705.37 |
| CASS: | | | | |
| DOC(s): | | | | |

(1) The COM must include information and direction pertaining to NVFR operations.

### 4.2.10 Aircraft Instrument & Equipment Requirements

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 605.14-18, 605.22-42, 702.42-43 | 605.14-18, 605.22-42, 703.64-69 | 605.14-18, 605.22-42, 704.62-69 | 605.14-18, 605.22-42, 705.67-84, 705.93, 705.104 |
| CASS: | 722.82(1)(k) | A723.105(1)(k), H723.105(1)(l) | 724.121(k) | 725.81, 725.135(k) |
| DOC(s): | 525.795 of the *Airworthiness Manual Chapter 525* | | | |

*Reserved*

#### 4.2.10.1 Instrumentation available for pilot flying

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 605.14, 605.15, 605.16, 605.18 | 605.14, 605.15, 605.16, 605.18 | 605.14, 605.15, 605.16, 605.18 | 605.14, 605.15, 605.16, 605.18 |
| CASS: | | | | |
| DOC(s): | | | | |

(1) The aircraft instrumentation available to the pilot must be in his/her primary field of vision.

(a) Primary field of vision is defined as that area right in front of the person.

i. This does not include cross-cockpit or on a floor mounted pedestal that requires a person's head to turn to view the object or area clearly.

(2) Appropriate navigation instruments are those required for the phase of flight of the aircraft; if on ILS approach an ILS, if on NDB enroute an NDB, etc.

Note: A pilot vectored approach increases crew workload as it requires that both pilots direct their attention at a single task during a critical phase of flight. A pilot vectored approach is not an acceptable alternative to an appropriate navigation instrument.

### 4.2.10.2 Interphone System

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | N/A | N/A | N/A | 705.73 |
| CASS: | | | | |
| DOC(s): | | | | |

(1) The interphone system and the public address system must be able to be operated independently.

(a) The exceptions are the handsets, headsets, microphones and selector switches that can be common to both systems.

For example, the switch that enables the user to go from public address to intercom may be inoperative; however, this does not necessarily prevent the operator of the system from making a public address announcement.

Similarly, if the public address handset becomes inoperative (e.g. the press bar or its connection has a short in it), that defect may not prevent the operator of the system from using the same handset to operate in the intercom mode.

(2) The aircraft cannot be dispatched with passengers on board with the interphone system inoperative.

(3) The interphone system should meet the following requirements:

(a) It must provide a means of two-way communication between the flight deck and

i. each passenger compartment; and

ii. each galley located on other than the main passenger deck level;

(b) It must be accessible for immediate use from each of two flight crew member stations in the flight deck;

(c) It must be accessible for use from at least one normal flight attendant station in each passenger compartment;

(d) It must be capable of operation within 10 seconds by a flight attendant at those stations in each passenger compartment from which its use is accessible; and

(e) For large turbojet-powered airplanes:

i. It must be accessible for use at enough flight attendant stations so that all floor-level emergency exits (or entryways to those exits in the case of exits located within galleys) in each passenger compartment are observable from one or more of those stations so equipped;

ii. It must have an alerting system incorporating aural or visual signals for use by flight crew members to alert flight attendants and for use by flight attendants to alert flight crew members; and

iii. The alerting system must have a means for the recipient of a call to determine whether it is a normal call or an emergency call.

### 4.2.10.3 Lavatory Fire Protection

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | N/A | N/A | N/A | 705.76I |
| CASS: | | | | |
| DOC(s): | CBAAC No. 0102R | | | |

(1) The *Non-Smokers Health Act* prohibits smoking on a scheduled commercial flight.

(a) There remains a requirement for ashtrays to be installed where such installation is required by the aircraft design standards to comply with Airworthiness Directive (AD) 74-08-09 issued by the FAA and adopted by TCCA.

i. This AD provides for some time limited relief for ashtrays required for lavatory fire protection and relief has been included in MMELs and TC Supplements to ensure that the relief is included in MMELs where appropriate.

1. Where such MEL relief is sought but not yet provided for in the MMEL, or TC Supplement, the operator is advised to submit a formal request to TCCA Aircraft Certification (Flight Test) for consideration.

(2) Transport Canada MMEL Global Change 7 also addresses the relief for inoperative or missing exterior lavatory door ashtrays.

### 4.2.10.4 Approval of Flight Attendant Stations

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | N/A | N/A | N/A | 705.41 |
| CASS: | N/A | N/A | N/A | 725.41 |
| DOC(s): | | | | |

(1) The regulation and its standard were introduced to ensure that at least the minimum number of flight attendants for the aeroplane would be required to occupy a seat that met standards that were reflective of the airworthiness requirements.

(2) The actual installation approval for the flight attendant seat is done in accordance with instructions from the manufacturer or as a supplemental type certificate (STC).

(a) CASI-Cabin Safety normally do not have any direct involvement with that approval process.

i. CASI-Cabin Safety generally do not have the engineering knowledge to assess and grant approval to a seat meeting paragraphs 725.41(1)(a), (b), or (c) of the CASS.

ii. CASI-Cabin Safety can review and grant approval to the operator's procedures in accordance with paragraphs 725.41(d), (e), and (f) of the CASS.

## 4.2.11 Instrument Approach Procedures

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 602.127-131 | 602.127-131, 703.34, 703.41 | 602.127-131, 704.37 | 602.127-131, 705.47-48 |
| CASS: | 722.82(1)(i) | A723.105(1)(l), H723.105(1)(m) | 724.121(m) | 725.135(l) |
| DOC(s): | | | | |

*Reserved*

### 4.2.11.1 Landing Surface and Wind Conditions

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | 703.40 | 704.36 | 705.47 |
| CASS: | | | | |
| DOC(s): | | | | |

(1) "Immediately prior to landing" or "immediately before landing" is not meant to imply that radio or other procedures should take precedence over proper cockpit and crew discipline during a critical phase of flight.

(a) It is only necessary that the PIC be aware of, and satisfied that, the wind and surface conditions permit a safe landing to be accomplished within the confines of the runway;

(2) There are numerous means to acquire the necessary information including, but not limited to, ATIS, tower winds, FSS reports, pilot reports, current JBI, and braking reports from previously landed aircraft.

## 4.2.12 Company Routes in Uncontrolled Airspace

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | 703.34 | 704.29 | 705.37 |
| CASS: | | 723.34, A723.105(1)(m), H723.105(1)(n) | 724.29, 724.121(m) | 725.37, 725.135(m) |
| DOC(s): | | | | |

*Reserved*

## 4.2.13 Enroute Procedures

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | 705.124 |

| | | | | |
|---|---|---|---|---|
| **CASS:** | 722.82(1)(m) | 723.98(19)-(22)<br>A723.105(1)(n),<br>H723.105(1)(o) | 724.115(22),<br>724.121(n) | 725.124(27),<br>725.135(n) |
| **DOC(s):** | | | | |

*Reserved*

#### 4.2.13.1 Enroute Limitations – Two Engines Inoperative

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | 705.59 |
| **CASS:** | | | | |
| **DOC(s):** | | | | |

(1) For aircraft with three or more engines, there are two options to ensure that an adequate level of safety is maintained. The operator can:

(a) plan an alternate within 90 minutes of the route that meets 705.60; or

(b) ensure that the enroute altitudes are sufficient in case of the failure of two engines.

This is a dispatch function and does not limit the course of action of the PIC under actual circumstances.

#### 4.2.13.2 Airports/Aerodromes/Heliport for inclusion on an AOC

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR** | N/A | 703.15 | 704.14 | 705.19 |
| **CASS** | | | | |
| **DOC(s)** | TP 312, AC 302-019, AC 602-005 | | | |

(1) Before an operator is approved to operate an air service to/from an airport, aerodrome or heliport, the airport/aerodrome/heliport shall be assessed by TCCA as safe for the aeroplane/helicopter type being operated.

(a) Approval of the airport/aerodrome/heliport will be indicated by the inclusion of these locations on the AOC as either bases or scheduled points.

(2) ALL airports/aerodromes/heliports that an operator plans to use (whether they end up being destinations or alternates, based on daily weather considerations during operations) need to be submitted for approval.

(3) For the purposes of this section a military aerodrome is considered to be a certified airport.

(4) Refer to TP 312 for criteria against which an aerodrome will be evaluated before the above-mentioned approval is given.

(5) The following is a summary of these requirements:

(a) navigation aids, approach aids, runway length, runway surface, facilities, and obstacle clearance criteria are such as to permit safe operation of the aircraft type under consideration; and

(b) an obstacle clearance assessment must be accomplished to ensure compliance with appropriate performance requirements.

(6) Further guidance and direction on the suitability of an aerodrome for use in passenger service can be found in examining the Aircraft Group Number (AGN) associated with the aerodrome in question. Aerodromes are commonly assessed and given an AGN, which denotes the size and scope of aircraft that can operate from and to the aerodrome.

(a) When requesting the addition of an aerodrome as a scheduled point to their AOC an operator should confirm that the AGN for that aerodrome adequately covers the operation of the aircraft they plan to operate to and from that aerodrome.

(b) Inspectors should in turn verify the aerodrome AGN is adequate for the planned aircraft operations.

(c) Operators should consider providing guidance for their pilots on where AGN's can be found, and how these AGN's can be compared to the aircraft types the pilots will be flying, in order for the pilot to ascertain that operations are appropriate.

(d) Guidance on the use of AGN, and the criteria used to determine them, can be found in TP 312 – 5th Edition, AC 302-019, and AC 602-005.

#### 4.2.13.2.1 Narrow Runway Operations

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | |
| DOC(s): | AC 525-014 | | | |

(1) The minimum runway width is that which is sufficient to allow the aeroplane to be safely controlled during take-off and landing using procedures, which can be consistently executed in service by crews of average skill.

(a) The width shall be sufficient to prevent any landing gear wheel from leaving the runway during take-off and landing in expected operating conditions, including engine failure.

(2) Operators need to be aware that their aeroplanes may not meet the criteria for their type certification, unless they operate in accordance with the appropriate approved data.

(3) Operators who plan to operate on an airport with runways less than 150 feet wide, should check whether the manufacturer has published procedures for doing so in an AFM Supplement.

(a) If no AFM approved data exists, operators should contact the particular aircraft manufacturer and request that the manufacturer seeks TCCA, Aircraft Certification approval for the desired minimum runway width.

(4) Canadian AFMs pertaining to the operation of aircraft from narrow runways contain the following statement:

"This supplement does not constitute approval to conduct operations from narrow runways".

In order to be compliant with the above statement, it is recommended that operators detail in their COM their procedures for operating into and out of an airport with narrow runways.

#### 4.2.13.2.2 Uncertified Aerodromes/Heliports for Scheduled Service Operations

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | N/A | 703.15 | 704.14 | 705.19 |
| CASS | | A723.15 | 724.14 | |
| DOC(s) | | | | |

(1) TCCA must assess an uncertified aerodrome/heliport as safe for the aircraft type that is being operated before its use in scheduled service.

#### 4.2.13.2.2.1 General Procedures

(1) Upon receipt of a request from an applicant/operator to provide a scheduled passenger service using a particular aerodrome/heliport, the following procedures shall be followed:

(a) A CASI-Aerodrome Safety confirms that all listed aerodromes/heliports on form 26-0045 are appropriate for the aircraft planning to utilize them; and

(b) Aerodrome Safety checks whether the aerodromes/heliports are certified or uncertified;

i. If the aerodromes/heliports are “certified”, the CASI-Aerodromes Safety annotates the Job Aid to confirm all aerodromes/heliports are appropriate.

ii. If any aerodrome/heliport is determined to be “uncertified”:

1. the CASI-Aerodrome Safety will request pertinent information on the aerodrome/heliport from the aerodrome/heliport operator;

2. when the aerodrome/heliport operator has supplied the information to Aerodrome Safety, a joint inspection by Aerodrome Safety and Flight Operations will be conducted (refer to section 6.5.3.2(1) of this volume); and

3. should that inspection indicate that the aerodrome/heliport is appropriate for the service:

a. the CASI-Aerodrome Safety will confirm such on the Job Aid, and

b. The CASI-Flight Operations will ensure the resultant AOC will contain an authorization for that aerodrome/heliport (refer to section 4.2.13.2.1.2, below).

#### 4.2.13.2.2.2 Issuing an Authorization for an Uncertified Aerodrome/Heliport

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | N/A | 302.01(2)(b), 302.01(3), 703.15(2) | 302.01(2)(b), 302.01(3), 704.14(2) | 302.01(2)(b), 302.01(3), 705.19(2) |
| CASS | | | | |
| DOC(s) | | | | |

(1) The Minister shall issue an authorization to an operator for the use of an uncertified aerodrome/heliport for use in scheduled passenger services where it is possible to specify the conditions that will ensure a level of safety in respect of the use of the aerodrome/heliport that is equivalent to the level of safety established by Subpart 302.

(a) These conditions shall be contained on the operator's AOC.

(2) Once all terms and conditions (as listed in section 6.5.3.2(1) in this volume) have been met, the following authorizations shall be issued:

(a) Aerodrome Standards shall issue an Aerodrome/Heliport Authorization specifying the terms and conditions of the authorization to the aerodrome/heliport operator; and

(b) Flight Operations shall issue an amendment to the air operator certificate (AOC), to include in the "Special Conditions" page (AOC Part I, page 2):

i. "Scheduled passenger services are authorized for";

ii. the name of the aerodrome/heliport;

iii. "using";

iv. the aircraft type and registration (if deemed necessary) of aircraft authorized for this aerodrome/heliport; and

v. "provided the operator adheres to the following conditions:

A company representative shall be present at the aerodrome/heliport for all departures and arrivals of the operator's flights and shall:

1. provide runway/helipad condition and any other necessary information to pilots to ensure a safe operation by the means of two-way radio communication and telephone;

2. ensure that the runway/helipad is maintained and clear of any obstructions;

3. restrict access to the aerodrome/heliport by any unauthorized persons; and

4. maintain a journal listing the conditions of the runways/helipads at the time of departures and arrivals of the company aircraft."

## 4.2.14 Operations in Hazardous Weather Conditions

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 602.11 | 602.11, 703.65 | 602.11, 704.63-65 | 602.11, 705.70-71 |
| CASS: | 722.76(10,(12),(14)&(21), 722.82(1)(n) & (2)(k) | A723.105(1)(o) & (2)(i), H723.105(1)(p) & (2)(j) | 724.121(o) | 725.135(o) |
| DOC(s): | | | | |

*Reserved*

## 4.2.15 Aircraft Performance Limitations

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 602.07, 602.32 | 602.07, 602.32 | 602.07, 602.32, 704.43-52 | 602.07, 602.32, 705.54-61 |
| CASS: | 722.82(1)(o)&(2)(l) | A723.105(1)(p)&(2)(j), H723.105(1)(q)&(2)(k) | 724.121(p) | 725.54, 725.135(p) |
| DOC(s): | AC 700-016, AC 700-049, AC 704-002 | | | |

(1) On occasion manufacturers will publish information/material that has not been approved during aircraft certification.

(a) "Non-approved" material can generally be divided into two types:

**i.** Information which was not required for the certification of the aircraft.

**ii.** Information that did not meet the safety/performance level required during certification of the aircraft.

(b) In all instances where this type of material is referenced, operators should only utilize it applying appropriate caution.

### 4.2.15.1 Operations To or From Unprepared Surfaces- Aeroplanes

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | 704.52 | |
| CASS: | | | | 725.54(1)(b) |
| DOC(s): | AC 700-011, AC 704-002 | | | |

(1) In the context of this standard, unprepared surfaces are defined in AC 700-011.

(2) Subpart 705 operations to or from an unprepared surface requires the applicant/operator to obtain a SA.

(a) Details on this SA can be found in Volume 3 of this manual series.

(b) Training and line indoctrination experience on unprepared surfaces is required when planning operations on to any surface not specifically addressed in the AFM.

i. This training and experience may be acquired while operating as second in command on the same aircraft type.

### 4.2.15.2 Operations using other than approved performance data

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.54(1)(b) |
| DOC(s): | | | | |

(1) This standard also applies to a ski-equipped aeroplane such as the DC-3.

### 4.2.15.3 Visual departures – Aeroplanes – Net Take-off Flight Path

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | 704.47 | 705.57 |
| CASS: | | | | 725.54(3) |
| DOC(s): | AC 700-016, AC 704-002 | | | |

*Reserved*

### 4.2.15.4 Turns Exceeding 15 Degrees of Bank – Aeroplanes

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | 704.47(2)(c) | 705.57(3) |
| CASS: | | | | |
| DOC(s): | AC 700-016, AC 704-002 | | | |

(1) Performance criteria for net take-off flight path banks up to 15 degrees are defined in the applicable regulation.

(a) For an applicant/operator that wish to use greater than 15 degrees of bank, a SA is available.

i. Guidance on the SA, including the requirements for COM procedures and training, can be found in Volume 3 of this manual series.

### 4.2.15.5 Dispatch Limitations - Landing at Destination – Aeroplanes

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | 704.49 | 705.60 |
| CASS: | | | | |
| DOC(s): | AC 704-002 | | | |

(1) An aircraft shall not be dispatched nor shall it depart for a destination airport unless the required landing distances are available at destination or the alternate.

(2) Once airborne, if a runway closure or other unforeseen circumstances reduce the runway length available, the flight may be continued to the planned destination provided that the performance calculations show that a safe landing can be accomplished within 100% of the landing distance available.

(3) Where an aircraft malfunction in flight increases the landing distance required, the flight may be continued to the planned destination provided that the performance calculations for the malfunction show that a safe landing can be accomplished within 100% of the landing distance available.

(4) There is some relief to landing distance factors. A destination that normally satisfies all dispatch factors may still be used on days when ambient conditions preclude compliance, provided the operator files an alternate that fully meets all dispatch limitations.

(a) This relief provision is not compatible with No Alternate IFR. For these purposes an ISA day and 5 knots of headwind may be considered "Normal". An operator may other conditions as "normal" when authorized by their respective Region.

#### 4.2.15.6 Dispatch Limitations - Wet Runway - Turbojet Powered Aeroplanes

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | 704.50 | 705.61 |
| CASS: | | | | |
| DOC(s): | | | | |

(1) AFMs may not contain wet runway landing distance performance information.

(a) In this case an air operator must provide supplementary performance information that is approved by a competent regulatory authority to demonstrate compliance with the regulation.

(2) If a flight has been planned to a dry destination and unforeseen precipitation makes the planned runway wet, the flight can continue so long as the landing distance available at the destination airport is at least 15% greater than the landing distance required.

#### 4.2.15.7 Take-Off Minima - Weather below Landing Limits

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | N/A | 703.30(1) | 704.26(1) | 705.34(1) |
| CASS: | N/A | 723.30(1) | 724.26(1) | |
| DOC(s): | | | | |

(1) For a Subpart 703 or 704 applicant/operator to include these types of operations in their procedures, a SA is required.

(a) Guidance on the SA, including the requirements for COM procedures and training, can be found in Volume 3 of this manual series.

#### 4.2.15.8 Take-off RVR 1200 - Weather below Published Take-Off Minima

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.02 | 703.30(3) | 704.26(3) | 705.34(3) |
| CASS: | 722.08 | A723.30(2) | A724.26(2) | 725.34(1) |
| DOC(s): | | | | |

(1) For a Subpart 705 applicant/operator to include these types of operations in their procedures, a SA is required.

(a) Guidance on the SA, including the requirements for COM procedures and training, can be found in Volume 3 of this manual series.

#### 4.2.15.8.1 Aeroplanes with Certified Engine-Out Performance

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | 702.02 | 703.30(3) | 704.26(3) | N/A |
| **CASS:** | 722.08(4) | A723.30(2)(a) | A724.26(2)(a) | N/A |
| **DOC(s):** | | | | |

(1) For an applicant/operator to include these types of operations in their procedures, a SA is required.

(a) Guidance on the SA, including the requirements for COM procedures and training, can be found in Volume 3 of this manual series.

(2) Certified engine-out take-off information is performance information that has been certified to be correct by a Civil Aviation Authority (TCCA, FAA, EASA etc). This is the basis for ensuring in the event of a loss of one engine the aeroplane will be able to meet specific performance requirements.

(3) It is up to the air operator to ensure that the aeroplane will meet the unique take-off performance requirements for the particular runway in use or aerodrome.

(4) If the manufacturer has performance information that has not been certified, an air operator may request their manufacturer to apply to TCCA for review and approval of their performance information. Should this information meet the applicable requirements, then the air operator could achieve the same operational limits as those aircraft with certified performance data.

#### 4.2.15.8.2 Aeroplanes without Certified Engine-Out Performance

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | 702.02 | 703.30(3) | 704.26(3) | N/A |
| **CASS:** | 722.08(5) | A723.30(2)(b) | A724.26(2)(b) | N/A |
| **DOC(s):** | | | | |

(1) Aeroplanes that are not certified for continued takeoff and climb in the event of an engine failure may not be able to safely continue a take-off in the event of an engine failure during take-off. .

(2) In many cases a manufacturer may have available "unapproved" or advisory information that describes engine-out takeoff performance. There may exist combinations of aircraft weight and ambient conditions that permit a sustained climb after takeoff with an engine inoperative. This information, although not subject to the same certification scrutiny as approved AFM performance information may be authorized for use, to permit these aircraft to operate in reduced visibilities. The performance requirements are set out in the Standard.

(3) Flight training for RVR 1200 take-offs is required to be conducted in a Level B or higher simulator, because of the potential hazards and difficulty of conducting this flight training in an aeroplane during RVR 1200 visibilities.

## 4.2.16 Securing of Cargo / Bags

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 602.86 | 602.86 | 602.86 | 602.86 |
| CASS: | 722.82(1)(p)&(2)(m) | A723.105(1)(q)&(2)(k), H723.105(1)(r)&(2)(l) | 724.121(q) | 725.135(g) |
| DOC(s): | 551.500 of the *Airworthiness Manual Chapter 551* | | | |

### 4.2.16.1 Securing Cargo or Baggage on Passenger Seats

(1) The PIC of an aircraft has the regulatory authority to restrain carry-on baggage, equipment and cargo using whatever means he/she determine is adequate.

(2) Baggage, equipment and cargo that is transported in the passenger compartment of an aircraft should be stowed or restrained in a manner that ensures continued compliance with the applicable operating regulations (such as section 602.86), as well as the standards of airworthiness specified in the basis of certification for the aircraft (if applicable).

(3) During initial certification of an aircraft, the manufacturer will demonstrate that each seat will restrain its occupant under the applicable ground, flight and emergency landing loads using the safety belt provided as part of the type design.

- (a) For some designs this certification will also demonstrate the retention of under seat baggage where the design provides a restraint for this baggage.

(4) Passenger seats and safety belts are specifically designed and approved for the carriage and retention of human beings. As such, they permit the use of a restraint whose shape and flexibility provide adequate occupant restraint when exposed to the applicable load conditions.

- (a) If objects, other than a person, are placed on the seat and the safety belt alone is used for retention, it may require additional consideration in order to prevent any movement or weight shift of the object during dynamic flight, or to meet requirements in the aircraft basis of certification (if applicable).
  - i. This may include a demonstration of compliance with restraint requirements and all emergency features and evacuation requirements that may be affected.
  - ii. If an item of equipment required by the certification or operating regulations (such as a life raft) is intended to be restrained on a seat, additional considerations such as access and marking requirements may also be relevant.
- (b) Additional means to successfully restrain seat loaded baggage or cargo may be necessary, such as nets or covers.
  - i. Any additional means, and its installation in each aircraft in which it is to be used, shall be approved by the Minister.
    1. Persons delegated with authority to approve on behalf of the Minister include Design Approval Representatives (DARs) and Airworthiness Engineering Organizations (AEOs)).

## 4.2.17 Passenger Safety Briefing

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 602.89, 702.16, 702.23 | 602.89, 703.38, 703.39 | 602.89, 704.34, 704.35 | 602.89, 705.16, 705.40, 705.43, 705.44 |
| CASS: | 722.23, 722.82(1)(q)&(2)(n) | 723.38, 723.39, A723.105(1)(r)&(2)(l), H723.105(1)(s) | 724.34, 724.35, 724.121(r) | 725.40, 725.43, 725.44, 725.135(r) |
| DOC(s): | AC 700-012 | | | |

(1) The intent of this regulation and standard is to ensure that all of the required areas of concern are briefed.

(a) The operator has some discretion on how and when the passenger safety briefing may be accomplished. The circumstances of the operation will determine what procedures work the best.

i. The briefing may be completed before embarkation of the passengers, after the passengers are embarked, or any time during taxi that is convenient.

ii. The briefing prior to passenger disembarkment can be completed any time after landing. It is recommended that the briefing be done immediately before allowing the passengers to disembark

(2) For the purpose of the briefing in the event of an emergency, the phrase "when time and conditions permit" allows the pilot the discretion to utilize his/her time and resources in the best way that the pilot sees fit.

### 4.2.17.1 Visual and Aural Control of Passengers

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | N/A | | 704.33(1)(e) | N/A |
| CASS: | | | | |
| DOC(s): | | | | |

(1) The requirement for visual and aural supervision of passengers is required to perform safety-related duties and to manage the passengers in an emergency situation.

(a) This means direct (line of sight) visual contact with the passenger cabin, which enables the flight crew member to be made aware of passenger needs relative to safety when the flight crew member is seated with their restraint system (safety belt and shoulder harness) fastened.

(b) The flight crew should be able to both see and to hear the passengers.

Note: On aircraft where flight crew members cannot exercise supervisory control over the passengers by visual and aural means, a cabin crew member is required, as is identified in Subparts 604 and 705.

Subparts 703 & 704 do not give allowance for an operator to carry a cabin crew member when the flight crew cannot supervise control of the passengers.

### 4.2.17.2 Safety Features Cards

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | N/A | 703.39(3) | 704.35 | 705.44 |
| **CASS:** | N/A | 723.39(4) | 724.35 | 725.44 |
| **DOC(s):** | | | | |

**Applicant/operator to submit:**
**Safety Feature Cards**
**CR COM 70X**

**TCCA to complete:**
**CR COM 70X**

(1) SFCs and supplemental briefing cards do not require Ministerial approval (i.e.; they are reviewed and accepted by TCCA). The applicant/operator is responsible for ensuring that:

(a) the SFC is developed in accordance with regulatory requirements and meets the standard. (i.e.; TCCA does not conduct QA for individual operators); and

(b) the information provided on the SFC continues to be accurate for the aircraft type, configuration and equipment carried on board, for the aircraft in which the SFC is used.

(2) Safety Feature Cars should be developed using both the applicable CASS, and the relevant section of the CR COM 70X.

(a) Applicant/operators need to complete and submit the CR COM 70X with their SFC.

(b) CASI-Cabin Safety should verify the content, using the submitted CR COM 70X to guide the check.

(3) In the case where an applicant/operator has hired a third-party contractor to produce their SFCs, and the contractor submits a SFC and accompanying CR COM 70X to the CASI-Cabin Safety on behalf of the operator, it is recommended that the CASI-Cabin Safety first request authorization from the operator to communicate with the contractor directly.

(a) This authorization should include the intent of the communications and specific details regarding the task, and should be kept on the operator's file.

(4) All depictions should be simple and easy to understand.

(a) Symbols used in a passenger safety briefing card should be easily recognized and understood by a member of the travelling public.

(b) SFC should be tested for comprehension in accordance with recognized standards. Examples of testing methods can be found in the following documents:

i. ISO 9186 — Graphical symbols — Test methods; and

ii. ANSI Z535.3-2011 — Criteria for Safety Symbols — Annex B — General Procedures for Evaluating Candidate Safety Symbols.

## 4.2.18 Use of Company Aircraft Operating Manuals

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 605.04, 702.84 | 605.04, 703.107 | 605.04, 704.123-124 | 605.04, 705.137-138 |
| CASS: | 722.82(1)(r)&(2)(o), 722.84 | A723.105(1)(s)&(2)(m), H723.105(1)(t)&(2)(m) 723.107 | 724.121(s), 724.123-124 | 725.135(s), 725.137-138 |
| DOC(s): | | | | |

(1) Where an operator determines that guidance on aircraft operating procedures would be better handled in a separate manual, the operator can develop a dedicated aircraft AOM.

(2) The use of the AOM should be described in the COM.

## 4.2.19 Aircraft In-Flight Ice, Frost and Snow Critical Surface Contamination Procedures

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 602.11, 702.24 | 602.11, 703.42 | 602.11, 704.63 | 602.11, 705.69 |
| CASS | 722.82(1)(s)&(2)(p) | A723.105(1)(t)&(2)(n), H723.105(1)(u)&(2)(n) | 724.121(t) | 725.135(t) |
| DOC(s) | AC 700-030 | | | |

*Reserved*

## 4.2.20 Carriage of Dangerous Goods

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.82(1)(t)&(2)(q) | A723.105(1)u), (2)(o)&(3)(k), H723.105(1)(v), (2)(o)&(3)(k) | 724.121(u) | 725.135(u) |
| DOC(s): | | | | |

(1) All operators transport dangerous goods (DG) either as cargo, mail and/or in passenger and crew baggage.

(a) Every operator requires a SA for the carriage of DG.

i. Details on the requirements to obtain this SA are contained in Volume 3 of this manual series.

(b) Every operator must describe in their COM all procedures related to the handling of DG. These procedures may be:

i. An approved “awareness program”, where the operator is listed on their AOC as not carrying DG as cargo and/or mail. (i.e.; “NO” on the SA)

ii. A fully approved handling program for DG carried as cargo and/or mail. (i.e.; “YES” on the SA).

(2) Further guidance on dangerous goods legislation and requirements can also be found in Section 10.2 of this volume.

## 4.2.21 Fuelling Procedures

### 4.2.21.1 Fuel Contamination

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 625.88, 722.82(1)(u)&(2)(r) | 625.88, A723.105(1)(v)&(2)(p), H723.105(1)(w)&(2)(p) | 625.88, 724.121(v)(i) | 625.88, 725.135(v)(i) |
| DOC(s): | | | | |

*Reserved*

### 4.2.21.2 Aircraft Bonding

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.82(1)(u)(ii) & (2)(r)(ii) | A723.105(1)(v)(ii) & (2)(p)(ii) H723.105(1)(w)(ii) & (2)(p)(ii) | 724.121(v)(ii) | 725.135(v)(ii) |
| DOC(s): | TP 14371 (AIR 1.3) | | | |

*Reserved*

### 4.2.21.3 Procedures to Advise Cabin Personnel that Fuelling is Taking Place

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.40(2)(r) |
| DOC(s): | | | | |

(1) Flight attendants shall be aware of when fuelling takes place so that associated cabin safety procedures can be accomplished.

(a) The COM shall detail the process that will be used to inform flight attendants that fuelling is taking place. Some operator's procedures may call for an assumption that fuelling

takes place at each stop while others may identify special procedures for imparting this information to flight attendants.

(b) Where the COM states that flight attendants will assume that fuelling takes place at each stop, a procedure shall be detailed to advise flight attendants if unusual fuelling procedures are to take place (e.g.; over-wing fuelling on aircraft that are usually pressure fuelled from underwing).

#### 4.2.21.4 Fuelling with Engines Running

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 602.09 | 602.09 | 602.09 | 602.09 |
| CASS: | 722.82(1)(u)(iii) &(2)r)(iii) | A723.105(1)(v)(iii)&(2)(p)(iii), H723.105(1)(w)(iii)&(2)(p)(iv) | 724.121(v)(iii) | 725.135(V)(iii), 725.138(21) |
| DOC(s): | | | | |

(1) If fuelling with an engine running is prohibited, a statement to that effect must be contained in the COM.

(2) If fuelling with an engine running is allowed, the COM shall specify that it is not standard practice and shall detail the procedures to be followed.

(a) At least the following elements will be included in the COM:

i. A prohibition against fuelling with passengers on board the aircraft;

ii. The permissible distance of the aircraft from the passengers and terminal buildings;

iii. A stipulation that the entire fuelling operation be monitored;

iv. A description of how the fuelling is to be conducted;

v. A description of the bonding procedures to be used;

vi. A stipulation that cargo may not be loaded/unloaded during fuelling; and

vii. A stipulation that other aircraft servicing may not be carried out during fuelling.

#### 4.2.21.5 Fuelling with Passengers on Board

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.82(1)(u)(iv) &(2)r)(iv) | A723.105(1)(v)(iv)&(2)(p)(iv), H723.105(1)(w)(iv)&(2)(p)(iii) | 724.33(2)(a), 724.121(v)(iv) | 725.40(2)(a), 725.135(V)(iv) |
| DOC(s): | | | | |

(1) Two-way communication shall be maintained between the ground crew supervising refuelling and the qualified personnel on board the aircraft.

(a) Qualified personnel on board means flight crew members, flight attendants or any other personnel who have received training on refuelling procedures.

(b) Communication may be maintained in any way that allows the fuelling personnel and the qualified person on board the aircraft to communicate with each other at any time during the fuelling process.

(c) Communication may also be through an intermediary such as a maintenance person assigned to operate fuelling controls.

(d) Communications methods will vary dependent upon aircraft type. This can entail direct verbal communications, hand signals or any other means that meets with the requirement.

#### 4.2.21.6 Photography When Fuelling is Taking Place

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | 724.33(2)(d)(xi) | 725.40(2)(d)(xi) |
| DOC(s): | NFPA 407, ICAO Doc 9137 - Part 1 | | | |

(1) Open flash photographic equipment should not be used within the fuelling safety zone, which is an area that extends three metres (10 feet) radially from the filling and venting points on the aircraft and from the fuelling equipment.

(a) This requirement is for photographic equipment external to the aircraft. While passengers taking pictures inside the aircraft are not included in this limitation, when conducting overwing fuelling it would be prudent to prohibit their use if fumes are detected in the passenger compartment.

### 4.2.22 Emergency Equipment & Use

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 602.59-63, 702.20(1) | 602.59-63, 703.82 | 602.59-63, 704.84 | 602.59-63, 705.95-96, 705.227 |
| CASS: | 722.82(1)(v), (2)(s), (3)(f)&(4)(g) | A723.105(1)(w), (2)(q)&(3)(f), H723.105(1)(x), (2)(q)&(3)(f) | 724.121(w) | 725.95, 725.135(w) |
| DOC(s): | | | | |

(1) Operators and inspectors should look to the manufacturer's submissions for TSO authorization or Letter of Design Approval to get information on inspection schedules and/or maintenance requirements (as applicable).

#### 4.2.22.1 Crash Axe

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | 705.92 |

| | | | | |
|---|---|---|---|---|
| **CASS:** | | | | |
| **DOC(s):** | 551.408 of the *Airworthiness Manual Chapter 551* | | | |

(1) The required crash axe should be carried in a discrete location that is not known or accessible to a potential terrorist.

(a) The flight deck has always been considered as a prime location.

(b) A non-placarded, locked cabinet in the cabin would also be considered as a suitable location for this purpose.

(2) Although regulations only require the carriage of one crash axe, some operators have elected to carry more than one. Given that the usage of a crash axe is more likely to be required to facilitate an escape from the flight deck than from the cabin (because of the reduced number of exits), it is recommended that at least one crash axe be carried on the flight deck.

### 4.2.22.2 Hand-held Fire Extinguishers - Isolated Galley

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | 705.93(3) |
| **CASS:** | | | | |
| **DOC(s):** | | | | |

(1) An isolated galley is defined as one that is physically separate from the normal working environment in such a way that fire extinguishers in the passenger cabin are not readily available for use in the galley area. (e.g.: the DC-10 lower deck galley is an isolated galley, while the galleys on the Boeing 737 are not).

(2) As it is important that the crew member in the galley has access to a suitable fire extinguisher, the rule is specific in requiring installation of one handheld fire extinguisher in each isolated galley.

### 4.2.22.3 Location of Additional Flashlights in the Passenger Compartment

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | N/A | | | 705.79, 705.97, 705.139s |
| **CASS:** | | | | |
| **DOC(s):** | | | | |

(1) Section 705.79 of the CARs requires air operators, operating under Part VII, subpart 5 to equip aircraft with flashlight stowage provisions that are accessible from each required flight attendant seat.

(2) On many aircraft models requiring only one flight attendant, the flight attendant station is located in the forward section of the passenger compartment. If the accessible flashlight becomes unserviceable during an emergency, the flight attendant may not be able to leave their station to retrieve a flashlight located in the aft section until all the passengers have evacuated the aircraft.

(3) While the priority is to evacuate passengers, air operators may also include operational procedures to, if time and circumstances permit, retrieve any additional emergency equipment located elsewhere in the passenger compartment.

(4) Air operators who install additional flashlights in the passenger compartment of an aircraft:

(a) should ensure the location of the second flashlight is accessible to flight attendants during the post evacuation procedures and checks of the passenger compartment;

(b) shall ensure the location and use of the second flashlight is described in the air operator's flight attendant manual; and

(c) should;

i. ensure the flashlight operates in the same manner as the typically installed flashlight; or

ii. where differences exist, shall ensure these differences are reflected in the air operator's approved flight attendant manual.

### 4.2.22.4 Location and Stowage of Survival Equipment

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | 705.95 |
| CASS: | | | | 725.95 |
| DOC(s): | ICAO TI 9284, TDGR | | | |

(1) Transport Canada recommends that air operators ensure that life-saving appliances or survival equipment are stored in compliance with Packing Instruction 905 of ICAO TI 9284 when required to be carried on board an aircraft in accordance with applicable airworthiness requirements or operating regulations.

(2) Confirmation of the use of non-flammable packaging and stowage containers for survival and pyrotechnic emergency equipment is essential for air operators carrying such equipment. Where necessary, modification or a change to the container or packaging materials may be required to comply with the ICAO TIs and the TDGRs.

### 4.2.22.5 Survival Equipment - Water Requirements for Life Raft Survival Kits

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 602.63(6)(c)(ii) | 602.63(6)(c)(ii) | 602.63(6)(c)(ii) | 602.63(6)(c)(ii), 705.95 |
| CASS: | | | | |
| DOC(s): | 551.404 of the *Airworthiness Manual Chapter 551* | | | |

(1) Canned water, desalting tablets or a manual desalinator approved for use in life rafts are all acceptable means of meeting the water requirements.

(a) A manual desalinator may occupy far less space and weigh considerably less than fresh water or desalting tablets (e.g.: about 200 kilograms of desalting tablets would be required for a Boeing 777). A manual desalinator can provide several gallons of water per day, can be as small in size as a brick, and can weigh less than 3 pounds.

## 4.2.23 Emergency Procedures

### 4.2.23.1 ELT Use

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | 605.38-40 | 605.38-40 | 605.38-40 | 605.38-40 |
| **CASS:** | 722.82(1)(w)(i) &(2)(t)(i) | A723.105(1)(x)(i)&(2)(r)(i), H723.105(1)(y)(i)&(2)(r)(i) | 724.121(x)(i) | 725.135(x)(i) |
| **DOC(s):** | 551.104 of the *Airworthiness Manual Chapter 551* | | | |

*Reserved*

### 4.2.23.2 Passenger Preparation for Emergency Landing/Ditching

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR** | 702.23 | 703.38-39 | 704.34(3) | 705.43(4) |
| **CASS** | 722.23, 722.82(1)(w)(ii) &(2)(t)(ii) | 723.39, A723.105(1)(x)(ii)&(2)r)(ii), H723.105(1)(y)(ii)&(2)(r)(ii) | 724.34(3), 724.121(x)(ii) | 725.43(4), 725.135(x)(ii) |
| **DOC(s)** | Cabin Safety Technical Directive 305 | | | |

(1) Emergency procedures for the preparation of passengers for emergency landing or ditching are to include but are not limited to the following:

(a) notification of the emergency; and

(b) flight deck to in-charge flight attendant briefing items. An example of items to include are:

i. type of emergency;

ii. time to prepare;

iii. signal for brace position;

iv. evacuation signal;

v. who will notify the passengers and when;

vi. special instructions such as exit(s) not to be used, etc.; and

vii. initiation/cancellation of the evacuation.

### 4.2.23.3 Emergency Evacuation

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR** | 702.23 | | | |

| | | | | |
|---|---|---|---|---|
| **CASS** | 722.82(1)(w)(iii)&(2)(t)(iii) | A723.105(1)(x)(iii) &(2)r)(iii), H723.105(1)(y)(iii) &(2)(r)(iii) | 724.121(x)(iii) | 725.135(x)(iii) |
| **DOC(s)** | | | | |

(1) The emergency evacuation procedures must include crew member responsibilities including the responsibility for initiation of the evacuation.

#### 4.2.23.4 Ground Emergency Co-ordination

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR** | | | | |
| **CASS** | | A723.105(1)(x)(iv)&(2)(r)(iv) | 724.121(x)(iv) | 725.135(x)(iv) |
| **DOC(s)** | | | | |

(1) Ground emergency co-ordination procedures may also include the post evacuation and survival procedures as listed below, as applicable to the operator's operation:

(a) responsibilities of crew members such as grouping of passengers, first aid, etc.;

(b) survival priorities such as first aid, signals, shelter, water, food, etc.;

(c) hazards inherent in different environments as applicable to the operator, (e.g. sea, desert, jungle, wilderness, and arctic);

(d) identify on board equipment and supplies that can enhance survival;

(e) survival equipment; and

(f) signaling and recovery techniques.

### 4.2.24 Unlawful Interference

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |
| **CASS:** | | A723.105(1)(x)(v) &(2)(r)(v) | 724.121(x)(v) | 725.135(x)(v) |
| **DOC(s):** | | | | |

(1) Security (unlawful interference) procedures must address:

(a) bomb threats; and

(b) hijacking.

(2) The guidelines for the submission, review and approval of the security portion of operators' documentation is outlined in Section 10.1 of this Volume.

## 4.2.25 Flight Crew Requirements & Qualifications

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | 702.64, 702.65, 702.67 | 703.86-88, 703.91 | 704.106-108, 704.111 | 705.106-108, 705.111, 705.113 |
| **CASS:** | 722.65, 722.67, 722.82(1)(x)&(2)(u) | 723.86, 723.88, 723.91 A723.105(1)(y)&(2)(s), H723.105(1)z)&(2)(s) | A724.106, 724.108, 724.111, 724.121(y) | 725.106-108, 725.111, 725.113, 725.134(y) |
| **DOC(s):** | | | | |

*Reserved*

### 4.2.25.1 Pilot Qualifications for Non-Revenue Flights

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | N/A | N/A | 704.108(6)(a) | 705.106(3)(a) |
| **CASS:** | | | | |
| **DOC(s):** | | | | |

(1) When the operator is using an aircraft for a non-revenue flight, the operator does not need to meet the requirements of the applicable Subpart CASS for pilot qualifications.

E.g.: A flight crew member that has passed the PPC but has not completed line indoctrination can be used to position the aircraft but cannot fly the same aircraft with passengers on board.

### 4.2.25.2 Take-Offs and Landings Requirements

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | N/A | 703.88(1)(b) | 704.108(1)(b) | N/A |
| **CASS:** | | | | |
| **DOC(s):** | | | | |

(1) For those aircraft that do not require a type rating, the 3 take-offs and landings must be completed in an aircraft of that category and class.

(a) Aeroplanes and helicopters are separate categories.

(b) Landplanes and seaplanes are separate classes.

(c) Single-engine and multi-engine aircraft are separate classes.

### 4.2.25.3 Competency check

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.65(2)(d) | A723.88(2)(b)(iv) | N/A | N/A |
| DOC(s): | | | | |

(1) The intent of this rule is to provide for a competency "check" to be conducted by the chief pilot or his/her delegate. That "check" is to be done concurrently with the training, be it initial or recurrent. TCCA expects that until someone is deemed to be competent in a specific manoeuvre the training continues.

(2) Where a chief pilot delegates another pilot to conduct checks on his/her behalf, the delegated pilot must have, at a minimum, the qualification required to conduct the check.

(a) It is the chief pilot's responsibility to make sure the delegated pilot is qualified (including possessing a valid PCC).

### 4.2.25.4 Other Than an Employee Pilot

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | N/A | 703.88(6) | 704.108(6) | 705.106(3) |
| CASS: | | | | |
| DOC(s): | | | | |

(1) The provision for authority to permit an operator to use a flight crew member who is not qualified in accordance with the applicable subsection of the CARs (covering flight crew member qualifications) is intended to allow an operator to use a highly experienced pilot from another organization to conduct training and act as a crew member during initial introduction of a new type to the operator's fleet.

(a) Application for this authority is required, to include resumes and proof of background for each pilot being given this waiver.

(b) The duration of use of unqualified pilots will be limited and dependent on the aircraft complexity and logistics introducing the aircraft into service.

i. Authorization will only be in effect until an initial number of company pilots, sufficient to sustain the air service, have been qualified.

### 4.2.25.5 Groupings for PPC Purposes

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | A722.65 Schedule III | A723.88 Schedule II | A724.108 Schedule III | N/A |
| DOC(s): | AC 700-017, AC 700-018 | | | |

(1) Where aeroplanes have been demonstrated to have common cockpit and flight characteristics, TCCA has approved a grouping of aircraft types under one PPC for renewal purposes.

(2) Should an operator have the requirement for a new grouping, this approval may be possible by demonstrating to TCCA the common flight and cockpit characteristics of the particular aircraft.

#### 4.2.25.6 Pilot Currency - Sector Requirements Within the Previous 90 Days

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | N/A | N/A | N/A | 705.106(1)(b) |
| CASS: | | | | |
| DOC(s): | | | | |

(1) A crew member, in addition to the requirement for take-offs and landings, must be current on departure, arrival and cruise procedures.

(2) A sector is comprised of a take-off, departure, arrival and landing including a cruise segment of at least 50 nautical miles.

(3) Completion of the sector will also count as one of the three take-offs and landings for the flight crew member manipulating the controls (pilot flying).

(4) A crew member can remain current by completing five sectors assigned to duty as a flight crew member in an aircraft of that type and need not complete a landing.

### 4.2.26 Flight Time, Flight Duty Period Limitations and Rest Periods / Flight Crew Member Fatigue Management

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 702.91-98 | 700.19-72<br>700.100-135 | 700.19-72<br>700.100-135 | 700.19-72<br>700.100-135 |
| CASS | 722.82(1)(y)&(2)(v),<br>722.92-96 | A723.105(1)(z)&(2)(t),<br>H723.105(1)(a-a) &(2)(t) | 724.121(z) | 725.135(z) |
| DOC(s): | AC 700-047 | | | |

### 4.2.27 Fatigue Risk Management Systems

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | N/A | | | |
| CASS: | N/A | | | |
| DOC(s): | AC 700-045, AC 700-046, TP 14572-14578 | | | |

(1) Fatigue Risk Management Systems (FRMS) provide an option to air operators who wish to seek a variance from one or more of the prescriptive regulations through exemption.

(a) Access to the exemption is on condition of:

i. implementing a FRMS; and

ii. subsequently validating a safety case related to the variance to ensure an equivalent level of safety is being provided. (i.e.; demonstrate that the variance will not adversely affect the level of flight crew fatigue and alertness, comparing the prescriptive regulation to the FRMS being used to vary that regulation).

(b) The exemption is available under Section 5.9(1) of the Aeronautics Act, Exemption by Governor in Council.

i. Individual exemptions are not issued to air operators. Instead, the initial exemption is automatically conferred upon air operators based on their submission of a compliant Notice of Intent (NOI).

(2) The FRMS regulations are contained in CARs 700.200 to 700.259, and cover all requirements related to developing a FRMS.

(3) Although approval is not required for FRMS documentation, it will be accepted by TCCA.

(a) The FRMS documentation will form part of the COM, whether contained within the COM itself or in another volume.

(4) AC 700-046 - Fatigue Risk Management System Requirements, and AC 700-045 – Exemption and Safety Case Process contain detailed information and guidance for applicant/operators.

## 4.2.28 Training Programs & Forms

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.07(2)(f), 702.23, 702.76, 702.77 | 703.98, 703.99 | 704.07(2)(g), 704.115, 704.116, 704.117 | 705.07(2), 705.173, 705.124, 705.127(1) |
| CASS: | 722.76, 722.82(1)(z)&(2)(w) | 723.98, A723.105(1)(a-a), (2)(u)&(3)(g), H723.105(1)(b-b), (2)(u)&(3)(g) | 724.115, 724.121(a-a) | 725.124, 725.135(aa) |
| DOC(s): | | | | |

(1) As this subject matter is quite extensive, and has varying levels of complexity dependent upon the Subpart the operator functions under, this guidance material has been placed in a separate Chapter of this Volume.

(a) Please refer to Chapter 5 of this volume for guidance and tools references specific for flight crew, flight attendant, dispatcher and support personnel training requirements.

## 4.2.29 Use of Oxygen

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 605.31, 605.32 | 605.31, 605.32 | 605.31, 605.32 | 605.31, 605.32 |
| CASS: | 722.82(1)(b-b) | A723.105(1)(b-b) | 724.121(b-b) | 725.135(bb) |

| | |
|---|---|
| **DOC(s):** | |

*Reserved*

#### 4.2.29.1 Protective Breathing Equipment (PBE)

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | 703.67 | 704.66 | 705.71 |
| **CASS:** | | | | |
| **DOC(s):** | 551.405 of the *Airworthiness Manual Chapter 551*, AC 700-032, AC 705-010, SI 700-006 | | | |

(1) The locations of the PBE units are intended to allow immediate access of a PBE unit by a crew member.

(a) Placing a PBE unit inside a Class A, B or E cargo compartment to satisfy subparagraph 705.71(3)(b)(i) of the CARs would require the crew member to don the PBE in a less than ideal environment during a potential fire. Common sense prevailing, the PBE unit should be located in close proximity to the entrance outside the cargo compartment to allow a crew member immediate access to the PBE unit and to don the equipment in the cabin environment. The crew member would then proceed into the cargo compartment to monitor and/or combat the fire.

(2) For aircraft operating in a combined cargo/passenger configuration (combi), especially those aircraft operating with one flight attendant, some relief in the total number of PBE units installed on board an aircraft may be achieved by placement of PBE units in appropriate locations.

(a) More than one requirement set out in section 705.71 of the CARs can be satisfied by combining the cargo firefighting PBE requirements with the cabin PBE requirements.

i. For example, on a combi aircraft operating with one flight attendant, with the main deck comprised of the flight deck, forward cargo compartment, aft cargo compartment and passenger compartment, placing one PBE unit on the forward cabin bulkhead can cover both requirements for a PBE unit accessible and readily available for the cargo area and for a PBE unit next to the halon fire extinguisher on the forward bulkhead in the cabin.

ii. Similarly, the placement of a PBE unit next to a hand-held fire extinguisher in the aft galley area would also satisfy the requirement to have a PBE unit accessible and readily available for the aft cargo compartment.

(3) A PBE unit is required for each hand-held fire extinguisher located in each isolated galley.

#### 4.2.29.2 First Aid Oxygen

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | 703.68 | 704.67 | 705.72 |
| **CASS:** | | | | |
| **DOC(s):** | AC 700-002 | | | |

(1) The purpose of first aid oxygen is to provide oxygen for those passengers who may have suffered a respiratory or cardiac emergency as a result of a decompression or a medical condition.

(a) A passenger may not necessarily have the same fitness level as a crew member and may not be accustomed to the normal cabin pressure altitudes of 6,000 to 8,000 feet. For some passengers, the decrease in pressure at altitude can aggravate or trigger an existing medical condition necessitating the need for first aid oxygen.

(2) The requirement that sufficient oxygen be available for the duration of the flight above a cabin altitude of 8000 feet does not necessarily mean that it is required for the duration of the originally planned flight.

(a) If the flight is to be diverted, first aid oxygen need only be available to cover the duration of flight to the diversion airport.

(3) If first aid oxygen carriage is to be predicated on flight continuance at a cabin altitude of less than 8000 feet or to a diversionary airport, standard operating procedures following a rapid depressurization should be detailed in the COM.

(4) To determine the period of time for which first aid oxygen must be provided, calculate which of the following is the longer period with respect to the particular flight operation/routing:

(a) one hour; or

(b) the duration of the flight, following depressurization of the cabin, that is operated at a cabin altitude above 8,000 feet.

i. When making this calculation, assume that the cabin depressurization occurs at the “worst case” point along the route.

(5) For each first aid oxygen cylinder, the air operator should provide a means of restraint when the cylinder is in use that has been designed for the restraint of that equipment to prevent it from shifting during the taxi, take-off, descent and landing phases of flight, during periods of in-flight turbulence, and an emergency landing. The means of restraint for each first aid oxygen cylinder should be approved by TCCA, aircraft certification engineering and used to restrain each first aid oxygen cylinder when in use by a passenger at their seat.

(6) The first aid oxygen cylinder for use during flight and any oxygen accessories should be stowed under a passenger seat equipped with a forward and sideward means of restraint in accordance with section 551.500 of the CARs, and restrained by the means referred to above

## 4.2.30 Operations Support Services & Equipment

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | 702.07(2)(d), 702.12 | 703.07(2) | 704.07(2)(c) | 705.07(2)(d) |
| **CASS:** | 722.12, 722.82(1)(a-a) &(2)(x) | 723.07(2), A723.105(1)(d-d) &(2)(w) | 724.07(3), A724.121(c-c), H724.121(b-b) | 725.07(4), 725.135(cc) |
| **DOC(s):** | | | | |

*Reserved*

## 4.2.31 Passenger & Cabin Safety

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | 703.38 | 704.33, 704.34 | 705.40, 705.222(1), 705.223(1) |
| CASS: | | 723.38, A723.105(1)(e-e), (2)(x) &(3)(l) | 724.33, 724.34, A724.121(d-d), H724.121(c-c) | 725.40, 725.135(dd) |
| DOC(s): | | | | |

*Reserved*

### 4.2.31.1 Use of Portable Electronic Devices

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 602.08, 700.12, 700.12.1, 700.12.2 | 602.08, 700.12, 700.12.1, 700.12.2 | 602.08, 700.12, 700.12.1, 700.12.2 | 602.08, 700.12, 700.12.1, 700.12.2 |
| CASS: | | A723.39(1)(a)(viii), H723.39(1)(a)(xii) | A724.34(1)(a)(viii), H724.34(1)(b)(viii) | 725.43(1)(a)(ix) |
| DOC(s): | AC 700-005, AC 700-020 | | | |

(1) The vulnerability of aircraft radionavigation and communications system may be greatest during the take-off, climb, approach and landing phases of flight. During these phases, the aircraft is at lower altitudes and may be in close proximity to numerous ground-based interference sources, which could increase the likelihood of disruptive interference due to combined interference effects.

(2) Portable two-way radio communication devices include, but are not limited to, cellular phones, two-way radios, mobile satellite service handsets, personal communication service devices, etc.

(a) Passenger use of portable two-way radio communication devices onboard aircraft may interfere with the safe operation of the aircraft radio navigation/radio communication systems and flight management systems.

(b) Telephones that are permanently installed in aircraft are installed and tested in accordance with appropriate certification and airworthiness standards. In the context of this subsection, these devices are not considered portable two-way radio communication devices.

## 4.2.32 Emergency Equipment Inspection

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | 703.82 | 704.84 | 705.95, 705.96 |
| CASS: | | A723.105(1)(g-g) | A724.121(f-f), H724.121(d-d) | 725.95, 725.135(ee) |

| | |
|---|---|
| **DOC(s):** | |

(1) Operators and inspectors should look to the manufacturer's submissions for TSO authorization or Letter of Design Approval to get information on inspection schedules and/or maintenance requirements (as applicable).

## 4.2.33 GPWS/ACAS/TCAS

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | 605.37 | 605.37 | 605.37, 704.70 | 605.37, 705.83, 705.84 |
| **CASS:** | | A723.105(1)(h-h) | A724.121(g-g) | 725.135(ff) |
| **DOC(s):** | AC 700-004 | | | |

*Reserved*

## 4.2.34 RNAV Procedures

### 4.2.34.1 Navigation System Authorization

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |
| **CASS:** | | | | 725.135(gg) |
| **DOC(s):** | | | | |

(1) TCCA approval for long range navigation systems which are not dependent on VOR or NDB information (INS, GPS, IRS/FMS, LORAN, OMEGA etc) will be accomplished by means of SAs.

(a) The operator must apply for these SAs, detailing equipment to be used, flight crew member training, operating conditions and any other information considered pertinent to the accuracy and safety of the operation.

(2) Unless otherwise specified, these SAs will not permit the use of non-ground-based navigation aids within the terminal area.

(3) See Volume 3 of this manual series for further guidance on these SAs.

## 4.2.35 ETOPS, MNPS, CMNPS, and Reclear Flights

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |
| **CASS:** | | | A724.121(h-h) | 725.135(hh) |
| **DOC(s):** | TP 6327 | | | |

(1) Applicant/operators intending to conduct Extended Twin-engine Operations (ETOPS), or operations within Minimum Navigation Performance Specification (MNPS), or Canadian Minimum Navigation Performance Specification (CMNPS) airspace require a SA issued by TCCA.

(a) The applicant/operator must apply for these SAs, detailing equipment to be used, flight crew member training, operating conditions and any other information considered pertinent to the accuracy and safety of the operation.

(2) See Volume 3 of this manual series for further guidance on these SAs.

## 4.2.36 Policy on Occupation of Observers Seat

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | 602.89, 703.21 | 602.89, 704.21 | 602.89, 705.27, 705.28 |
| CASS: | | A723.105(1)(i-i) | A724.121(i-i), H724.121(e-e) | 725.135(ii) |
| DOC(s): | | | | |

(1) Information related to this subject can be found in section 4.2.45 (Control of Admission to the Flight Deck) of this volume.

## 4.2.37 Preparation of Runway Analysis Charts

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | A723.105(1)(j-j) | A724.121(j-j) | 725.135(jj) |
| DOC(s): | AC 700-016 | | | |

*Reserved*

## 4.2.38 Procedures for Reduced VFR Limits in Uncontrolled Airspace

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.17 | 703.28 | 704.24 | N/A |
| CASS: | 722.82(3)(h) | 723.28, A723.105(1)(k-k), (2)(z) &(3)(i), H723.105(3)(i) | 724.24, H724.121(f-f) | N/A |
| DOC(s): | | | | |

(1) This type of operation requires a SA.

(a) Guidance can be found in Volume 3 of this manual series.

(2) Note that this SA is not applicable to Aeroplane operations under Subparts 704 or 705.

## 4.2.39 Flight Crew Pairing

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | 705.108 |
| CASS | | | | 725.108, 725.135(ll) |
| DOC(s) | | | | |

*Reserved*

### 4.2.39.1 Restriction - Upgrade

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.108(2)(b) |
| DOC(s): | | | | |

(1) Flight crew members upgrading to PIC status for the first time will be subject to flight crew pairing restrictions even though they may have acquired considerable experience as second-in-command on the same aircraft type.

(a) This restriction will be in effect until the operator is satisfied that crew pairing restrictions no longer need to be applied; and

(b) In no case shall the flight crew pairing restriction be less than 50 hours.

### 4.2.39.2 Restriction - Different Technologies

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.108(2)(e) |
| DOC(s): | | | | |

(1) A flight crew member who is, for the first time, transitioning to an aircraft type that is significantly different from the flight crew member's current aircraft type, will be subject to the crew pairing requirements of 725.108.

(a) This applies to the first transition made to an aircraft that utilizes significantly different technology.

(b) Subsequent transitions to the same aircraft (within 24 months of the PPC expiring) after having flown another aircraft type, do not require crew pairing restrictions.

#### 4.2.39.3 Restriction – Transition

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.108(4) |
| DOC(s): | | | | |

(1) Restrictions for transitioning as stated in 725.108(4) are intended to facilitate transition from the previous system where there were no crew pairing limitations to this system.

(2) A flight crew member who has successfully transitioned to an aircraft type prior to introduction of these requirements will be deemed to have completed the consolidation period

#### 4.2.39.4 Limitations

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.108(5&6) |
| DOC(s): | | | | |

(1) For a new carrier or a new aircraft introduction, this standard gives a means of compliance.

(a) Should the flight crew member not meet the standard, then a training pilot who does meet the standard must occupy the jump seat until the standard is met.

### 4.2.40 APU Unserviceability

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.135(mm) |
| DOC(s): | | | | |

*Reserved*

### 4.2.41 Carry-on Bag Control Program

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | N/A | N/A | N/A | 705.42 |
| CASS: | N/A | N/A | N/A | 725.42 |
| DOC(s): | | | | |

(1) Once an operator submits their COB control program, it will be reviewed by a CASI-Cabin Safety for approval and inclusion in the FAM and COM.

(2) An operator must always follow their own approved COB control program, regardless of whether or not they are conducting charter work for another operator.

### 4.2.42 Safety Management System

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | 107.01(1)(b), 107.02-04, 705.07(2)(c), 705.151-154, 706.15 |
| CASS: | | | | 725.135(oo) |
| DOC(s): | AC 107-001, AC 107-002, SI SUR-001 | | | |

(1) All applicant/operators who have or are planning to implement a SMS should document that system either:

(a) In their COM and MCM; or

(b) As a stand-alone document, but referred to in their COM and MCM.

(2) Guidance on SMS and its implementation can be found in section 3.5 of this volume.

### 4.2.43 Company Forms & Use

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | A723.105(1)(l-l) | A724.121(l-l), H724.121(g-g) | 725.135(pp) |
| DOC(s): | | | | |

*Reserved*

### 4.2.44 Carriage of Animals and/or People on Cargo Aircraft

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | 705.16, 705.78 |
| CASS: | | | | 725.16, 725.135(qq) |
| DOC(s): | *Airworthiness Manual Chapter 525* | | | |

*Reserved*

## 4.2.45 Control of Admission to the Flight Deck

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | 705.27, 705.45, 705.80 |
| CASS: | | | | 725.135(rr) |
| DOC(s): | | | | |

(1) It is intended that the procedures to control the admission to the flight deck is a two-step process:

(a) The person has to be authorized to occupy the flight deck, and

(b) The person has to be admitted to the flight deck, after the captain is satisfied that:

i. the authorization is in good order; and

ii. after that person has been identified by the required means to be the same person as he/she claims to be.

(2) The operator has to establish the means by which authorizations will be communicated between crew members.

### 4.2.45.1 Occupation of the Observer Seat

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | 705.27-28 |
| CASS: | | | | |
| DOC(s): | | | | |

(1) Revenue passengers are not allowed on the flight deck unless there is a seat available for that person in the passenger compartment.

(a) Operators are not allowed to use the observer seat as an additional revenue passenger seat.

(2) Safety considerations mandate that the requirements and capabilities placed on any person occupying a seat in the flight deck are more stringent than those placed on any person occupying a passenger seat in the passenger compartment.

(a) The flight deck environment is critical to safe operations; and

(b) the presence of a passenger in the flight deck must not adversely affect the safety of the flight, impede the flight crew member's performance of emergency procedures to prevent an accident, or otherwise impede the actions of flight crew members after an accident.

(3) The physical and cognitive demands that may be imposed on a person occupying the flight deck observer seat are significantly higher than the characteristics required of someone seated in a passenger cabin exit row seat, where limitations are established to ensure that these persons will not adversely affect safety.

(a) It is important that the operator ensure that persons who have access to the flight deck observer seat possess the physical and cognitive characteristics needed in the unique environment of the flight deck in the event of an emergency.

i. For example, individuals occupying a flight deck observer seat must be capable of accomplishing emergency egress from the flight deck unassisted. Emergency egress may entail sliding open a window, opening a compartment, or balancing on a windowsill and sliding down a rope. Similarly, emergency egress could require climbing up a flight deck escape ladder, or releasing an overhead hatch and sliding down the exterior of the fuselage. Regardless of the method used to exit the plane, emergency egress must be conducted unassisted and in a timely manner. In addition, there are other flight deck emergencies such as rapid decompression that require a flight deck occupant to be able to recognize the problem, remove the equipment from stowage, don an oxygen mask or protective breathing equipment and fasten it to the face.

(b) Additionally, occupants of the flight deck observer seat should be capable of keeping abreast of the flight's status at all times.

i. it is important that persons in the flight deck be able to hear crew member commands, or other audible warnings given by the aircraft systems. This may be the only way a person knows to take emergency measures such as evacuate the aircraft or don an oxygen mask.

ii. to facilitate the flight crew member's handling of an emergency, the occupant of the flight deck observer seat may be requested to move to another part of the aircraft.

(4) Any person who occupies the flight deck observer seat should meet the following physical and cognitive criteria:

(a) Possess sufficient physical mobility, strength, and dexterity in both arms, hands, legs, and feet to reach upward, sideways, and downward to the location of any emergency exits, slide operating mechanisms, emergency exit devices (descent reel, tape or rope), and observer seat operating mechanisms.

(b) Be able to, without assistance, physically grasp, push, pull, turn, or otherwise expeditiously manipulate any emergency exit, slide operating mechanisms, emergency exit devices (descent reel, tape or rope), and observer seat operating mechanisms.

(c) Be able to, without assistance, physically push, shove, pull, or otherwise expeditiously open or provide access to any emergency exit.

(d) Be able to physically reach all emergency exits expeditiously without the assistance of any person or appliance, such as crutches, a wheelchair, or a cane.

(e) Be able to physically don and use, the observer seat oxygen mask, life preserver, smoke goggles, and appropriate protective breathing equipment (PBE) without assistance from any flight crew member.

(f) Be able to physically operate the safety belt and shoulder harness mechanisms and assemblies located at the observer seat without assistance from any flight crew member.

(g) Possess sufficient visual capacity to perform the specified physical capabilities with regard to emergency exits, operating mechanisms, and emergency equipment without the assistance of visual aids beyond contact lenses or eyeglasses.

(h) Possess sufficient aural capacity to hear and understand instructions by crew members without assistance beyond a hearing aid.

(i) Possess the ability to adequately impart information orally to flight crew members.

(j) Possess the ability to read and understand instructions related to emergency evacuation procedures and equipment provided by the operator in text or graphic form.

(k) Possess the ability to hear and understand oral crew member commands or instructions.

(5) The procedure specified in the COM for authorizing persons to occupy an observer seat must contain at least the following:

(a) the procedure must show that, with the exception of a CASI, Flight Operations, concurrence of the PIC is required before a person on the list is authorized to occupy an observer seat;

(b) the general physical and cognitive capabilities of any observer admitted to the flight deck;

(c) the PIC shall provide all passengers in the flight deck with a passenger briefing in accordance with section 602.89 of the CARs; and

(d) the operator shall provide a safety features card for each passenger that occupies a flight deck observer seat.

(6) The briefing given to the observer seat occupant should include at least the least the following items:

(a) the location and use of the seat belt and shoulder harness, oxygen mask, and life vest (as applicable);

(b) communication devices;

(c) expected exit, responsibilities and actions in the event of an emergency, including emergency evacuation;

(d) silent cockpit procedures and critical phases of flight where the flight crew shall not be distracted; and

(e) any other items that is company or aeroplane specific and that may impact on the safety of the flight.

Note: The briefing content will vary according to the knowledge of the person being briefed, but the intent is that the person receives sufficient information to enable appropriate action to be taken during the various phases of flight and in the event of an emergency.

### 4.2.45.2 Seat for CASI-Cabin Safety

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | 705.28 |
| CASS | | | | |
| DOC(s) | | | | |

(1) In order to accommodate CASI-Cabin Safety under extenuating circumstances, it is suggested that the operator includes CASI-Cabin Safety in the list of persons authorized for admittance to the flight deck and occupancy of the observer's seat.

(2) Where an AOC authorizes a CASI-Cabin Safety carrying out an in-flight cabin inspection to occupy an available flight attendant seat, the CASI-Cabin Safety may, at his/her discretion, occupy an available flight attendant seat or flight deck observer seat.

(3) Where the operator is providing the CASI-Cabin Safety a confirmed seat in the passenger cabin, this seat should, wherever possible, provide the CASI-Cabin Safety with a good view of the passenger compartment.

(4) Only in circumstances where an in-flight cabin inspection on a particular flight is necessary, shall a CASI-Cabin Safety bump a revenue passenger or deadheading crew member.

#### 4.2.45.3 Flight Crew Members at Controls

##### 4.2.45.3.1 Relief of the Captain

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.29(2)(b) |
| DOC(s): | | | | |

(1) There shall always be a person designated to act as PIC or a person who is delegated with the responsibility for the safe operation of the flight when the captain is absent from the cockpit.

(2) For the purpose of relieving the captain, the relief person does not have to complete the operator's upgrade training.

(3) The person relieving the captain will be designated "in charge" of the flight, as per a procedure established in the SOP.

(a) Terminology for designating persons for the purpose of relief is left to the operator.

##### 4.2.45.3.2 First Officer Relieved by a Captain

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | |
| CASS | | | | 725.29(3) |
| DOC(s) | | | | |

(1) This subsection does not apply to captains occupying the right seat for the whole flight.

(a) In such case, refer to CASS 725.124(18), right seat conversion training.

### 4.2.46 Departure Contingencies

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.135(ss) |
| DOC(s): | | | | |

*Reserved*

### 4.2.47 Post-flight Reporting of Volcanic Activity

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.135(tt) |

| | |
|---|---|
| **DOC(s):** | TP14371 (AIR 2.5-6) |

*Reserved*

### 4.2.48 Interference with Crew Members

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | 602.05 | 602.05 | 602.05 | 602.05, 705.172, 705.174, 705.175 |
| **CASS:** | | | | 725.135(uu), 725.174 |
| **DOC(s):** | Aeronautics Act 7.3(1)(d), AC 700-010 | | | |

*Reserved*

### 4.2.49 Denying Transport to Persons that May Pose a Risk to Safety

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | 602.46 | 602.46 | 602.46 | 602.46 |
| **CASS:** | | | | 725.135(vv) |
| **DOC(s):** | AC 700-010 | | | |

(1) An operator may not use this regulation to justify a continuing refusal to transport a passenger when that passenger has subsequently stopped behaving in a disruptive manner.

### 4.2.50 Other Information Related to Safety

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |
| **CASS:** | | A723.105(1)(n-n) & (2)(aa) | A724.121(n-n), H724.121(h-h) | |
| **DOC(s):** | | | | |

(1) Although this topic is listed in the CASS for Subpart 703 & 704 operations, this reference is not to be used as a “catch-all” for subjects of concern for an Inspector that aren't directly captured in another existing CAR or CASS.

(a) Applicant/operators are only held responsible to meet the requirements of the CARs.

### 4.2.51 Air Ambulance Operations (MEDEVAC)

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |

| | | | | |
|---|---|---|---|---|
| **CASS:** | N/A | A723.105(1)(m-m), H723.105(1)(c-c) | A724.121(m-m) | N/A |
| **DOC(s):** | AC 700-002 | | | |

(1) TCCA approval for Air Ambulance operations will be accomplished by means of a SA.

(a) The operator must apply for this SA, detailing equipment to be used, flight crew member training, operating conditions and any other information considered pertinent to the accuracy and safety of the operation.

(2) See Volume 3 of this manual series for further guidance on this SA.

## 4.2.52 Seaplane Operations

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | N/A |
| **CASS:** | | A723.105(1)(h-h), (2)(y) &(3)(m) | A724.121(1)(e-e) | N/A |
| **DOC(s):** | | | | |

*Reserved*

### 4.2.52.1 Weight and Balance - Float Load Lines

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | N/A |
| **CASS:** | | A723.37 | | N/A |
| **DOC(s):** | | | | |

(1) Float load lines can be used as guidance information only.

(a) The PIC is still obligated to perform an acceptable weight and balance calculation.

### 4.2.52.2 Floatation Devices

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | N/A | A703.83 | | N/A |
| **CASS:** | N/A | | | N/A |
| **DOC(s):** | | | | |

*Reserved*

## 4.2.53 Carriage of External Loads

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | 602.16, 702.01, 702.16, 702.21, 702.45 | | N/A | N/A |
| **CASS:** | 722.16, 722.21, 722.82(1)(c-c) &(2)(y) | A723.105(1)(c-c) &(2)(v) | N/A | N/A |
| **DOC(s):** | AC 500-011 | | | |

(1) For helicopter operations, guidance specific to the application for the SA for carriage of external loads can be found in Volume 3 of this manual series.

(2) For aeroplanes, to carry external loads operators will need to obtain approval through a Type Certificate, Supplemental Type Certificate (STC) or Limited Supplemental Type Certificate (LSTC) for each aircraft type they would like to operate with an external load. Guidance on this process can be found in AC 500-011 *Restricted Category Certification of Small Aeroplanes and Helicopters for Special Purpose Operations.*

## 4.2.54 Aerial Work Operations

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | 602.12-17, 702.01, 702.19, 702.21-22, 702.45 | N/A | N/A | N/A |
| **CASS:** | 722.16, 722.19, 722.21-22, 722.82(1)(c-c) &(2)(y) | N/A | N/A | N/A |
| **DOC(s):** | | | | |

*Reserved*

## 4.2.55 Parachute Jumping Operations

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR:** | 602.23, 602.25-26, 603.36-39, 605.22, 605.23, 605.25, 702.16(b), 702.18(b), 702.19(a)(iii), 702.23 | N/A | N/A | N/A |
| **CASS:** | 623.36-38, 623.65(e) 722.82(4)(j) | N/A | N/A | N/A |

| DOC(s): | |
|---|---|

*Reserved*

### 4.2.56 Operational Control Manual

(1) The operator is permitted to have a separate Operational Control Manual that can contain relevant sections of the COM related to operational control functions of the company.

(a) This manual will be considered as part of the COM.

## 4.3 Aircraft Operating Manual (AOM)

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | 704.123 | 705.137 |
| CASS | | | 724.123 | 725.137 |
| DOC(s) | | | | |

**Applicant/operator to submit:**
**All AOM's**
**CR AOM/SOP 70A – for each Aircraft "grouping" operated**

**TCCA to complete:**
**CR AOM/SOP 70A – for each Aircraft "grouping" operated**

### 4.3.1 General

(1) Development of an Aircraft Operating Manual (AOM) is optional.

(a) The operator may choose to use a COM:

i. containing all guidance material; or

ii. along with AOM(s).

1. See section 4.2.18 of this volume for specifics on AOM use, as contained in the COM.

(2) Any Subpart 7 operator can choose to develop and use an AOM.

(a) For Subparts 704 & 705, the AOM:

i. must include any associated aircraft SOPs.

ii. must cover the requirements specified in the applicable CASS.

(b) For Subpart 705, the AOM (and included SOP) must be submitted to TCCA for approval.

(3) AOM's are highly suggested when an operator uses aircraft in the fleet that have marked differences in their operational procedures (i.e.; that would benefit from a manual dedicated to explaining these differences).

(4) The AOM for each aircraft type must be based on the manufacturers' suggested aircraft flight manual, and contain all differences and modifications for the company fleet, the company SOPs and the type checklists.

# 4.4 Standard Operating Procedures (SOP)

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.84 | 703.107 | 704.124 | 705.138 |
| CASS: | 722.84 | 723.107 | 724.124 | 725.07(1)(g), 725.138 |
| DOC(s): | | | | |

**Applicant/operator to submit:**
**All SOPs (may be part of the COM or AOM)**
**CR AOM/SOP 70A's – for each Aircraft "grouping" operated**

**TCCA to complete:**
**CR AOM/SOP 70A's – for each Aircraft "grouping" operated**

## 4.4.1 General

(1) The regulation requires an operator to establish an SOP "for each of its aircraft that is required to be operated by two or more pilots".

(a) If the type certificate requires 2 pilots, then an SOP is mandatory.

(b) If the type certificate only requires one pilot and the aircraft is to be operated IFR, then an SOP is required when the operator does not have authority to operate the aircraft single-pilot.

(c) Where the aircraft is to be operated with 2 pilots by choice rather than by requirement, the operator is encouraged to develop an SOP.

(2) For Subpart 702 & 703 operators, where SOPs are common across several aircraft types, then these SOPs can reside in the COM.

(a) The procedures in the SOPs cannot be contrary to other parts of the COM.

(3) Company SOPs must include aircraft checklists, and layout the method of performing all checklists, aircraft checks, crew co-ordination, emergency drills and approach procedures.

### 4.4.1.1 Standard Briefings

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | |
| CASS | | | | 725.138(8) |
| DOC(s) | | | | |

(1) These briefings are intended to include the security briefing.

## 4.4.2 Normal Procedures

### 4.4.2.1 Ramp/Gate Procedures

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.138(10) |
| DOC(s): | | | | |

(1) Items to be included in the ramp/gate procedures include, but are not limited to:

(a) no smoking policy;

(b) door closing procedures/signals;

(c) the seating of passengers prior to aircraft movement;

(d) the completion of standard passenger safety briefings;

(e) procedures for securing the cabin/galley for take-off; and

(f) passenger head count and weight and balance adjustments.

### 4.4.2.2 Cruise

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.138(15) |
| DOC(s): | | | | |

(1) Items to be included in the cruise procedures include, but are not limited to:

(a) turbulence procedures including procedures to discontinue service when the level of turbulence exceeds light;

(b) fuel management, including automated operation of fuel transfer and weight and balance management;

(c) fuel accuracy checks at each waypoints identified on the operational flight plan, including independent check of each fuel quantity indicator, confirmation of fuel remaining at destination and reconciliation of fuel burned and fuel remaining with the fuel quantity at departure; and

(d) navigation accuracy checks at each significant waypoints identified in the flight plan or at each 10 degree of latitude or longitude, whichever is less, including plotting the present position approximately 10 minutes after passing each waypoints.

### 4.4.2.3 Descent Procedures

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | |
| CASS | | | | 725.138(16) |
| DOC(s) | | | | |

(1) Items to be included in descent procedures include, but are not limited to:

(a) procedures for securing the cabin/galley for landing; and

(b) fuel dumping procedures (if applicable).

### 4.4.3 Abnormal and Emergency Procedures

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | |
| CASS | | | | 725.138(25) |
| DOC(s) | | | | |

(1) Other emergencies could include but are not limited to:

(a) gate/apron emergencies;

(b) APU torching/fire;

(c) fuel spill/fire;

(d) fire fighting;

(e) fuel fumes in cabin; and

(f) taxi emergencies.

#### 4.4.3.1 Bomb Threat and Hijacking

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | |
| CASS | | | | 725.138(25)(d) |
| DOC(s) | | | | |

(1) Bomb threat and hijacking procedures include:

(a) procedures with the aircraft on the ground;

(b) procedures with the aircraft in flight; and

(c) use of code words.

## 4.5 Flight Attendant Manual

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | N/A | N/A | N/A | 705.139(1) |
| CASS: | N/A | N/A | N/A | |
| Doc(s): | TP 12295 | | | |

**Applicant/operator to submit:**
**FAM**
**CR FAM 705**

**TCCA to complete:**
**CR FAM 705**

(1) The applicant/operator needs to submit a Flight Attendant Manual (FAM) that meets the requirements set out in TP 12295 – *Flight Attendant Manual Standard*.

(a) A conformance report has been specifically developed to facilitate the development of the FAM, and should be submitted by the applicant/operator with that manual.

(2) CASI-Cabin Safety are authorized to approve those parts of an operator's manuals related to cabin safety, and other related aspects of its operation.

(3) When reviewing an applicant/operator's documents for approval, the CASI-Cabin Safety should:

(a) be familiar with the aircraft type(s) in the applicant/operator's fleet; and

(b) utilize the conformance report that was submitted with the FAM.

## 4.6 Maintenance Control Manual

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR** | 706.08 | 706.08 | 706.08 | 706.08 |
| **CASS** | 726.08 | 726.08 | 726.08 | 726.08 |
| **DOC(s)** | TP 14408, TP 14427 | | | |

### 4.6.1 General

(1) An applicant/operator shall establish, maintain and authorize the use of a MCM that contains company policies and procedures, to ensure the efficiency of the maintenance control system.

(a) This manual needs to be approved by TCCA and, if different, by the State of Registry (although it does not need to be formally approved by those States).

(2) The operator must ensure that the MCM is revised as necessary to keep it current, accurate and compliant with the regulations.

(a) All revisions must be submitted to TCCA for approval.

(3) The CASI-Airworthiness will:

(a) review the MCM to determine whether it reflects a compliant maintenance control system; and

(b) conduct onsite inspections to determine whether the maintenance control system described in the MCM is in place, effective and meets the regulatory requirements.

(4) Copies of all revisions will be furnished promptly to all organizations or persons to whom the manual has been issued.

(5) The details in and number of volumes of the MCM will vary depending upon the type, complexity and number of aircraft involved.

(a) Content requirements of the MCM are detailed in CASS 726.08.

## 4.6.2 Documents Incorporated by Reference

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR** | 706.08(2) | 706.08(2) | 706.08(2) | 706.08(2) |
| **CASS** | 726.08 | 726.08 | 726.08 | 726.08 |
| **DOC(s)** | | | | |

(1) An AOC holder may establish and maintain subsidiary or associated manuals, documents or lists in support of the Maintenance Control System and related to the MCM, which are known as "documents incorporated by reference" in the MCM.

(a) Before documents incorporated by reference can be used by the AOC holder, the Minister must approve the use of those documents.

(2) Documents incorporated by reference are used when the material covered is subject to frequent or regular change, and are more effectively addressed separate from the MCM.

(3) Although separate from the MCM, documents incorporated by reference are part of the maintenance control system.

(a) These documents:

i. may not need specific CASI-Airworthiness approval; but

ii. will require maintenance manager certification.

(4) Examples of incorporated documents are:

(a) special procedures;

(b) training records;

(c) tool tracking;

(d) authorization recording and tracking;

(e) fuelling arrangements;

(f) elementary work; and

(g) the air operators SMS and Quality Assurance Programs.

## 4.6.3 Maintenance Schedule

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR** | 605.86 | 605.86 | 605.86 | 605.86 |
| **CASS** | 625.86 | 625.86 | 625.86 | 625.86 |
| **DOC(s)** | TP 13094 | | | |

(1) Each aircraft operated under a Part 7 certificate must be maintained in accordance with a maintenance schedule specifically approved by TCCA.

(2) A maintenance schedule is based on and affected by the aircraft's intended use, and describes what maintenance actions are to be accomplished and when.

(a) The schedule will generally be based on recommendations of the aircraft manufacturer, but it can be adapted to the AOC holder's operation if substantiating data is accepted by TCCA.

(3) TP 13094 - Civil Aviation Maintenance Schedule Approval Policy and Procedures Manual provides guidance in the development and approval of aircraft maintenance schedules.

## 4.7 Minimum Equipment List (MEL)

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 605.07 | 605.07 | 605.07, 704.07(2)(d) | 605.07, 705.07(2)(e) |
| CASS: | 625.07, 722.07(1)(d) | 625.07, 723.07(1)(g) | 625.07, 724.07(1)(h) | 625.07, 725.07(1)(h) |
| DOC(s): | TP 9155 | | | |

**Applicant/operator to submit:**
**All MELs**
**CR MEL 70A's – for each aircraft type operated**

**TCCA to complete:**
**CR MEL 70A's – for each aircraft type operated**

### 4.7.1 General

(1) An operator's MEL provides for defect deferral and control.

(a) It is based on a Master MEL (MMEL) created by the type certificate holder of the aircraft.

(2) The MEL of an air operator is approved by a CASI-Flight Operations in accordance with CAR 605.07, and involves the CASI-Airworthiness for the deferral of items that include a maintenance action

(3) A list of TCCA approved Master Minimum Equipment List and TC Supplements can be accessed online at the following webpage:

http://wwwapps2.tc.gc.ca/Saf-Sec-Sur/2/MEL-LEM/m_e_l_s.aspx?lang=eng

(4) A list of Global Changes can be accessed online at the following webpage:

https://tc.canada.ca/en/aviation/aircraft-airworthiness/master-minimum-equipment-list-mmel/global-changes

(5) The MMEL Guidance book is available online at the following webpage:

https://tc.canada.ca/en/aviation/aircraft-airworthiness/master-minimum-equipment-list-mmel/mmel-guidance-book

(6) The operators MCM will detail deferral control policy under its Defect Rectification and Control Procedures.

(a) Refer to section 4.6 of this volume for more details.

### 4.7.2 MEL Amendments Following Foreign Approved MMEL Revisions

(1) Operators are allowed to submit amended MELs for TCCA approval immediately following the operator's receipt of a foreign approved MMEL revision.

(a) These amended MELs may then be approved provided they are not in contradiction with or less restrictive than the current TC Supplement.

Note: An operator may have to further amend a MEL if a TC Supplement amendment is introduced following the normal TCCA review of the MMEL revision

### 4.7.3 Approval of Cabin Safety Items in the Minimum Equipment List

(1) CASI-Cabin Safety shall review the cabin safety items in the operator's MEL.

(a) A list of Cabin Safety related MEL items appears in Appendix F of this volume.

## 4.8 Manual Cross Referencing

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | 705.135, 705.134(1), 705.137(1), 705.138(1), 705.139(1), |
| CASS: | | | | |
| DOC(s): | | | | |

### 4.8.1 General

(1) Information regarding policies, procedures or equipment descriptions may be provided in more than one publication or document, such as the COM, AOM, FAM, SOP, MEL and MCM.

(a) Established policies, procedures and descriptions must be compatible and not conflict between publications.

(2) It is the responsibility of the applicant/operator to verify that all parts of applicable manuals are consistent and compatible, and continue to remain so after any amendment process.

### 4.8.2 Manual Cross-referencing List (COM, SOP, FAM)

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | 705.135(1), 705.135(2)(a) |
| CASS: | | | | |
| DOC(s): | | | | |

(1) Air operators are advised that use of the Manual Cross-referencing List will assist them in establishing a complete, consistent and cross-referenced COM, SOP and FAM.

(2) In accordance with regulatory requirements, when a manual is separated into parts, all parts must be cross-referenced when they are established and during any subsequent amendment process.

(a) This cross-referencing will contribute to good communication among crew members and help to ensure coordinated and consistent safety and emergency procedures for flight crews and flight attendants.

(3) It is the applicant/operator's responsibility to ensure that MEL alleviations that relate to cabin safety items and require flight attendant procedures be included in the FAM and that these procedures are cross-referenced with the MEL.

(4) It is also the operator's responsibility to ensure that conditional procedures stipulated in any other document such as an Exemption, etc., (i.e. Stowage of Disposable Waste in Aircraft Lavatories) are included in the COM and FAM and such procedures are cross-referenced.

(5) The following procedures must be included and cross-referenced to ensure IDENTICAL INFORMATION is presented:

- (a) Planned Emergency - Preparation for emergency landing/ditching:
  - i. All communication from flight deck to flight attendants in an emergency:
    1. Notification of an emergency; flight deck to in-charge flight attendant briefing items;
    2. Signal for brace position;
    3. Evacuation signal;
    4. If both terms are used in the manuals, definition of evacuation and deplanement; et
    5. Cancellation of evacuation.
- (b) Passenger and Cabin Safety Procedures:
  - i. Communication from flight deck to flight attendants; and
  - ii. Signal for flight attendants to be seated for take-off, landing and during periods of in-flight turbulence.

(6) The following must be included and be cross-referenced to ensure that the CONCEPT IS SIMILAR AND DOES NOT CONFLICT in order to fulfill regulatory requirements:

Procedures in the COM and SOP will be written for flight crew member action, while the procedures in the FAM will be written for flight attendant action.

- (a) Carry-on baggage control
- (b) Emergency Procedures - Evacuation procedures:
  - i. initiation of evacuation; and
  - ii. crew responsibilities.
- (c) Unplanned Emergencies:
  - i. Gate/apron emergencies;
  - ii. PTV mated to aircraft (if applicable);
  - iii. APU/Engine torching/fire (if applicable);
  - iv. Fuel spill/fire;
  - v. Fuel fumes in cabin;
  - vi. Taxi emergencies;
  - vii. Runaway or overspeed propeller procedures (if applicable);
  - viii. Pressurization/decompression procedures (if applicable);
  - ix. Fire-fighting procedures;

x. Smoke-removal procedures (if applicable); and

xi. Pilot Incapacitation.

(d) Safety Procedures:

i. Standard Briefings - Pre-flight crew briefing;

ii. Procedures for safe movement of passengers to/from aircraft and embarkation/disembarkation;

iii. Passenger briefing procedures;

iv. Procedures for fuelling with passengers onboard;

v. Fuelling with engine running;

vi. Aircraft surface contamination procedures;

vii. Rejected/aborted take-off/missed approach procedures;

viii. Carriage of dangerous goods;

ix. Portable electronic devices;

x. Carriage and securing of cargo, baggage, commissary and equipment;

xi. Ramp/Gate procedures (no smoking, door closing procedures/signals, passengers to be seated prior to aircraft movement, cabin/galley secure procedures for take-off, passenger head count);

xii. Weight and balance;

xiii. Cruise (turbulence procedures, including procedures to discontinue service when level of turbulence exceeds light turbulence); and

xiv. Descent/Landing (fuel dumping if applicable, cabin/galley secure procedures for landing).

(e) General:

i. Duties, responsibilities and succession of command of management and operations personnel (authority of PIC); and

ii. Policy on occupation of observer seat (including admittance to flight deck).

(f) Security (Unlawful interference):

i. Bomb threats - aircraft on the ground/aircraft in the air; and

ii. Hijacking - aircraft on the ground/aircraft in the air. Use of code word(s) must be IDENTICAL.

(g) Safety and Emergency Equipment:

i. List of emergency survival equipment carried and how to use equipment; and

ii. Inspection details and frequency of inspection of emergency equipment carried on board.

(7) The following items are not required in the COM or SOP. If included, ensure CONCEPT IS SIMILAR AND DOES NOT CONFLICT:

(a) Operations policy;

(b) Transport Canada CASIs;

(c) Sterile flight deck;

(d) Flight deck door locking procedures;

(e) Admittance to flight deck;

(f) Flight deck meal and beverage service;

(g) Minimum number of flight attendants for each aircraft model;

(h) Flight attendant stations (including policy on occupancy of available flight attendant seat);

(i) Incapacitated flight attendant;

(j) Acceptance and carriage of special needs passengers;

(k) Exit row seating;

(l) Communication from flight attendant to flight deck in an emergency including means of communication on the ground, during critical phases of flight and in-flight;

(m) Alcohol & drugs/ crew members;

(n) Alcohol & drugs/ passengers;

(o) Impaired/unruly passengers;

(p) Passenger medical oxygen;

(q) Cabin supervision;

(r) Service on the ground;

(s) Prisoners & escorts;

(t) Weapons;

(u) Circuit breakers;

(v) Cabin logbook procedures; and

(w) If applicable, emergency and normal procedures reflecting differences when one flight attendant is carried and when more than one flight attendant is carried.

## 4.9 Ground Icing Program

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 602.11 | 602.11 | 602.11 | 602.11 |
| CASS: | 622.11 | 622.11 | 622.11 | 622.11 |
| DOC(s): | AC 700-030, AC 700-061, TP 14052, Holdover Time Guidelines | | | |

**Applicant/operator to submit:**
**GIP (May be part of the COM)**
**CR GIP 70A**
**CR COM 70X (if GIP is part of COM)**

**TCCA to complete:**
**CR GIP 70A**
**(CR COM 70X)**

(1) Holdover time guidelines can be found at:

https://www2.tc.gc.ca/en/services/aviation/general-operating-flight-rules/de-icing-aircraft/hold-over-guidelines.html

## 4.10 Other Documents

### 4.10.1 Letters from Local Airport Authorities (if applicable)

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.07(1)(a) | 723.07(1)(a) | 724.07(1)(a) | 725.07(1)(a) |
| DOC(s): | | | | |

**Applicant/operator to submit:**
**Letters from local airport authorities**

*Reserved*

### 4.10.2 Aircraft Registration

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.07(2)(d)&(g) | 703.07(2)(d)&(g) | 704.07(2)(e)&(h) | 705.07(2)(f)&(i) |
| CASS: | 722.07(1)(a) | 723.07(1)(b) | 724.07(1)(b) | 725.07(1)(b) |
| DOC(s): | | | | |

**Applicant/operator to submit:**
**Copies of aircraft registration(s)**

(1) Proof of legal custody and control of aircraft should be confirmed through:

(a) use of the CCARCSE database

https://wwwapps.tc.gc.ca/saf-sec-sur/2/ccarcs-riacc/RchSimp.aspx

(b) to see if the aircraft has a certificate of registration (CofR) issued in the name of the applicant/operator; or

(c) some other form of legal documentation supplied by the applicant/operator that can verify they have custody and control (e.g.; this could be the case where they have not yet received a CofR, but have applied for one).

### 4.10.3 Aeroplane Crash Charts

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | A723.07(1)(j) | A724.07(1)(k) | 725.07(1)(k) |
| DOC(s): | | | | |

(1) Aeroplane crash charts were required when an operator was requesting to use an aircraft that had never previously been operated in Canada. These crash charts were utilized by TCCA for the purposes of planning and preparing support services that would be required for that aircraft type when operating into a Transport Canada operated airport.

(2) Transport Canada has divested itself or airport management functions at nearly all airports in Canada (there remain 4 airports run by TCCA). As such, the requirement for aircraft crash charts to be supplied to TCCA is no longer necessary.

Note: Operators should consult with the aerodrome operating agency where they plan to conduct operations to determine whether these charts might be required by that agency

# Chapter 5 – Training Programs - Content & Review

## 5.1 General

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.07(2)(f), 702.76 | 703.07(2)(f), 703.98 | 704.07(2)(g), 704.115 | 705.07(2)(h), 705.124 |
| CASS: | 722.76(1), 722.82(1)(z) | 723.98(1)&(4) AI723.105(1)(a-a) AV&HV723.105(2)(u) HI723.105(1)(b-b) | 724.115(1)&(5), 724.121(a-a) | 725.124(1), 725.135(aa) |
| DOC(s): | | | | |

**Applicant/operator to submit:**
**Training Program (May be part of COM)**
**CR TP 70X**

**TCCA to complete:**
**CR TP 70X**

(1) An applicant/operator for an AOC is required to develop a training program for crew members, dispatchers, instructors, or any other person authorized to perform functions under the Subpart they plan to operate.

(a) This training program may be contained in the COM or as a separate manual that makes up part of the main COM.

(2) The training program must:

(a) cover all required items listed in the applicable Commercial Air Service Standards (CASS);

(b) fully describe all these items, as specific to the companies' operational procedures; and

(c) not be a "cut-and-paste" of the contents found in the applicable CASS.

(3) An existing operator may need to revise their training program when purchasing new equipment, operating in a new environment, obtaining new authorizations, or when new TCCA requirements are specified.

(4) Each applicant/operator must obtain TCCA approval of curriculums used for training personnel. The operator is responsible for ensuring that its training program is complete, current and in compliance with TCCA guidance.

(a) No training of any type shall be completed until approval has been given.

(b) Subpart 704 & 705 applicant/operators can seek conditional approval:

i. to allow them to begin training; and

ii. to allow TCCA to validate that the training program is effective, through monitoring.

(5) The operator's training program manual, which is approved by TCCA, should contain the general training curricula, facilities and record keeping policies.

(a) Training programs for instructors who provide training to operations personnel shall also have the approval of the TCCA.

(6) This chapter outlines the procedures and job aids that CASIs will utilize prior to providing the approval of an operator's training programs for the purpose of qualifying a crew member, or person performing operational control functions, for duties in commercial air services.

(7) Depending on the scope and complexity of the proposed operation, the training programs required may be carried out under the direct control of the applicant/operator, or conducted by other training facilities under contract to the applicant/operator, or a combination thereof.

(a) While third party training is permissible but all responsibility for the training course and syllabus remains with the operator and must be approved by TCCA.

(b) See section 5.3 of this volume for further details.

(8) The TCCA certification team will need to carry out a thorough analysis and inspection of all phases of the applicant/operator's ground and flight training programs. This analysis and inspection will permit a determination as to whether the training methods, syllabi, training aids and devices, training standards, related facilities and record keeping are adequate.

(a) The qualifications of ground instructors and training pilots should also be established, and their effectiveness evaluated.

(9) In assessing the scope, quality and effectiveness of the training program, the CASI will need to observe actual training or instruction being given so that it can be determined that:

(a) the applicant/operator is adhering to their prescribed syllabus;

(b) the applicant/operator's ground instructors, training pilots and check pilots are competent; and

(c) training personnel are able to recognize and appropriately deal with weak or unsatisfactory performance by trainees.

(10) During the review of the training program, the applicant/operator's plan for the maintenance of flight crew member qualifications, for conversion and for flight crew member upgrading, should be reviewed to ensure that:

(a) the training and associated qualification checks are carried out in a conscientious manner by properly qualified and authorized personnel;

(b) initial and recurrent training and checking is conducted in a systematic manner, in accordance with the training syllabus, and without undue reliance upon the individual skill or preferences of the instructor or check pilot;

(c) simulation of abnormal or emergency situations is not permitted when passengers or cargo are carried; and

(d) flight training that the operator intends to conduct during deadheading or positioning flights must be fully described in the training section, with safeguards detailed to ensure that no passengers, cargo or unnecessary persons are on board during these exercises.

(11) The training program for maintenance duties must be described in detail either in the MCM or in another training manual (which forms part of the MCM, as a document incorporated by reference in that MCM).

(a) Refer to section 4.6 and 5.70 of this volume for more details.

## 5.2 Training Program Approval

### 5.2.1 The Training Program Approval Process

(1) Training program approvals follow a similar process to those described in the manual approval process, contained in Volume 1 of this manual series.

(a) The major difference would be the inclusion of conditional approvals, along with validations tests for those conditional approvals.

i. These two phases are specific for 704 and 705 operators only.

(2) This approval process applies to:

(a) each applicant/operator requesting approval of a new program; or

(b) an operator requesting a revision to a currently approved program.

(3) Training programs may be broken up into sub-programs (curricula), dependent upon an applicant/operator's equipment

(a) The basic steps of this process must be followed, whether it be for a curricula, or the whole program.

i. Each phase may be adjusted to accommodate existing circumstances.

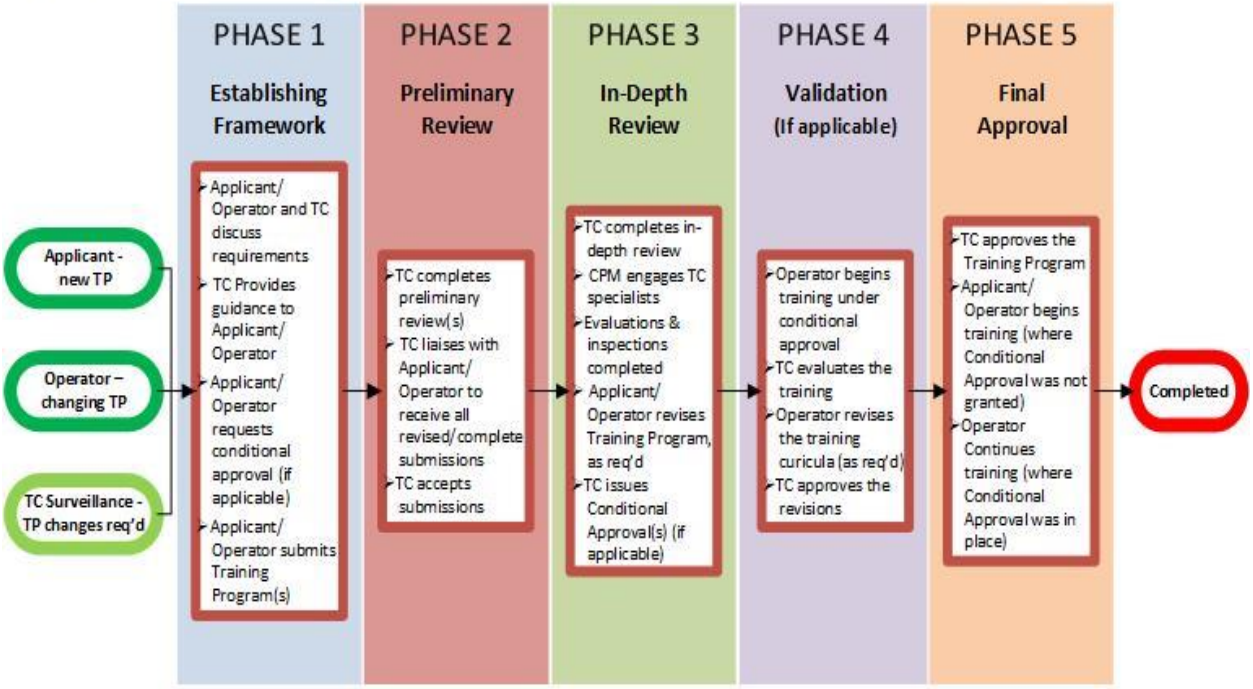
(4) Depending on the complexity of the operator's request and the availability of TCCA (TC) resources, this approval process may be accomplished in just a few days, or may last many months.

(5) Inherent in the approval process is TCCA's responsibility to deny approval of any training which does not meet regulatory requirements, or which has been found deficient.

(6) Training curricula which have been granted approval and later found either to be in conflict with regulatory requirements or to be ineffective must be appropriately modified by the operator, or TCCA approval must be withdrawn.

#### 5.2.1.1 Diagram of the Training Program Approval Process

Figure 5-1: The Training Program Approval Process




## 5.2.2 Phase 1: Establishing a Framework for Review

(1) The training approval process can be initiated by either the applicant/operator or TCCA, as follows.

(a) The applicant/operator can inform TCCA that they are planning to establish a new training curriculum or to change an existing curriculum.

(b) TCCA can inform an operator that revisions to their training program are required based on recently acquired information relative to training techniques, aviation technology, aircraft operational history, operator performance, or regulatory changes.

#### 5.2.2.1 Determining the Requirements of the Applicant/Operator

(1) Early in the process, TCCA and the applicant/operator should establish, through discussion, a common understanding of both the regulatory training requirements and the direction and guidance provided by this manual.

(2) The CASI or CPM and the applicant/operator must examine the entire operation to ensure that any training necessitated by operational requirements, authorizations, or limitations (such as those in the operations specifications, minimum equipment lists (MEL), deviations, and exemptions) is included in the applicant/operator's training program.

(3) The training program is the area most affected by operational changes. The CASI should review all general requirements in the regulations and in this manual that apply to the proposed operation. The CASI should be aware of changes to the information initially provided by the operator.

(4) The CASI should discuss with the operator the sequence and timing of events which occur in the development and granting of conditional (if applicable) and final approval of a training program.

(5) If the applicant/operator's proposal involves complex operations (such as long range navigation or polar navigation operations), the CASI must consult appropriate sections of this manual and other relevant documents and be prepared to advise the applicant/operator accordingly.

(a) The CASI should also determine whether assistance from a TCCA specialist is necessary.

i. If an applicant/operator's proposal includes related aircraft differences training, the applicant/operator must first receive approval of the related aircraft designation from Commercial Flight Standards (AARTF) prior to conditional approval of the curriculum.

#### 5.2.2.2 Guidance Given to the Applicant/Operator

(1) A TCCA CASI should be prepared to provide guidance to an applicant/operator during training curriculum development.

(2) During phase one, the operator must be informed of the procedure for requesting conditional approval and the types of additional supporting information which the CASI will require the applicant/operator to submit.

(3) An CASI should be prepared to provide guidance to the applicant/operator on the following:

(a) The general format and content of curricula, curriculum segments, training modules, and flight manoeuvres and procedures documents;

(b) Courseware;

(c) Facilities;

(d) Qualifications of instructor personnel; and

(e) Other areas of the applicant/operator's proposed training program.

#### 5.2.2.3 Importance of Early Involvement

(1) Early TCCA involvement is also important for the following reasons:

(a) TC guidance during development of training may provide a useful service to the applicant/operator. This guidance may save the applicant/operator and TCCA from unnecessary use of resources. It may also prevent the applicant/operator from submitting a training curriculum proposal which would not be approved by TCCA.

(b) The CASI can become familiar with the material the applicant/operator intends to submit. This facilitates review of the proposal before the granting of conditional approval.

(c) The CASI can begin planning long-range needs, such as qualification of CASIs on the applicant/operator's aircraft, and evaluation of the program's overall effectiveness.

(d) Early TCCA CASI involvement in the development of training programs is appropriate.TC CASIs, however, must act in an advisory capacity only. The CASI must avoid active participation in the actual training program development. The applicant/operator is responsible for the development of its own training program. TCCA CASI must not assume that responsibility.

#### 5.2.2.4 Additional Help

(1) As the applicant/operator's proposals solidify, any significant requirements which may affect office or regional CASI resources should be discussed with the TCC.

(2) A TCCA CASI may need training on an applicant/operator's aircraft type.

(3) Requests for CASIs from outside the office or region to assist in the training approval process may be necessary.

#### 5.2.2.5 Potential Causes of Approval Delays

(1) The applicant/operator should be aware of the potential for delays in approval. Such delays may be caused by any of the following reasons:

(a) The applicant/operator for a certificate not meeting the schedule of events;

(b) The applicant/operator failing to expeditiously transmit information to TCCA;

(c) A change in plans (e.g., changing either the training locations or the type of aircraft);

(d) Inadequate, insufficient, or unclear material submitted in phase 2;

(e) Deficiencies in the training discovered during phases 2,3 or 4;

(f) Delays in obtaining FSTDs and training equipment or FSTD approval; or

(g) Higher priority work (such as accidents) assigned to the CASI-Flight Operations or other CASIs associated with the training approval process.

#### 5.2.2.6 Requests for Conditional Approval (Subpart 704 & 705 only)

##### 5.2.2.6.1 Overview

(1) The applicant/operator is required to submit to TCCA:

(a) an outline of each curriculum or curriculum segment;

(b) any additional supporting information; and

(c) a letter of request for the conditional approval.

(2) Preferred format for the submissions is electronic.

#### 5.2.2.6.2 Required Information in Curricula

(1) Each applicant/operator must submit its own specific curriculum segment outlines appropriate for its type of aircraft and kinds of operations.

(2) These outlines may differ from one operator to another and from one category of training to another in terms of format, detail, and presentation.

(3) Each curriculum should be easy to revise and should contain a method for controlling revisions, such as a revision numbering system.

(4) Curricula for different duty positions may be combined in one document, provided the positions are specifically identified and any differences in instruction are specified for each duty position.

(5) Each curriculum and curriculum segment outline must include the following information:

- (a) Applicant/Operator's name;
- (b) Type of aircraft;
- (c) Duty position;
- (d) Title of curriculum and/or curriculum segment, including the category of training;
- (e) Consecutive page numbers; and
- (f) Page revision control dates and revision numbers.

#### 5.2.2.6.3 Required Curriculum Segment Items

(1) Each curriculum and curriculum segment must also include the following items, as appropriate:

- (a) Prerequisites prescribed by the applicable CAR Subpart training standard or required by the applicant/operator for enrolment in the curriculum.
- (b) Statements of objectives of the entire curriculum and a statement of the objective of each curriculum segment.
- (c) A list of each training device, mock-up, system trainer, procedures trainer, and other training aid which will be used in the curriculum. (The curriculum may contain references to other documents in which the approved devices and aids are listed.)
- (d) A list of FSTDs approved, as applicable, including approvals for particular manoeuvres, procedures, or functions.
- (e) Descriptions or pictorial displays of normal, abnormal, and emergency manoeuvres and procedures which are intended for use in the curriculum, when appropriate. These descriptions or pictorial displays, when grouped together, are commonly referred to as the flight manoeuvres and procedures document. The applicant/operator may choose to present detailed descriptions and pictorial displays of flight manoeuvres and procedures in other manuals. For example, the flight manoeuvres and procedures document may be described in an aircraft operating manual. However, as a required part of the training curriculum, it must either be submitted as part of the curriculum or be appropriately referenced in the curriculum.
- (f) An outline of each training module within each curriculum segment. Each module should contain sufficient detail to ensure that the main features of the principal elements or events will be addressed during instruction.
- (g) Training hours which will be applied to each curriculum segment and the total curriculum.
- (h) The checking and qualification modules of the qualification curriculum segment used to determine successful course completion, including any Subpart 704 or 705 qualification requirements for flight crew members.

#### 5.2.2.6.4 Additional Relevant Supporting Information

(1) An applicant/operator must submit any additional relevant supporting information requested by the CASI.

(2) This information is that additional information the CASI finds necessary for determining whether the proposed training program is feasible and adequately supported. It is information which would be difficult to include in a curriculum outline format.

(3) The type and amount of supporting information needed will vary depending on the type of training, aircraft types to be operated, and kinds of operations.

(4) The CASI must determine the appropriate types of supporting information to be required. This should be limited to only that information critical to the determination of the proposed training program's acceptability.

(5) The following list of types of relevant supporting information is not all inclusive, but includes information that is typical.

##### 5.2.2.6.4.1 Description of Facilities

(1) A description of facilities is appropriate if the CASI is unfamiliar with the facilities, or if the facilities are not readily available for examination.

##### 5.2.2.6.4.2 List of Ground and Flight Instructors and Qualifications

(1) A list of ground and flight instructors and their qualifications may be requested. This information is particularly important if the operator intends to use contract instructors.

(2) The CASI should determine whether the proposed instructors meet regulatory requirements and if they are qualified to conduct training.

##### 5.2.2.6.4.3 Description of an FSTD

(1) A detailed description of each FSTD is appropriate when the FSTD is not readily available for the CASI's examination.

(a) This detailed description is particularly important when the applicant/operator intends to contract for a specific FSTD.

(b) This description should provide sufficiently detailed information to enable the CASI to determine whether the training and checking to be conducted is appropriate for the level of the FSTD to be used.

##### 5.2.2.6.4.4 Description of Qualification and Enrolment Prerequisites

(1) A detailed description of minimum student qualifications and enrolment prerequisites is appropriate when such prerequisites are not described in detail in the curriculum.

(a) Examples of these prerequisites which may need to be detailed as supporting information , including type of Flight Crew licence, aircraft type qualifications, previous training programs, minimum flight hours, experience with other Subpart 704/705 operators, and recency of experience.

(b) This description may be useful to the CASI when determining whether the proposed amount of detail outlined in training modules and the proposed training hours are adequate.

##### 5.2.2.6.4.5 Recordkeeping Requirements

(1) Copies of training forms and records to be used for recording student progress and the completion of training may be required.

(2) This ensures the applicant/operator has planned for the CARs recordkeeping requirements.

(3) This type of supporting information shall be required of applicant/operators for an operator certificate. It may also be required of operators with any significant revision to existing training programs.

(4) These forms, records, or computer transmittal worksheets must be designed so that attendance and course completion information is recorded and retrievable for verifying regulatory compliance.

#### 5.2.2.6.4.6 Supporting Information

(1) Supporting information may include samples of courseware, such as lesson plans and instructor guides.

(a) Descriptions of other types of courseware, such as home study, computer-based instruction (CBI), and Line Oriented Flight Training (LOFT) scenarios, should be in enough detail to provide an understanding of how the training will be administered and of the proposed instructional delivery method.

(b) This information should describe the instructor–student interaction and indicate methods for measuring student learning.

#### 5.2.2.7 Submissions to TCCA

(1) Phase 1 is completed when the applicant/operator submits all documents associated with the training program application for approval.

### 5.2.3 Phase 2: Preliminary Review

(1) In phase 2, the CASI must review the submitted training curriculum and supporting information for completeness, general content, and overall quality.

(a) A detailed examination of the documents is not required during this phase.

(2) If after initial review, the submission appears to be complete and of acceptable quality, or if the deficiencies are immediately brought to the applicant/operator's attention and can be quickly resolved, the CASI may begin the phase 3 in-depth review.

(3) If the submission is determined to be incomplete or obviously unacceptable, the approval process is terminated and the CASI must immediately return the documents (preferably within 5 business days) with an explanation of the deficiencies.

(a) The immediate action by the CASI will alleviate any understanding of the applicant/operator, who will be assuming the process is moving ahead to the next phase.

(b) The approval process can be resumed when the revised training curriculum or curriculum segment is resubmitted.

#### 5.2.3.1 Training Curricula Submitted with Initial AOC Applications

(1) An applicant/operator for a certificate in the early stages of certification may be unable to provide all information required for their training program.

(a) EG: The applicant/operator may not yet know what training facilities or FSTDs they intend to use.

(b) The lack of such information in the formal application does not necessarily indicate that the training curriculum attachment be returned.

(c) There should be an understanding between the applicant/operator and the CPM that such portions are missing.

i. The CPM may initiate the phase 3 in-depth review without this type of information.

(2) If conditional approvals are requested, curriculum segments must be complete and acceptable before the conditional approval can be given.

(a) It may be appropriate to initially approve a ground training curriculum segment even though the FSTD has not yet been evaluated and approved for flight training.

(b) Effective evaluation of training curricula can be hampered when an excessive number of incomplete curriculum segments are permitted.

i. The CPM shall either delay conditional approval of training curricula or return them to the applicant/operator when an excessive number of incomplete curriculum segments have been submitted with the formal application.

## 5.2.4 Phase 3: In-Depth Review

### 5.2.4.1 Specialists and/or TCCA Offices

(1) Phase 3 is initiated when TCCA begins a detailed analysis and evaluation of a training curriculum or curriculum segment.

(2) To complete an evaluation in a timely manner, the CASI may need to involve other TCCA personnel early in this phase.

(a) Certain specialists or offices may be required to participate in the approval process, as follows:

i. AVSEC should be involved in security training issues.

ii. CASI-Airworthiness for evaluating compliance with CAR 706.12/CASS 726.12 training requirements.

iii. Navigation specialists should be involved with evaluating special navigation operations.

iv. The CASI may need to contact AARTFT and the Operations Evaluation Board (OEB) for information on training recommendations and MEL procedures.

(b) The CASI's TTL and certain headquarters (HQ) personnel may need to be involved with locating and directing additional TCCA resources to accomplish the approval process.

i. AARTF may need to be involved with deviation and exemption requests.

### 5.2.4.2 Required Evaluations

(1) The CASI must ensure that the following evaluations are accomplished:

(a) A side-by-side examination of the curriculum outline with the appropriate regulations and with the direction provided in this manual must be performed.

i. This examination is to ensure that training will be given in at least the required subjects and in-flight training manoeuvres.

ii. It should also ensure that appropriate training will be given on safe operating practices.

iii. Use of the submitted CR will aid in comparison of training program content to the regulatory requirements.

(b) An examination of the courseware developed or being developed by the applicant/operator must be performed.

i. This review should include a sampling of available courseware such as lesson plans, audio-visual programs, flight manoeuvres and procedures documents, and student handouts.

ii. The courseware must be consistent with each curriculum and curriculum segment outline.

iii. From this review, the CASI should be able to determine whether the applicant/operator is capable of developing and producing effective training courseware.

(c) An inspection of training facilities, FSTDs, training equipment, and instructional aids (which will be used to support the training) must be performed if the CASI is not familiar with the applicant/operator's training program capabilities.

(d) The training time specified in each curriculum segment outline must be evaluated.

i. A CASI should not attempt to measure the quality or sufficiency of training by the number of training hours alone.

1. This can only be determined by direct observation of training and testing (or checking) in progress, or by examination of surveillance and investigation reports.

ii. The specified training hours must be realistic, in terms of the amount of time it will take to accomplish the training outlined in the curriculum segment, so as to achieve the stated training objectives.

iii. During the examination of courseware, a CASI should note the times allotted by the applicant/operator for each training module.

1. These times should be realistic in terms of the complexity of the individual training modules.

iv. The number of training hours for any particular curriculum segment depends upon many factors. Some of the primary factors to consider are as follows:

1. The aircraft family in which the specific aircraft belongs;
2. Complexity of the specific aircraft;
3. Complexity of the type of operation;
4. Amount of detail that needs to be covered;
5. The experience and knowledge level of the students; and
6. Efficiency and sophistication of the applicant/operator's entire training program (including items such as instructor proficiency, training aids, facilities, courseware, and the operator's experience with the aircraft).

### 5.2.4.3 Completion of Phase 3

(1) If, after completing these evaluations, the CASI determines that the program, curriculum or curriculum segment:

(a) is satisfactory and adequately supported and that the training hours are realistic:

i. In the case of requests for conditional approval, this phase should culminate in the CASI issuing conditional approval.

ii. For applicant/operators not requesting conditional approvals, the process should advance to Phase 5.

(b) Is not satisfactory, dependent upon the severity of the issues, the CASI should:

i. Send the program, curricula or segments back to the applicant/operator for further development/revision; or

ii. In cases where there appears to be issues beyond correction, the CASI should reject the applicant/operators training program/curricula/segment(s).

### 5.2.4.4 Conditional Approvals (Subpart 704 & 705 only)

#### 5.2.4.4.1 Conditional Approval Expiration Date

(1) Conditional approvals must have an expiry date.

(a) The expiration date provides an incentive to the applicant/operator for refining all aspects of the program to assure that the program will meet all regulatory requirements.

(b) The expiration date also provides the CASI with a timeframe within which to plan evaluation activities for determining the effectiveness of the training.

(2) The expiration date assigned to a conditionally approved training curriculum must not exceed 24 months from the date of conditional approval.

(a) The expiration date of conditional approval may be reduced by the CASI if it is apparent that a 24 month time frame will unnecessarily delay final approval.

(3) The CASI may grant final approval any time before the expiration date.

(4) Except when unforeseen circumstances preclude an adequate evaluation of training effectiveness, an extension to the conditional approval expiration date should not be permitted.

(a) A new expiration date may be established for a curriculum segment when there are significant revisions to a conditionally approved curriculum segment.

#### 5.2.4.4.2 Conditional Approval Letters

##### 5.2.4.4.2.1 Contents

(1) The conditional approval letter must include at least the following information:

(a) Specific identification of the curricula and/or curriculum segments conditionally approved, including page numbers and revision control dates;

Note: Dangerous Goods training programs cannot be given conditional approval.

(b) A statement that conditional approval is granted, including the effective and expiration dates;

(c) Any specific conditions affecting the conditional approval, if applicable;

(d) A request for advance notice of training schedules so that training may be evaluated in accordance with 704.115/705.124; and

(e) If the CASI is authorizing a reduction in the programmed hours specified by CARs, a statement concerning the basis for reduction.

##### 5.2.4.4.2.2 Record of Revisions

(1) A conditional approval letter serves as the primary record of curriculum or curriculum segment pages that are currently effective.

(a) The CASI and each applicant/operator may agree to use the method to account for revisions to training documents.

i. If this method is used, the stamp must clearly indicate conditional approval and the expiration date.

(2) Other acceptable methods include a list of effective curriculum or curriculum segment pages, or pages with pre-printed signature and date blocks.

#### 5.2.4.4.3 Method of Denying Conditional Approval

(1) If the CASI determines that conditional approval of a proposed training curriculum or curriculum segment must be denied, the applicant/operator shall be notified in writing of the reasons for denial. This letter/email must:

(a) contain an identification of the deficient areas of the training curriculum and a statement that conditional approval is denied; and

i. It is not necessary that each minor deficiency which resulted in the denial be identified; however, the major deficiencies should be outlined in the letter/email.

(b) be given in writing by TCCA, and sent by personal service or by registered or certified mail to the applicant/operator's latest known address.

(2) It is the applicant/operator's responsibility to redevelop or correct the deficient area before resubmission to TCCA.

#### 5.2.4.5 Record Storage

(1) The original pages of the curriculum or curriculum segment shall be returned to the applicant/operator with the transmittal letter/email.

(a) These documents should be retained by the applicant/operator as an official record.

(2) A copy of the training curriculum or curriculum segment, with a copy of the transmittal letter/email granting conditional approval attached, and all additional relevant supporting information, shall be maintained on file by TCCA

(a) The CASI will save these documents to the company file in RDIMS.

### 5.2.5 Phase 4: Validation of Conditionally Approved Curricula (Subpart 704 & 705 only)

#### 5.2.5.1 Overview

(1) Phase 4 begins when the operator starts training under the conditionally approved curriculum.

(a) This phase should provide the operator with adequate time to test the program and the flexibility to adjust the program during TCCA evaluation.

(b) The operator must demonstrate the ability to effectively train flight crew members.

(2) The operator is required to provide ongoing schedules of all training and checking to be accomplished under a conditionally approved training curriculum.

(3) The CASI must closely monitor training conducted under conditional approval.

(a) Whenever possible, the first session of training conducted under conditional approval should be monitored by the CASI or a qualified Operations CASI.

(b) A CASI does not need to observe every training session.

i. A sufficient sampling of the training sessions should be observed as a basis for a realistic evaluation.

(4) Inspectors qualified on the type aircraft, and other individuals knowledgeable in the curriculum subject matter, should assist in evaluating the training.

(5) During training under conditional approval, the operator is expected to evaluate and appropriately adjust training methods as needed.

(a) Often, adjustments can be made by changing courseware and instructional delivery without (or with only minor) revisions to the conditionally approved curriculum.

(b) It may be necessary for the operator to substantially change the curriculum which may require another conditional approval action by the CASI before the changes can be put into effect.

(6) Proposed revisions may be transmitted to the CASI just before the conditional approval expiration date.

(a) If the change is significant, the CASI may need to establish a different expiration date for the curriculum segment, or for the revised portions, to allow adequate time for a proper evaluation.

#### 5.2.5.2 Identification and Correction of Curriculum Deficiencies

(1) Each deficiency identified during the evaluation of training conducted under a conditionally approved curriculum must be discussed with the operator.

(a) If the deficiencies are significant, they must be documented and kept on file.

(2) Each significant deficiency which has been accurately identified must be immediately corrected by the operator.

(a) If an operator does not take appropriate corrective action, the CASI shall advise the operator in writing that conditional approval is withdrawn.

#### 5.2.5.3 Evaluating Training

(1) The CASI must develop a plan for systematically evaluating training given under the conditionally approved training curriculum.

(a) This plan should remain in effect throughout the conditional approval period.

(2) There are five elements which can be evaluated when assessing the overall effectiveness of training programs. These five elements are:

(a) curriculum segment outlines;

(b) courseware;

(c) instructional delivery methods and training environment;

(d) testing and checking; and

(e) surveillance and investigation of operator activities.

These elements are interrelated. However, each can be evaluated separately.

##### 5.2.5.3.1 Curriculum Segment Outlines

(1) Curriculum segment outlines contain the specific training modules and, where applicable, the amount of time allocated for the curriculum segment.

(a) The modules must be consistent with regulatory requirements and safe operating practices.

(2) This element requires direct examination.

(3) Before evaluating a training program, a CASI must become familiar with the contents of the curricula or curriculum segments to be evaluated.

(4) This preparation is essential if a CASI is to determine whether an operator has developed an effective course of instruction from its conditionally approved training curriculum.

#### 5.2.5.3.2 Courseware

(1) Courseware converts curriculum outline information into usable instructional material.

(2) Courseware must be consistent with the curriculum outline and be organized to permit effective instructional delivery.

(a) It is readily adaptable to adjustments and refinement by the operator.

(3) This element usually requires direct examination, to include reviewing materials such as lesson plans, workbooks, or flight instructor guides.

(4) The CASI must determine whether the courseware:

(a) is consistent with the curriculum or curriculum segment; and

(b) has been organized to facilitate effective instructional delivery.

(5) Courseware is usually the training program element which is most adaptable to revision or refinement.

(6) CASIs must review at least a sampling of the courseware.

#### 5.2.5.3.3 Instructional Delivery Methods and Training Environments

(1) Instructional delivery methods are used to convey information to the student.

(2) Effective learning is maximized if the instructional delivery adheres to and properly uses the courseware.

(3) This element requires direct observation, to include surveillance of training methods, such as instructor lectures, online presentations, CBT and in-flight instruction.

(4) Effective learning can only occur when an instructor is organized and prepared and properly uses the courseware and various training aids.

(a) The CASI must evaluate if the instructional delivery is consistent with the courseware.

(b) The CASI should note whether the instructor teaches the topics specified in the lesson plan.

(5) Training aids and FSTDs should function as intended during the instructional delivery.

(6) During training, the CASI should be sensitive to the type of questions being asked by students and should identify the reasons for any excessive repetition.

(a) These conditions may indicate ineffective instructional delivery or courseware.

(7) The CASI must also determine if the instructional environment is conducive to learning.

(a) Distractions which adversely affect instructional delivery, such as excessive temperatures, extraneous noises, poor lighting, and cramped classrooms or workspaces, are deficiencies that interfere with learning.

#### 5.2.5.3.4 Testing and Checking

(1) Testing and checking is a method for determining whether learning has occurred.

(a) Testing and checking standards are used to determine that a desired level of knowledge and skill has been acquired.

(b) Testing and checking also measures the effectiveness of courseware and instructional delivery.

(2) This element requires direct observation, and is an effective method for determining whether learning has occurred.

(a) It can be supplemented by examining operator records of tests and checks.

i. Examining the results of tests, such as oral or written tests or checks, provides a quantifiable method for measuring training effectiveness.

ii. The CASI must examine and determine the causal factors of significant failure trends.

#### 5.2.5.3.5 Surveillance and Investigation of Training and Checking in Progress

(1) Surveillance and inspections produce information about an operator's overall performance.

(a) A high rate of satisfactory performance usually indicates a strong, effective training program.

(b) Repeated unsatisfactory performances can often be traced to deficiencies in a training program.

(2) This element requires the examination and analysis of surveillance and inspection reports.

(3) Direct observation of training and checking in progress is also an effective method of evaluating training.

(a) In situations where direct observation opportunities are limited, the CASI will have to rely on his/her evaluation of other sources of information, such as reports of surveillance and investigations.

i. Results of inspection reports, incident or accident reports, compliance and enforcement actions, and other relevant information about the operator's performance should be reviewed by the CASI for indications of training effectiveness.

ii. The CASI must establish methods to evaluate these sources of information for trends which may develop while training is being conducted under conditional approval.

iii. Repeated reports of deficiencies, such as excessive taxi speed, navigation deviations, incomplete briefings, or incorrect use of the checklists, may be traceable to a lack of specific training or ineffective training. Such information may provide indications that revisions or refinements are needed for a curriculum segment and/or training modules.

### 5.2.5.4 Revisions to Training Curricula

#### 5.2.5.4.1 Probable Causes of Revisions

(1) There are many factors that could require revisions to training curricula/segments. Common factors include the following:

(a) The effects and interrelationships of changes in the kind of operations;

(b) The size and complexity of an operation;

(c) The type of aircraft being used;

(d) Any special authorizations/specific approvals;

(e) A revised MEL; and

(f) Any exemptions or deviations.

(2) Other proposed revisions, including any proposal to reduce the approved number of training hours, are subject to the training program approval process.

(a) Although each step in the process must be completed, the process may be abbreviated in proportion to the complexity and extent of the proposal.

#### 5.2.5.4.2 Final Approval of Proposed Revisions

(1) To incorporate significant revisions into training curriculum with final approval usually requires the full training approval process.

(2) Final approval may be directly granted to a proposed revision if the revision involves any of the following situations:

(a) Correction of administrative errors such as typographical or printing errors;

(b) A reorganization of training or any changes in the sequence of training that does not affect the quality or quantity of training; and

(c) An improvement to the quality, or an increase in the quantity, of training.

## 5.2.6 Phase 5: Final Approval

(1) This phase involves the final evaluation of whether an applicant/operator's training program, curriculum and/or segment(s) meet all regulatory requirements, and can be approved by TCCA.

(a) Based on the results of this evaluation, the CASI must determine whether to grant or not grant final approval.

i. This determination must be made before the expiration date of the conditional approval (if applicable).

### 5.2.6.1 Approval Granted

#### 5.2.6.1.1 For Programs That Contain a List of Effective Pages (LEP)

(1) Final approval of the training program, curriculum or segment is documented by the CASI on the LEP.

(a) The LEP will have any pages listed that include the approved program/curricula marked as "TCCA-Approved" (or equivalent);

(b) The LEP will be stamped "TCCA-Approved" (or equivalent) at the bottom of the page;

(c) The CASI will date and sign beside the approval stamp;

(d) The original program/curriculum/segment must contain the originally signed LEP.

(e) When forwarding the LEP, program/curriculum/segment, the CASI should include a transmittal letter/email, as indicated in 5.2.6.1.3, below.

#### 5.2.6.1.2 For Programs That Do Not Contain an LEP

(1) Final approval needs to be contained on each page of the training curriculum and/or curriculum segment.

(a) The original copy of the complete document will be returned to the applicant/operator.

(b) TCCA will save a copy of the complete document to the applicant/operator's company file in RDIMS.

(c) When forwarding the program/curriculum/segment, the CASI should include a transmittal letter/email, as indicated in 5.2.6.1.3, below.

#### 5.2.6.1.3 Transmittal Letter/Email

(1) The original approved program/curriculum/segment should be accompanied by an approval letter/email signed by the CASI.

(a) This letter/email must specifically identify the program/curriculum/segment, contain a statement that final approval is granted, and provide the effective date of approval.

(b) This letter/email must also state that final approval shall remain in effect until otherwise notified by TCCA that a revision is necessary, in accordance with the applicable CAR Subpart training regulation, provided that the operator continues to train in accordance with the approved curriculum.

(2) A copy of the approval letter/email should be saved to the company file in RDIMS.

#### 5.2.6.2 Approval Not Granted

(1) Should the CASI decide that final approval is not warranted, then the applicant/operator will be notified of that fact accordingly in writing.

(a) The letter/email must contain:

i. a statement informing the applicant/operator that final approval is not granted;

ii. the reasons for not granting the approval;

iii. a statement that the actions specified in the letter/email may be appealed; and

iv. Instructions on how to make an appeal.

(2) As the denial of final approval of a training program/curriculum can have significant consequences to the applicant/operator, the CASI should consult with his/her direct superior before proceeding with this action.

(a) Regions have various procedural differences when dealing with this type of action.

### 5.2.7 Withdrawing Approval of Training Programs or Curricula

(1) Before withdrawing approval of an operator's training program/curriculum/segment, the CASI shall make reasonable efforts to convince the operator to make any necessary revisions.

(a) It is important to understand that withdrawing approval could be detrimental to the operator's business.

i. The operator's ability to continue to hold a certificate may be in question if a new curriculum is not submitted for conditional approval within a reasonable period of time.

(2) A decision to withdraw approval must be based on sound judgment and justifiable safety reasons.

(a) When sufficient reasons are established, it is mandatory for the CASI to take immediate action to remove TCCA approval from an ineffective or noncompliant training program/curriculum.

(3) When an approval is withdrawn, the CASI must ensure that the operator clearly understands that any further training conducted under an unapproved program/curriculum is contrary to CAR requirements.

(a) Compliance or enforcement action must be taken if any company employee who received unapproved training is used in operations.

(4) The three methods for withdrawing approval of a training curriculum are as follows:

(a) Allowing a conditionally approved training curriculum to expire without granting final approval;

(b) Withdrawing approval of a conditionally approved training curriculum or segment before the expiration date; and

(c) Withdrawing approval of a training program/curriculum/segment which has already received final approval.

#### 5.2.7.1 Expired Training Curricula

(1) If the CASI does not grant final approval before the expiration date, training under that curriculum must terminate as of that date.

(a) Final approval may not be granted to an operator's training curriculum for several reasons. Common examples are:

i. The operator may be unable to achieve an acceptable level of training effectiveness during phase four of the approval process.

ii. The operator may have intentionally discontinued use of the conditionally approved curriculum.

(2) When the CASI decides not to grant final approval before the expiration date, the operator must be notified of the decision in writing, at least 30 days before the expiration date of the conditionally approved curriculum.

(a) If not notified, the operator may mistakenly assume that the conditional approval will continue in effect until receipt of notification of either final approval or termination.

(b) A CASI who fails to provide this 30 day notification must establish a new expiration date so that appropriate notification can then be given to the operator.

(3) The notification letter/email should contain:

(a) Contain the reasons for allowing the curriculum to expire; and

(b) State that any further training under the expired curriculum will not be in compliance with regulatory requirements.

#### 5.2.7.2 Withdrawal of Conditional Approval of Training Curricula

(1) A CASI may decide to withdraw conditional approval any time during phase four of the approval process.

(a) This action may be necessary if the training:

i. is not in regulatory compliance;

ii. does not provide for safe operating practices; or

iii. is ineffective in meeting training objectives.

(2) An operator who has received a letter/email withdrawing approval must revise or refine the training curriculum and resubmit it for conditional approval.

(3) The CASI must ensure that the operator corrects each deficiency in the training program.

(4) The CASI withdraws conditional approval of training curricula by letter/email.

(a) This letter/email must contain:

i. a statement informing the operator that conditional approval is withdrawn;

ii. the effective date of the withdrawal;

iii. the reasons for withdrawal of approval; and

iv. a cautionary statement concerning the use of persons trained under a curriculum which is not TCCA approved.

#### 5.2.7.3 Withdrawal of Final Approval of Training Program/Curriculum

(1) Each operator is responsible for ensuring that its training programs/curriculum, once granted final approval, continue to provide training in accordance with the conditions under which final approval was granted.

(a) Whenever TCCA determines that a program/curriculum no longer meets regulatory requirements, or has failed to comply with the conditions under which it was granted final approval, TCCA will inform the operator.

(2) Notification of withdrawal of approval for a training program/curriculum that is already in place will be by means of a letter/email:

(a) This letter/email must contain:

i. a statement informing the operator that approval is withdrawn;

ii. the effective date of the withdrawal;

iii. the reasons for withdrawal of approval;

iv. a cautionary statement concerning the use of persons trained under a curriculum which is not TCCA approved;

v. A statement that the actions specified in the letter/email may be appealed; and

vi. Instructions on how to make an appeal.

(3) As the withdrawal of a program/curriculum can have significant consequences to the operator, the CASI should consult with his/her direct superior before proceeding with this action.

(a) Regions have various procedural differences when dealing with this type of action.

#### 5.2.7.4 Revisions After Withdrawal Notice

(1) If the operator chooses to revise the training program/curriculum in response to the notification letter/email, the proposed revision will be processed in the same manner as any other request for a training program/curriculum approval.

(a) The CASI must reinitiate the five-phase approval process.

### 5.2.8 Appeal of a Decision to Withdraw Approval

(1) If an operator decides to appeal the CASI's action, it must, within 30 days after receiving notification, petition TCCA for reconsideration of the withdrawal of final approval.

(a) The petition must be in writing and contain a detailed explanation on why the operator believes the revisions described in the withdrawal notice are unnecessary.

(2) If upon receipt of a petition, the TTL believes that an emergency exists which directly impacts aviation safety, he/she must immediately inform the operator in writing of this decision.

(a) The TTL letter/email must include a statement that an emergency exists, a brief description of the revisions which must be made, and the reasons the revisions are necessary.

i. In this case, the TTL letter/email upholds the CASI's decision to withdraw final approval.

(b) The operator must revise its training program if TCCA approval is to be obtained.

(3) If the TTL does not believe an emergency exists, careful consideration must be given to both the operator's petition and the CASI's reasons for withdrawal of approval.

(a) The operator's petition stays the CASI's withdrawal of final approval and the operator may continue to train under the training curriculum, pending the TTL's decision.

(b) The TTL may need to conduct additional evaluations of the operator's training program.

i. It may be appropriate for the TTL to obtain additional facts from other sources.

ii. Consultation with AARTF may be advisable.

iii. The TTL must make a decision within 60 days after receipt of an operator's petition.

(c) If the TTL accepts the operator's explanations, he/she will direct the CASI to rescind the letter/email that withdrew final approval, either partially or fully.

(d) If the decision is to uphold the CASI's action, the TTL must respond to the operator's petition in writing. The letter/email denying the petition:

i. should indicate that careful consideration was given to the petition;

ii. must contain the reasons for denying the petition;

iii. must include a statement that confirms the withdrawal of final approval; and

iv. must also contain a statement that any training conducted under the unapproved training curriculum is contrary to the CARs.

### 5.2.9 Operations Conducted Under Multiple Subparts

(1) It is TCCA policy that a training, checking, and qualification program submitted by a Subpart 704 operator, which is found by TCCA to be in compliance with Subpart 705, will be considered as a program that exceeds the requirements of Subpart 704 and will be approved by TCCA for use by that operator.

(2) Operators are always encouraged to adopt practices that afford their operation higher levels of safety. Utilizing a "higher" Subpart requirement for operations will, in most cases, support this practice.

(a) As a matter of safety policy, TCCA will both permit and encourage compliance with higher Subpart standards by operators of lower Subparts.

### 5.2.10 Submission and Review of Security Procedures Training Programs

(1) Although forming part of the training program of the applicant/operator, security procedures training is reviewed and accepted by TCCA, Aviation Security.

(a) Operators should submit their security training procedures along with their training programs to their CASI-Flight Operations or CASI-Cabin Safety.

(2) Information on the submission, review and acceptance procedures for security related documents can be found in Section 10.1 of this volume.

## 5.3 Crew Training on a Contract Basis

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(2) | 723.98(2) | 724.115(2) | 725.124(2) |

| DOC(s): | |
|---|---|

(1) Training vendors such as Bombardier, CAE Simuflite, or FlightSafety International tailor their courses to the majority of their customers who are regulated by the Federal Aviation Administration, or national agencies that accept the U.S. Code of Federal Regulations as a common standard.

(a) These standards are not necessarily consistent with the CARs.

(b) The assumption that the course offered by the training vendor meets the CARs requirements must be avoided.

(c) TCCA does not have a mechanism for approving the courses supplied by training vendors.

(2) TCCA approves the operator's training program, which may incorporate a training vendor's course.

(a) When approving an operator's training program which incorporates a training vendor's course, CASIs must follow the same process as if the operator was conducting the course.

Note: Operators planning to incorporate any training with American flight training facilities should check with the training facility for the latest U.S. Department of Homeland Security rules.

### 5.3.1 Training Contracts

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.124(2) |
| DOC(s): | | | | |

(1) An operator may contract crew member training to another organization provided:

(a) the arrangement is clearly provided for in the approved training program;

(b) the outside organization uses the manuals and publications used by the operator (COM, SOP's, AFM, AOM, etc., as applicable);

(c) the operator ensures that the training is conducted in accordance with their approved program;

(d) where type training is conducted, the training is provided on the type and model operated by the operator, unless otherwise provided for in their approved training program; and

(e) the operator maintains training records as required by the Subpart they operate under.

## 5.4 Training Facilities

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | 724.115(3) | 725.124(3) |

| DOC(s): | |
|---|---|

*Reserved*

## 5.5 Training Personnel – Qualifications & Responsibilities

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(3) | 723.98(3) | 724.115(4) | 725.124(4) |
| DOC(s): | | | | |

*Reserved*

### 5.5.1 Qualifications and Responsibilities of a Training Pilot

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(3)(b) | 723.98(3)(b) | 724.115(4)(b) | 725.124(4)(c) |
| DOC(s): | | | | |

(1) The minimum qualifications for a training pilot shall be detailed in the COM. These qualifications can be more demanding but will not be less than those indicated in the standard.

(2) The chief pilot will internally produce a list of training pilots. All prospective training pilots must be approved by the chief pilot prior to serving in the role. The CASI-Flight Operations may request that the training pilot list be forwarded to TCA whenever there is a change.

(3) Training pilots conducting line indoctrination, who do not have PIC status with the operator, must be qualified to the standard of a PIC on that aircraft type.

(4) Training pilots monitor the operation and make recommendations to the chief pilot for amendments, or modifications to, existing standard operating procedures and other programs.

(5) Training pilots are in a unique position to observe application of the operator's standard operating procedures as well as logistical or other issues that may affect a pilot's proficiency. Because of this insight, it is important for the training pilots to bring to the attention of the chief pilot any procedural or standards issues that they feel should be addressed.

#### 5.5.1.1 Use of Other Than an Operator Employee Pilot for Training and Checking

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | 723.88(3) | A724.108(3), H724.108(2) | 725.106(6) |
| DOC(s): | | | | |

(1) The number of these instructors/check pilots and the duration of their instructor/checking privileges will be dependent upon the size, complexity and logistics of the aircraft introduced into service.

(2) Once sufficient number of operator pilots have been trained that can sustain service and training requirements, the operator shall be expected to revert to the requirements of the applicable CARs.

#### 5.5.1.2 Where No Qualified Training Pilots Exist

(1) In circumstances where a new SA has been established by TCCA, and consequently no qualified instructor pilots exist within or outside the organization:

(a) the applicant/operator will have to provide to TCCA:

i. their proposed training program;

ii. any manual amendments that would incorporate the new training; and

iii. an application to add the SA to their certificate or registration document.

(b) a TCCA SME CASI who is knowledgeable and experienced on the SA procedures will:

i. review the proposed training program;

ii. get together with applicant/operator's nominated instructor pilots (who will be the initial cadre of qualified instructors for this SA) to discuss the program; and

iii. if an acceptable level of knowledge is demonstrated by the instructors, and the program content meets the regulatory requirements, give conditional approval for the applicant/operator to conduct a limited ground school, with the CASI monitoring that training.

(c) the CASI will then monitor the conduct of aircraft training by the nominated instructors, using a simulator, with the instructors:

i. demonstrating the performance covered by the SA (i.e.; as pilot flying); and

ii. teaching the manoeuvers to inexperienced pilots.

Note: The Instructors will need to obtain the requisite experience and recency while the CASI is monitoring them.

(d) if acceptable performance is witnessed by the CASI for those instructors, then:

i. the training program will be approved;

ii. any related manual amendments will be approved; and

iii. the SA will be processed and issued.

#### 5.5.1.2 Where No Qualified Training Pilots Exist

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | 723.88(3) | A724.108(3), H724.108(2) | 725.106(6) |
| DOC(s): | | | | |

(1) In circumstances where a new SA has been established by TCCA, and consequently no qualified instructor pilots exist within or outside the organization:

(a) the applicant/operator will have to provide to TCCA:

i. their proposed training program;

ii. any manual amendments that would incorporate the new training; and

iii. an application to add the SA to their certificate or registration document.

(b) a TCCA SME CASI who is knowledgeable and experienced on the SA procedures will:

i. review the proposed training program;

ii. get together with applicant/operator's nominated instructor pilots (who will be the initial cadre of qualified instructors for this SA) to discuss the program; and

iii. if an acceptable level of knowledge is demonstrated by the instructors, and the program content meets the regulatory requirements, give conditional approval for the applicant/operator to conduct a limited ground school, with the CASI monitoring that training.

(c) the CASI will then monitor the conduct of aircraft training by the nominated instructors, using a simulator, with the instructors:

i. demonstrating the performance covered by the SA (i.e.; as pilot flying); and

ii. teaching the manoeuvers to inexperienced pilots.

Note: The Instructors will need to obtain the requisite experience and recency while the CASI is monitoring them.

(d) if acceptable performance is witnessed by the CASI for those instructors, then:

i. the training program will be approved;

ii. any related manual amendments will be approved; and

iii. the SA will be processed and issued.

## 5.5.2 Qualifications of a LOFT Facilitator

### 5.5.2.1 CRM Skills

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | N/A | N/A | 725.124(4)(e)(i) |
| DOC(s): | | | | |

(1) A LOFT facilitator must be sufficiently proficient in the use of CRM skills to effectively facilitate a LOFT session.

(2) The completion of a CRM course within the previous three years is not intended to mean that an initial CRM course is mandatory every three years.

(a) Recurrent training will be required in order to maintain currency as a LOFT facilitator.

#### 5.5.2.2 Pilots Without an ATPL or Applicable Type Rating

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | N/A | N/A | 725.124(4)(e)(iv) |
| DOC(s): | | | | |

(1) An experienced pilot who has not held an ATPL, or been endorsed on a particular aircraft type, will not be precluded from utilizing their experience as a LOFT facilitator.

(2) This section permits experienced pilots who may be retired airline pilots, furloughed pilots, military pilots, pilots who may not have a current medical or any other pilots that have experience that would contribute to being a competent LOFT facilitator, to be used as LOFT facilitators.

### 5.5.3 Flight Dispatcher Instructors

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | N/A | 724.109 | 725.124(4)(f)(i) |
| DOC(s): | | | | |

(1) Flight dispatcher instructors should be certified flight dispatchers.

(2) An instructor qualified for ground training for pilots may be used for training flight dispatchers on aeroplane systems, provided this instructor liaises with the person responsible for the operational control, and aeroplane systems are taught in view of their impact on operational control.

## 5.6 Validity Period - Expiry Date – all personnel training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.67 | 703.91 | 704.111 | 705.113 |
| CASS: | | | | |
| DOC(s): | | | | |

(1) Where a time is slated to begin with or ends at a specified day, or to continue to or until a specified day, the time includes that day. Consequently, where the CARs provide that the validity period of a line check "expires on the first day of the thirteenth month", the validity period ends at midnight of that first day of the month.

### 5.6.1 Validity Period Extension

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.67(5) | 703.91(3) | 704.111(3) | 705.113(5) |

| | | | | |
|---|---|---|---|---|
| **CASS:** | | | | |
| **DOC(s):** | | | | |

(1) Extensions of up to 60 days to the normal expiry date may be granted under the following circumstances:

(a) illness, accident, injury or medical requirements preclude completion of checking or training within the appropriate time;

(b) simulator, cabin emergency evacuation trainer, or training aid breakdown;

(c) simulator or cabin emergency evacuation trainer unavailability for reasons beyond the operator's control;

(d) pilot or flight attendant inability to attend scheduled session due to aircraft mechanical problems, weather related difficulties, or flight cancellation;

(e) family emergency; or

(f) any other item which, in the opinion of the issuing authority, merits an extension and will not compromise safety.

Note: An operator's inability to schedule properly would not be an acceptable reason to request an extension.

(2) The extension request must be submitted before the expiry date of the current validity period.

(3) The elapsed time from the date of the last completed check (or required training) does not exceed:

(a) nine months in the case of a mid-year PPC (or training session);

(b) fifteen months in the case of a twelve month PPC or line check; or

(c) fifteen months in the case of flight attendant annual training.

(4) In order to get the extension the operator must submit a formal written request. The request must be submitted prior to the expiry of the particular training validity period, and must include a proposal which effectively shows the Minister that aviation safety is not likely to be affected.

(a) It is anticipated that such situations would only result from abnormal circumstances and will likely be unique, therefore each will require a separate application for extension.

(5) In order to show that safety is not likely to be affected the operator would need to support the request with specific information (and supporting documentation, where appropriate), including:

(a) What are the circumstances generating the request for extension?

(b) What is the proposal?

(c) When does the current validity period expire?

(d) When did the crew member receive their last training? (This is important because if it was taken within 60 days prior to its being due (and thus the due date was not changed) it means that in real time the crew member has already exceeded a 12 month period between training classes.)

(e) Any other relevant info.

(6) The operator should be advised that where an extension is granted:

(a) the training must be taken as proposed; and

(b) a further extension is not an option.

(7) Normally, the validity period will be extended by 30 days.

(a) A further 30 day extension may be granted (subject to the points above) if required.

(b) If it is known at the outset that the issue requiring an extension will not be resolved within 30 days, the validity shall be extended for 60 days or compliance with item (1)(g) above, whichever is shorter.

## 5.7 Company Indoctrination Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(4) | 723.98(5) | 724.115(6) | 725.124(5) |
| DOC(s): | | | | |

*Reserved*

## 5.8 Resetting Tripped Circuit Breaker Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.76(2)(d)(vi) | 703.98(2)(d) | 704.115(2)(e) | 705.124(2)(e) |
| CASS: | | | | |
| DOC(s): | | | | |

(1) Company policies and procedures regarding resetting tripped circuit breakers (CB) must be clearly stated and readily available to all operational staff associated with this action. These policies and procedures should promote increased awareness of safety concerns associated with resetting tripped CBs and should stress the importance of strict adherence to specific safety guidance.

(2) Operators shall develop training programs intended for crew members, maintenance personnel, and ground servicing personnel that clearly state company policies and procedures with regard to resetting tripped CBs.

(a) Aircraft manufacturers normally provide guidance in the AFM, Aircraft Maintenance Manual (AMM), and aircraft servicing manuals; these procedures and limitations shall be the basis for the operator's specific CB resetting procedures.

(b) Training should be conducted annually, and be provided during both:

i. Technical ground training; and

ii. Synthetic or Aircraft flight training.

(3) There is a widely held view that one reset of any tripped CB is acceptable. This view can be misleading. The following points should be considered when developing training programs:

(a) Locating and eliminating any associated fault is required prior to considering resetting any CB remembering that both high and low ampere CBs could readily ignite a fire.

(b) On the ground, a CB tripped by an unknown cause may only be reset on the ground after maintenance has determined the cause of the trip and has determined that the CB may be safely reset.

i. A CB may be cycled (tripped, pulled or reset) where it is required to be performed within approved maintenance inspection criteria, or as part of an approved trouble-shooting procedure, unless doing so is specifically prohibited.

(c) In flight, a tripped CB shall not be reset in flight unless doing so is consistent with explicit procedures specified in the approved operating manual, SOPs, checklists and AFM used by the crew members or unless, in the judgment of the PIC, resetting the CB is necessary for the safe completion of the flight.

i. Crew members should limit resetting of CBs to one in-flight reset where this action is required.

(d) Special caution is appropriate where fuel pumps and/or Fuel Quantity Indicating System (FQIS) are involved, because of the possibility that arcing might lead to the ignition of fuel or fuel vapors.

i. The resetting of fuel boost pump and/or the FQIS CBs:

1. In-flight is not recommended, unless specifically approved by the aircraft manufacturer, and then only when authorized by the PIC.

2. On the ground, without first identifying the source of the electrical fault, is not recommended.

(e) No attempt should be made to reset a CB if it trips a second time.

(f) A detailed logbook write-up is a proven safety practice for tracking, and may provide maintenance personnel with the key to prompt trouble-shooting and effective corrective action on the ground. That write-up should include the following:

i. the conditions existing when the CB trip occurred;

ii. the conditions existing when the CB was reset; and

iii. the results of resetting the CB.

(4) The CASI-Flight Operations monitoring, reviewing and approving pertinent training programs in COMs and company documentation shall ensure that operators have incorporated CB resetting procedures into their manuals.

(a) The information must provide adequate detail for personnel to address resetting tripped CBs, both in-flight and on the ground.

(b) The procedures shall be consistent with, though not less restrictive than, the aircraft manufacturer's guidance.

## 5.9 Technical Ground Training - Flight Crew

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.76 | 703.98 | 704.115 | 705.124 |
| CASS: | 722.76(7) | 723.98(6) | 724.115(7) | 725.124(6) |
| DOC(s): | AC 705-007 | | | |

*Reserved*

### 5.9.1 Pilot Self-Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(7) | 723.98(6) | N/A | N/A |
| DOC(s): | | | | |

(1) Where the operator's training program includes pilot self-training, the details of that program shall be included within the COM.

(a) This self-training is only permitted for technical ground-based training curricula.

(2) Small operators with only a single pilot on staff must have the flight training conducted on the candidate pilot by a training pilot with appropriate experience and qualifications on the aircraft type.

(a) A pilot employed by another operator who meets the requirements of the CASS would be acceptable.

(3) In a single seat aircraft, where it is not possible to receive training from another person, pilots will, in this scenario, conduct their own flight training in accordance with an approved training program detailed in the COM.

### 5.9.2 Elementary Work and Servicing Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.76(2)(d)(ii), 706.10-12 | 703.98(2)(c)(ii), 706.10-12 | 704.115(2)(a)(v)(B), 706.10-12 | 705.124(2)(a)(iv)(B), 706.10-12 |
| CASS: | 722.76(7)(g), 726.10-12 | 723.98(6), 726.10-12 | 724.115(7), 726.10-12 | 725.124(6), 726.10-12 |
| DOC(s): | | | | |

(1) Where servicing is part of a flight crew member's duties, he/she will be trained in accordance with the standards.

(2) Training shall be:

(a) appropriate to the operator's operation; and

(b) detailed in the operator's training program.

(3) Elementary work and servicing training may also be provided under the direct supervision of an AME or an ATO approved under part 4.

## 5.10 Synthetic Flight Training Device or Aircraft Flight Training – Initial, Upgrade and Annual for Flight Crew

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |

| | | | | |
|---|---|---|---|---|
| **CASS:** | 722.76(9) | A723.98(27) | A724.115(31) | 725.124(8A) |
| **DOC(s):** | | | | |

*Reserved*

## 5.10.1 Training Program - Minimum Training Times - Aeroplane

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |
| **CASS:** | 722.76(12) | A723.98(27) | A724.115(31) | N/A |
| **DOC(s):** | | | | |

*Reserved*

## 5.10.2 Training Program - Training Times - Helicopter

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |
| **CASS:** | | | | N/A |
| **DOC(s):** | | | | |

*Reserved*

### 5.10.2.1 General

(1) The CASS does not define a minimum number of flight hours for **helicopter** initial and recurrent flight training programs.

(a) With the absence of regulatory guidance to define the minimum flight hours for helicopter flight training programs, the minimum flight hours stated in the CASS for **aeroplane** initial and recurrent flight training programs (references listed in section 5.10.1, above) should be used as a **guideline** for the development and approval of helicopter flight training programs.

(2) A CASI reviewing and approving an operator's flight training programs, as described in the COM, must be satisfied that the intent of the CARs / CASS is being met.

### 5.10.2.2 Recurrent

(1) The periodic recurrent training must cover the entire training program every two or three years as applicable.

(2) Helicopter recurrent training program times can be expected to be briefer than initial training program times.

### 5.10.3 PF and PNF Duty Allocation

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | A723.98(27)(b) | A724.115(31)(c) | |
| DOC(s): | | | | |

(1) PNF(PM) and PF duties are to be shared on a reasonable basis between both flight crew members.

(2) Every effort should be made to have the flight crew in training be crewed according to their position.

E.g.; the ideal pairing would be a captain and a first officer.

(3) As a general rule, flight crew members should be trained one half of the time as PF and one half of the time as PNF(PM).

(a) This can be modified according to training and student needs, but PNF(PM) should not be less than 25% nor more than 60% of the allocated simulator/aircraft training time.

### 5.10.4 Consolidation Period

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | N/A | N/A | N/A | |
| CASS: | N/A | N/A | N/A | 725.106(7) |
| DOC(s): | | | | |

(1) The consolidation period as specified in 725.106(7) is the time frame within which a pilot must gain initial operating experience on the aircraft to which he/she has successfully completed an initial PPC. This period is intended to reinforce and enhance retention of the initial training received by the pilot.

(a) A pilot who has not completed the required flying time within the 120 day consolidation period may be permitted a thirty day extension provided that his/her proficiency is at a satisfactory level.

(b) Should the required time not be completed within 120 days, the operator should make a ground evaluation of the pilot's proficiency as required by the Standard. The evaluation is accomplished by the carrier and should be recorded in the pilot's file. It may be accomplished through any means that assure the operator that the pilot's proficiency is at an acceptable level to continue the consolidation period.

### 5.10.5 Transition and Mixed Fleet Flying Programs

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | N/A | N/A | N/A | 705.106 (Exemption) |

| | | | | |
|---|---|---|---|---|
| **CASS:** | N/A | N/A | N/A | |
| **DOC(s):** | Policy Letter 173 | | | |

(1) An approved Mixed Fleet Flying (MFF) program requires both an exemption to CAR 705.106 and an exemption for an Approved Transition program under subpart 705.

https://www.tc.gc.ca/CivilAviation/Regserv/Affairs/exemptions/docs/en/1826.htm

https://www.tc.gc.ca/CivilAviation/Regserv/Affairs/exemptions/docs/en/1882.htm

(2) Training Checking and Currency credits for a MFF (and Transition) program must be established either by the applicable Operational Evaluation Board (OEB) report or approved by TCCA for the individual air operator.

(3) Operators and flight crew members have multiple possibilities when it comes time to take advantage of the training, checking and currency credits offered by a Mixed Fleet Flying and/or Transition programs.

(a) It is important to note that there are differences between the two programs and that in most cases one may not be used without the other.

i. A Transition program is designed to offer training and checking credits when an operator wants to obtain pilot qualifications on a variant of the same, common or different type when currently qualified on a base aircraft.

ii. A Mixed Fleet Flying program is designed to offer 90-day currency credits when operating both a base aircraft and one or more variants of the same, common or different type within a 90-day period between training and checking events.

(4) An operator cannot operate under a Mixed Fleet Flying program without having a Transition program, but he can operate under a Transition program without having a Mixed Fleet Flying program.

(a) The Mixed Fleet Flying program is only required when the applicable Operational Evaluation Board report has identified that there are specific take-off, landing and sector currency requirements on either or both aircraft intended to be operated in a Mixed Fleet Flying program in order to meet pilot qualification requirements. Here are examples of how an operator may take advantage of either program.

Example 1 - An operator has been operating an A-320 for several years and decides to purchase a variant of a different type; the A-330. The flight crew member that is currently qualified on the A-320 that will transit to and only operate the new aircraft will only need to comply with the operator's approved Transition program, which will include training and checking credits. The base aircraft will be the A-320 until such time that all the training and checking credits have expired, at which point the A-330 will become the base aircraft for the purpose of future transition to another variant.

Example 2 - If after 3 years in Example 1, the A-330 flight crew member is reassigned to only operate the A-320, the flight crew member will need to comply with the operator's approved Transition program that contains training and checking credits where in this case the base aircraft is now the A-330. The Transition program may also have provisions where the flight crew member will alternate between the A-320 and the A-330 every 6 months. This is not considered Mixed Fleet Flying as both aircrafts are not operated with a period of 90 days.

Example 3 - The operator in Example 1 has now decided to operate both the A-320 and the A-330 within the period between training and checking events with

the same flight crew members. The flight crew member assigned to these aircrafts will need to comply with both the operator's approved Transition program and approved Mixed Fleet Flying program. The approved Mixed Fleet Flying program could not be conducted without an approved Transition program.

Example 4 - The operator in Example 1 has decided to purchase variants of the same type of the A-320, the A-319 and A-321. These variants are considered a single type by the Operational Evaluation report. The operator will be operating all the 3 variants at the same time with the same flight crew members. In this case the operators must ensure that the training and checking differences, if applicable, are identified between the variants in the ODR tables required by the approved Transition program. However, because they are considered the same type, there is no currency requirement other than those prescribed for a single type required to comply with the 90 currency requirements of the CAR.

#### 5.10.5.1 Transition Programs

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | N/A | N/A | N/A | 705.106 (Exemption)<br>705.113 (Exemption) |
| CASS: | N/A | N/A | N/A | 725.106 (Exemption) |
| DOC(s): | Policy Letter 173 | | | |

(1) An exemption to CARs 705.106, 705,113 and 725,106 is required under subpart 705 to support an approved Transition Program.

https://www.tc.gc.ca/CivilAviation/Regserv/Affairs/exemptions/docs/en/1882.htm

(2) To establish a Transition program, an operator must have both aircraft identified in this program within their fleet, and be actively operating the aircraft (i.e.; they must have approved training programs for both aircraft).

(3) Training Checking and Currency credits for a Transition program must be established either by the applicable Operational Evaluation Board (OEB) report or approved by TCCA for the individual air operator.

(4) The identification of a base aircraft is the responsibility of the operator in order to adapt to its operational requirements. Normally when the operator has been operating an aircraft from which it wants to obtain training and checking credit under an approved Transition program, that aircraft will initially become the base aircraft but there is no obligation to do so.

(a) Applicable Operator Difference Requirements (ODR) tables from an OEB report may provide a greater relief to operators in the long term in certain circumstances and the base aircraft on which the approved Transition program is based may changes after the initial approval to facilitate training and checking requirements.

(b) Every time a different base aircraft is identified, new ODR table must be approved and some additional training and/or checking requirements may have to be met on the newly nominated base aircraft.

(5) The choice of the Operational Evaluation (OE) report to be used must be made between either the most applicable updated TCCA Operational Evaluation Board, Joint Operational Evaluation

Board (JOEB) or Flight Standardization Board (FSB) report and is subject to the approval of the principal CASI, Flight Operations.

(a) Where two or more OE reports are available for a base aircraft and the applicable variant(s) of the same type, common type or different type, the TCCA OEB report should be used.

(b) Where a TCCA OEB report is not available or where TCCA was not part of the OE, the JOEB or FSB report should be used.

(c) Where none of the above is available the OE report of the country that has the greatest regulatory commonality with Canada should be used.

(d) In case of uncertainty of what OE is to be used and approved, the principal CASI, Flight Operations should contact the Chief, Commercial Flight Standards (AARTF).

### 5.10.6 Six Month Recurrent Training in Lieu of PPC

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | N/A | N/A | N/A | |
| CASS: | N/A | N/A | N/A | 725.113 |
| DOC(s): | | | | |

(1) Any pilot who completes an initial PPC must undergo a mid-year PPC prior to entering a recurrent training program that permits substitution of a training session for the mid-year PPC.

(2) The requirement to pass a mid-year PPC in the first twelve months of transitioning to a new aircraft type is also applicable to a pilot who is transitioning to the aircraft type for a second or subsequent time and, because of the length of time that their PPC has lapsed, requires an initial PPC.

(a) A pilot whose PPC or line check validity has expired for 24 months or more must undergo an initial PPC followed by a mid-year PPC.

(3) A pilot upgrading on the same equipment type must also undergo a recurrent or mid-year PPC following successful completion of the initial upgrade PPC.

(4) A captain who is qualified in the right seat, and subsequently becomes a first officer on the same equipment type, will be able to enter (or continue) the program that substitutes a training session for mid-year PPC.

## 5.11 Cockpit Procedures Training for Flight Crew Members

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.124(7) |
| DOC(s): | | | | |

*Reserved*

## 5.12 Synthetic Flight Training Device

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(9) | 723.98(7) | 724.115(8) | 725.124(8) |
| DOC(s): | TP 9685 | | | |

(1) Transport Canada approval is required for the use of synthetic flight training devices in training programs, requalification programs and PPCs.

(2) Operators are strongly encouraged to use synthetic training devices at every possible opportunity.

(3) The use of synthetic training devices is optional for Subpart 703 operators with the exception of:

(a) Training towards the Lower than Standard Take-Off Minima (RVR 1200 feet or 1/4 mile visibility) - Aeroplanes Without Certified Take-Off Performance (CASS 723.98(20)(b)); and

(b) the initial training for Single-engined Aeroplanes Carrying Passengers VFR at Night or Under IFR (CASS 723.98(24))

(4) The following are characteristics of different levels of synthetic training devices:

(a) Flight Training Device:

i. This is a cockpit replica with operative switches, gauges, dials etc and is mainly used for emergency evacuation competency training.

ii. It may have a motion or visual system but unless approved gets no credit for the extra systems.

iii. The devices are certified by TCCA and are assigned a level of from one to seven, with one being the least sophisticated.

iv. A higher level of sophistication permits the device to be used for more advanced training requirements.

(b) Level A Full Flight Simulator(FFS):

i. This synthetic training device has a motion and visual system that permits completion of a visual training program and PPC.

ii. When a Level A FFS is used for initial training there is also a requirement to complete airborne training and an airborne PPC.

iii. Recurrent training (and PPCs) may be conducted wholly in a level A FFS.

(c) Level B FFS:

i. It has a higher fidelity visual and motion system than that of Level A devices.

ii. Systems allow the device to accurately replicate aircraft handling when within ground effect and permits accurate depth perception and visual cues to assess sink rate.

iii. 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 FFS).

iv. A Level B FFS is compatible with Level A training programs.

(d) Level C FFS:

i. This device has a higher fidelity than the Level B device.

ii. Visual systems encompass a wider angle (i.e. side view) than the Level A and B devices.

iii. It is compatible with Phase 2 training programs and permits zero flight time training provided that certain pilot experience requirements are met.

(e) Level D FFS:

i. It is of a higher fidelity than the Level C simulator.

ii. It includes a daylight visual presentation.

iii. It is compatible with Phase 3 training programs which permits zero flight time training for pilots with no experience in similar type aircraft.

(5) For an in-depth description of the various classes of synthetic training devices, along with the basis for certification, consult TP 9685 Aeroplane and Rotorcraft Simulator Manual.

Note: The level of the training device is not the same as the level of a training program.

### 5.12.1 Use of Foreign Flight Simulators

(1) Canadian operators may use a foreign simulator for the purpose of training, licensing or checking flight crews, provided these simulators have TCCA approval.

Note: An FAA simulator approval up to Level A has TCA approval.

(2) An operator seeking approval to use a foreign simulator for training, checking or licensing flight crew members must apply in writing to the appropriate TCCA Regional Office or AARX requesting an evaluation of the foreign simulator.

(a) This request shall contain:

i. the simulator's Approval Test Guide (ATG); and

ii. a compliance statement certifying that:

1. the simulator meets the technical specifications for the level (A, B, C or D) requested; and

2. specific hardware and software configuration control procedures have been established.

### 5.12.2 Runway Illusion and Surface Conditions Simulation

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.124(11)(c)(iii), 725.124(12)(b)(i) |
| DOC(s): | | | | |

(1) To satisfy training requirements, a selection of visual views of the runway are required. The following are examples of what is expected:

(a) Less than ideal visibility due to obscuring phenomena such as fog, haze, blowing snow, snow showers;

(b) The use of different runways with different approach, threshold and centre-line lighting configurations; and

i. The varying runway "sight picture" presented to a pilot on visual approaches with glide paths that are too shallow, too steep, and nominal (corresponding to an ILS).

This is especially important for wide/long bodied aircraft simulators, and situations where the pilot is relatively inexperienced.

## 5.13 Level A Training Program for Pilots

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | 723.98(8) | A724.115(9), H724.115(8) | 725.124(9) |
| DOC(s): | | | | |

*Reserved*

## 5.14 Level B Training Program for Pilots other than Cruise Relief Pilot (CRP)

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | A723.98(9), H723.98(8) | A724.115(10), H724.115(8) | 725.124(10) |
| DOC(s): | | | | |

*Reserved*

## 5.15 Level C Training Program for Pilots other than CRP

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | A723.98(9.1), H723.98(8.1) | A724.115(10.1), H724.115(9.1) | 725.124(11) |
| DOC(s): | | | | |

*Reserved*

### 5.15.1 Additional Simulator Training in Lieu of Aircraft Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | A723.98(9.1)(c), H723.98(8.1)(c) | A724.115(10.1)(c), H724.115(9.1)(c) | 725.124(11)(c) |
| DOC(s): | | | | |

(1) There is a requirement to have pilots/flight crews participate in a number of additional simulated tasks should the operator wish to delete the requirement for aircraft training (assuming the conditions of the Standard are met).

(a) All of the additional tasks can be incorporated into the approved training syllabus and do not have to be done as a block of activities.

(2) The simulated line flight (as applicable, for Subpart 703 Aeroplanes, Subpart 704 & 705) should be structured to emulate an actual line flight as closely as possible.

(a) It should include flight planning, weather forecasts and actuals, ATC clearances, radio frequency changes etc.

(b) Each pilot should operate one sector as pilot flying (PF) and one sector as pilot not flying (PNF).

(c) If the approved training program already incorporates this exercise or the equivalent thereof in the training scenarios, then this requirement is satisfied.

## 5.16 Level D Training Program for Pilots other than CRP

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | A723.98(9.2), H723.98(8.2) | A724.115(10.2), H724.115(9.2) | 725.124(12) |
| DOC(s): | | | | |

*Reserved*

### 5.16.1 Additional Simulator Training in Lieu of Aircraft Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | A723.98(9.2)(b), H723.98(8.2)(b) | A724.115(10.2)(b), H724.115(9.2)(b) | 725.124(12)(b) |
| DOC(s): | | | | |

(1) There is a requirement to have pilots/flight crews participate in a number of additional simulated tasks should the operator to wish to delete the requirement for aircraft training (assuming the conditions of the Standard are met).

(a) All of the additional tasks can be incorporated into the approved training syllabus and do not have to be done as a block of activities.

(b) Beyond the additional tasks detailed in the Level C program, there is a requirement for a VFR flying training section for Level D training programs.

i. The VFR section requirement includes a minimum of four hours training, split equally into PF and PNF(PM) duties.

ii. The attached "Note" immediately posted after the VFR training program requirement permits some of the additional VFR training time to be used for other exercises, provided that the candidate demonstrates proficiency in the VFR manoeuvres.

1. This additional training time is not intended to be part of the minimum Level C training time allotment, as listed for Subparts 703 & 704. The Note quite clearly states "*as additional training to the Level C requirements*."

2. The intent of the Note is that a portion of the four hours' mandatory VFR training may be used to provide more beneficial and tailored simulator training for an experienced or advanced student who can demonstrate competence at an earlier point in the VFR training, and to use the remaining time for other training purposes in accordance with the Level C training criteria (but not to reduce or incorporate that time as part of the standard Level C specified time included in Subparts 703 & 704).

(2) The simulated line flight (as applicable, for Subpart 703 Aeroplanes, Subpart 704 & 705) should be structured to emulate an actual line flight as closely as possible.

(a) It should include flight planning, weather forecasts and actuals, ATC clearances, radio frequency changes etc.

(b) Each pilot should operate one sector as pilot flying (PF) and one sector as pilot not flying (PNF).

(c) If the approved training program already incorporates this exercise or the equivalent there of in the training scenarios, then this requirement is satisfied.

(3) The line flight is a separate, mandatory Standard requirement that cannot be combined with the other FFS training requirements. The operator's syllabus should reflect these requirements as separate training functions.

(4) The line flight requirement does not specify any sector length or time in each seat, so the operator should choose line flight sectors that realistically reflect their actual operation, or at least allow the pilots adequate time to prepare for each stage of the exercise.

## 5.17 Aircraft Only Flight Training Program

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR** | | | | |
| **CASS** | 722.76(10) | 723.98(10) | 724.115(11) | 725.124(13) |

| DOC(s) | |
|---|---|

(1) In scheduling aircraft training for initial, recurrent or other training, an operator should consider the fitness of both the training pilot and the candidate under training.

(a) The schedule should take into account other duties that are expected of the training pilot that day and ensure that he/she is in a position to deliver optimum performance.

(b) Since a person is better able to acquire and retain new knowledge when they are rested, the schedule of the candidate under training should also be considered so as to maximize the benefits of the training.

(c) Training sessions after the training pilot or the candidate has completed a full day of work should be avoided.

(2) In the case of a training flight, not only is the training pilot expected to address any emergency that may occur during the flight, he/she is also required to create a teaching environment which is conducive to learning on the part of the candidate, create and/or simulate a number of emergencies, monitor the performance of the candidate, correct any mistakes or inadequate performances from the candidate, and ensure that the flight is conducted safely.

(3) An operator having limited options other than scheduling aircraft training at the end of a working day should use the SMS to identify any potential hazards that could be related to this activity, and analyze each hazard by conducting a risk assessment.

(a) The operator would then be in a position to take corrective action to prevent the occurrence of incidents or accidents.

## 5.18 Emergency Procedures Training for Flight Crew Members

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.76(2)(c)(iii) | 703.98(2)(c)(iii) | 704.115(2)(a)(v)(C) | 725.124(2)(a)(iv)(C), 725.124(2)(b)(iv)(C) |
| CASS: | 722.76(13) | 723.98(11) | 724.115(12) | 725.124(14) |
| DOC(s): | | | | |

*Reserved*

### 5.18.1 General

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(13) | 723.98(11) | 724.115(12) | 725.124(14) |
| DOC(s): | | | | |

(1) Flight crew members are to receive training on the location and operation of emergency equipment on-board the aircraft.

(2) Except where noted, equipment used during practical training must be identical respecting the features and operation of equipment installed on the operator's aircraft.

(a) In aviation, practical training is commonly referred to as “hands on” training. Practical training ensures the effectiveness of the application of theory when combined with the skill set required to perform a task, especially when performance must be assessed.

(3) Although instructional videos, lectures or reading assignments may provide the basic theory, they do not satisfy the requirement of practical training.

(4) In evaluating an operator’s emergency procedures training program, the following should be considered respecting elements requiring practical training:

(a) Use of fire extinguishers:

i. The program should require each pilot to remove the extinguisher from its bracket/stored position and simulate operating the fire extinguisher (pull, aim, squeeze and sweep).

ii. It does not require the pilots to fight a live fire nor does it require that a fire extinguisher be discharged.

iii. If the extinguisher is accessible from the pilot’s seat, then the training should be conducted with the pilot strapped into his/her seat.

(b) Operation of emergency exits:

i. For operations under Subpart 705:

1. The pilot must be able to operate the main entrance door installed on the aircraft. It is not necessary for the pilot to evacuate through the exit during this training. It is not intended that pilots open each exit on every aircraft where:

a. exit operation in emergency mode for each exit on an aircraft is identical;

b. exit operation in emergency mode will cause automatic ramp/slide deployment and inflation (exits equipped with slides shall include slide or slide drag simulation), potentially causing damage to the aircraft; or by design can be used only once and then require maintenance action. In such cases, an approved video depicting the emergency operation can be used as an alternative; or

c. exit operation on one aircraft type is identical in operation to exits on another aircraft type.

ii. For operations under Subparts 702, 703 and 704:

1. If the pilot has assigned duties during an evacuation and is or could be required to operate or direct a passenger to operate an exit, he/she must be able to operate each type of exit installed on the aircraft. It is not necessary for the pilot to evacuate through the exits during this training. It is not intended that pilots open each exit on every aircraft where:

a. exit operation in emergency mode for each exit on an aircraft is identical; or

b. exit operation on one aircraft type is identical in operation to exits on another aircraft type.

(c) Donning and inflation of life preservers (as applicable):

i. Each pilot removes the life preserver, dons it correctly, tightens straps, locates the manual and oral inflation tabs/tubes, and simulates inflation and deflation techniques.

(d) Passenger preparation for an emergency (landing):

i. Each pilot practices the operator's approved procedures for preparing passengers during an emergency.

ii. This portion of the training can be incorporated with procedures described in the operator's approved Airplane Flight Training Program.

(e) Emergency evacuation procedures:

i. If the pilot has assigned duties during an evacuation, he/she must participate as a crewmember in an evacuation of the aircraft.

ii. For operators operating under Subpart 702, 703 and 704, as the pilot(s) is/are ultimately responsible for evacuating the passengers, he/she/they must participate in an evacuation of the aircraft as per the operator's procedures.

(f) Removal from stowage, deployment, inflation and boarding of life rafts/slides (as applicable):

i. Flight crew members shall demonstrate their ability to:

1. access the raft compartment and experience the difficulty associated with moving the weight of a packaged life raft within a space representative of the aircraft aisle;

2. examine all features of a fully inflated raft;

3. board raft(s); assist persons into raft; access the inflation lanyard;

4. access the raft release mechanism while verbally describing the procedure to release the raft from the aircraft; and

5. examine the raft survival kit and review the operation of all components.

ii. Rafts may be substituted provided there are no substantive differences with respect to weight, dimensions, appearance, features, and operation and training for the differences has been provided.

iii. Flight crew members shall also be instructed in techniques for righting an overturned raft, erecting the raft canopy, and raft management. This may be accomplished through theoretical instruction and/or practical training.

(g) Flight crew member incapacitation (as applicable to flight crew complement of two or more):

i. Each flight crew member participates in a drill with one flight crew member incapacitated. The training should include directions the flight crew member should give to a passenger/flight attendant to secure the incapacitated flight crew member in their seat and any communication/coordination procedures to assist the remaining flight crew member.

(5) CASIs involved in the approval and monitoring of operator training programs should verify that the emergency procedures training meets the intent of the applicable CASS, particularly where practical training is required.

### 5.18.2 Emergency Training - Evacuation and Ditching

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(13)(g) | 723.98(11)(d) | 724.115(12)(d) | 725.124(14)(d) |
| DOC(s): | | | | |

(1) Emergency evacuation training shall be given on all aircraft types.

(2) Ditching training shall be provided on aircraft types operated on extended over-water operations and that are required to have survival equipment under section 602.63 of the CARs.

(a) Ditching is a planned, controlled descent to a water surface as a result of an emergency situation while inadvertent water contact is an unexpected contact with the water (e.g. during departures or approaches over water surfaces).

(3) If the aircraft is flown in the regime where life rafts must be carried, then crew training is necessary on ditching and the deployment of rafts and emergency equipment on board the raft.

(4) The training should also include performing actual checklists and actions that the crew would have to complete in the event of an emergency evacuation. The following items should be addressed:

(a) which checklists to complete;

(b) which agencies to inform and what information to provide;

(c) briefing to flight attendants (if applicable);

(d) briefing to passengers;

(e) actions on landing, securing the aircraft, public address to passengers; and

(f) exits and evacuation procedures.

## 5.19 Regaining Competency Training

### 5.19.1 Recency not Maintained

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | 723.98(12) | 724.115(13) | 725.124(15) |
| DOC(s): | | | | |

*Reserved*

### 5.19.2 After PPC Expiry

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |

| | | | | |
|---|---|---|---|---|
| **CASS:** | N/A | A723.98(13) | A724.115(14) | 725.124(16) |
| **DOC(s):** | | | | |

*Reserved*

## 5.20 Upgrade Training and Checking

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |
| **CASS:** | 722.76(5) | A723.98(15) | A724.115(15) | 725.124(17) |
| **DOC(s):** | | | | |

(1) Requirements for airborne training and checking are not required for a pilot who requires upgrade training on an aircraft type on which he/she has previously qualified as second-in-command, provided he/she is current on the aircraft as a second-in-command with 100 hours on type.

## 5.21 Right Seat Conversion Training

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |
| **CASS:** | N/A | A723.98(14) | A724.115(16) | 725.124(18) |
| **DOC(s):** | | | | |

(1) The captain on type shall receive training and demonstrate competency prior to operating from the right seat on a revenue flight.

(a) The amount of training will vary depending upon operational differences between the two seats.

(b) Where duties are considerably different the magnitude and scope of training will reflect this.

## 5.22 Cruise Relief Pilot (CRP) Training

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |
| **CASS:** | N/A | N/A | N/A | 725.124(19) |
| **DOC(s):** | | | | |

*Reserved*

# 5.23 Line Oriented Flight Training (LOFT)

## 5.23.1 General

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | N/A | N/A | 725.124(20) |
| DOC(s): | | | | |

(1) Before the mid-year PPC can be replaced with a LOFT training session, the airline and the pilot shall have one year's experience on the aircraft.

(2) Currently, aircraft systems and emergency recurrent training (simulator) requires that pertinent systems and emergencies be covered in a twelve-month period in the manner approved in the COM.

(a) When substituting a LOFT session for the mid-year PPC, the pertinent systems and emergency requirements may be completed over a three-year period, as approved by TCCA.

## 5.23.2 LOFT Scripts

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | 705.124 |
| CASS: | N/A | N/A | N/A | 725.124(20) |
| DOC(s): | | | | |

*Reserved*

# 5.24 Initial and Recurrent Training for Flight Engineer and Second Officer

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | N/A | N/A | 725.124(20A) |
| DOC(s): | | | | |

*Reserved*

# 5.25 Flight Dispatcher Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | 704.109 | 705.110 |

| | | | | |
|---|---|---|---|---|
| **CASS** | | | A724.109 | 725.124(21) |
| **DOC(s)** | TP12513 | | | |

(1) Flight dispatcher training is required for Type A & B operational control systems, which are only required for:

(a) Subpart 705; and

(b) No Alternate IFR Aeroplane operations under Subpart 704.

## 5.25.1 Flight Dispatcher Age Limitations

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR** | | | | |
| **CASS** | | | A724.109 | 725.124(21)(q) |
| **DOC(s)** | | | | |

(1) The operator should have available in their employee records the age or birth date of each dispatcher, as proof that the dispatcher has met the minimum age requirements of the CASS.

(a) An appropriate place to maintain this information is the dispatcher's training record file.

## 5.25.2 Initial & Recurrent Training

(1) The training programs must:

(a) during the initial course, cover all subjects listed in CASS 725.124(21)(s); and

(b) during subsequent recurrent courses, cover all subjects listed in CASS 725.124(21)(s) over the period of three (3) years.

Note: Some subjects require more frequent training (e.g.; de-icing)

(2) The validity of the Flight Dispatch Certificate is maintained by the dispatcher:

(a) attending annual training; and

(b) successfully completing an annual competency check. This check:

i. must be completed no later than first day of thirteenth month following the date of certification;

ii. is conducted by Check Flight Dispatcher;

iii. takes place during an operating shift; and

iv. will evaluate items listed in CASS 725.124(21)(i)(i-xxii)

Note: Competency checks revalidate generic exams for 2 years.

(3) For initial training, dispatchers must complete all required items per CASS 725.124 prior to being recommended for a Dispatch Competency Check (DCC).

(4) For recurrent training, the recurrent DCC may be conducted prior to completion of all recurrent specific training. To maintain validity of the dispatcher's authority:

(a) the recurrent DCC must occur prior to the 1st day of the 13th month following the previous successful DCC; and

(b) the specific training is valid (i.e.; has occurred or will occur in the current calendar year)

### 5.25.3 Summary/Sequence of Flight Dispatcher Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | |
| CASS | | | A724.109 | 725.124(21)(a) |
| DOC(s) | SI 725-001, TP 12513 | | | |

(1) The following is the sequence of events related to training and certification of flight dispatchers:

(a) Generic Training:

i. The training should be based on the study guide TP 12513, *Study and Reference Guide - Flight Dispatchers.*

1. The guide provides information on subject matter covered by the two generic examinations mentioned below, in ii.
2. Training is not mandatory in order to pass the generic exams.
    a. A candidate may elect to:
        i. self-study; or
        ii. attend generic training with a selected school.

        A variety of private and public schools provide training in preparation for the generic exams, but these schools are not approved nor regulated by TCCA.

ii. The candidate must pass two generic examinations, one on operations and one on weather.

1. The examinations are administered by the Licensing Branch of TCCA.

iii. The completion of the dispatcher's initial competency check with an operator revalidates the TCCA generic exam to the first day of the twenty-fifth month following the competency check;

(b) Specific Training:

i. Content of the specific training:

1. ground school;
2. on-the-job training (operator specific).
    a. The time will vary depending on the complexity of the operations.
    b. If the operator's operational control system functions over a number of specified shifts, training shall be done on all shifts;
3. cockpit familiarization during actual revenue flights;
4. examinations, (developed by the operator); and
5. a competency check.

(c) Certification:

i. the flight dispatcher will be issued a certificate after all of the above-mentioned training has been completed and a successful competency check has been performed; and

ii. the certificate is valid for acting as a flight dispatcher for the operator where the candidate received the specific training.

1. Until the certificate is printed and in the candidate's possession, the competency check form will be used to testify to the certification of the dispatcher.

iii. All competency check forms must be inserted in the dispatcher's training file.

## 5.25.4 Training for Multiple Areas of Operation

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | |
| CASS | | | A724.109 | 725.124(21)(h) |
| DOC(s) | | | | |

(1) Where a dispatcher is responsible for multiple areas of operation, a rotation of these areas can be done over subsequent years until all areas have been reviewed.

(a) The process must be repeated once all areas of operation have been completed.

(b) A trip report must be filed and inserted in the dispatcher's training file.

## 5.25.5 Training for a Start-up Operation

(1) Where a new operator is starting up its flight operation, it is anticipated that the cockpit jump seats will be occupied for inspection and flight crew training in the first few weeks of the operation.

(a) New operators who are unable to provide cockpit familiarization training to flight dispatchers will be given interim approval for up to six months to complete it.

## 5.25.6 Contracted Flight Dispatch and Flight Watch Services

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | |
| CASS | | | A724.109 | 725.124(21)(n) |
| DOC(s) | | | | |

(1) Prior to contracting an outside organization to provide flight dispatch/watch services, it is the responsibility of the operator to ensure that all dispatchers hold the appropriate certificates.

(a) Employees of the contracting agency who provide flight dispatch and/or flight watch services for the operator will be viewed by TCCA as employees of the operator, from the certification standpoint.

(b) All dispatchers providing flight dispatch and flight watch services for Canadian operators shall be certified with that operator.

(c) The competency check of every contracted flight dispatcher must be performed in a real operational control environment, involving flights and aircraft of that operator.

### 5.25.7 Guidelines for Competency Check for Flight Dispatcher

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | |
| CASS | | | A724.109 | 725.124(21)(i) |
| DOC(s) | TP 14114 | | | |

(1) Operators will normally nominate a person to represent the Minister in conducting flight dispatcher training and checking.

(a) This position is known as an Approved Check Dispatcher (ACD).

(b) The Approved Check Dispatcher program is described in TP 14114.

(2) The competency check for flight dispatchers is detailed in CASS 725.124(21)(i). The items contained therein:

(a) are the minimum required items; and

(b) may be expanded at the operator's discretion.

(3) Guidelines for the conduct of the competency check can be found in TP 14114.

### 5.25.8 Flight Dispatcher Requalification

(1) Previously qualified dispatchers who have not actively dispatched for any operators for a period in excess of 24 months must rewrite the TCCA generic exams.

(a) The operators' principal operation CASI (POI) may allow a reduction of the operators' initial specific training, as per SI 725-001, based on the dispatcher' involvement with the company's operation and the duration of the hiatus period.

(b) This training shall be followed by on-the-job training and a successful competency check.

### 5.25.9 Flight Dispatcher Instructor and Check Flight Dispatcher

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | |
| CASS | | | A724.109 | 725.124(21)(f) |
| DOC(s) | | | | |

(1) Dispatcher initial and recurrent competency checks should be conducted by company flight dispatchers approved by TCCA (i.e; ACD).

(a) Where an ACD is not available for the checks, a TCCA CASI may also conduct these checks.

i. This option will normally be offered only as a temporary measure, until an ACD can become qualified for the company.

(2) The dispatcher nominated and approved for a checking position shall hold a valid Dispatcher Certificate and have operational control/dispatch experience.

(a) A minimum of twelve (12) months experience as a flight dispatcher, six of which with the current operator is required.

## 5.26 Check Dispatcher Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | N/A | 724.109 | 725.124(4)(f)(ii) |
| DOC(s): | TP 14114 | | | |

(1) As this position is part of an External Delegate of the Minister program, qualifications and training requirements are detailed under that program.

(a) The current term for this function is Approved Check Dispatcher (ACD).

(b) Refer to TP 14114 *Approved Check Dispatcher Manual* for details on training associated with this position.

(2) Where an operator does not have an Approved Check Dispatcher, the operator can request that a TCCA CASI perform the flight dispatcher competency checks.

(a) It is expected that only smaller operators will require CASIs to perform these checks.

## 5.27 Flight Follower Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(4) | A723.98(16), | A724.115(17), | 725.124(22) |
| DOC(s): | | | | |

*Reserved*

## 5.28 Surface Contamination Training for Operations Personnel

### 5.28.1 General

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 702.76(2)(d) | 703.98(2)(c)(v) | 704.115(2)(c) | 705.124(2)(d) |
| CASS | 622.11, 722.76(14) | 622.11, A723.98(17), H723.98(14) | 622.11, A724.115(18), H724.115(15) | 622.11, 725.124(23) |
| DOC(s) | TP 14052 | | | |

(1) Operations personnel are comprised of pilots, cabin attendants, de-icing personnel, maintenance personnel, and ramp personnel involved with loading, towing or pushing back flights prior to departure.

(2) The training program should be appropriate to the position held by the individual undergoing the training

(a) Training for flight crew would be different from training for ramp personnel.

(3) Companies who offer de-icing services on a contract basis are required to give contamination training to their personnel.

(4) Further information on the training requirements for operations personnel can be found in section 4.9 Ground Icing Program, within this volume.

### 5.28.2 Safety Awareness Program

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.76(3)(c) | 703.98(3)(c) | 704.115(3)(c) | 705.124(3)(c) |
| CASS: | | | | |
| DOC(s): | | | | |

(1) Anyone whose job may, at some time, put them in a position to observe possible surface contamination shall be the audience for a safety awareness program.

(a) Recipients of the program could be expected to include flight dispatchers, passenger escorts, fuelling personnel, ramp personnel not directly involved in aircraft servicing prior to departure, and anyone else who has, or may have, visual contact with an aircraft such that they would be able to detect aircraft critical surface contamination**.**

(2) A safety awareness program can consist of posters, articles, videos or any other medium that is available to personnel.

(3) The program must identify the hazards of contamination, and to whom it should be reported.

## 5.29 Minimum Equipment List (MEL) Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(16) | A723.98(18), H723.98(15) | A724.115(19), H724.115(16) | 725.124(24) |
| DOC(s): | TP 9155 | | | |

(1) MEL training is required for AMO personnel performing maintenance on aircraft of an operator. Refer to section 5.69 of this volume for specific details.

(2) Refer to TP 9155 – *Master Minimum Equipment List / Minimum Equipment List Policy and Procedures Manual* for specifics on the training required for personnel associated with aircraft operations.

## 5.30 Transportation of Dangerous Goods Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(17) | A723.98(19), H723.98(16) | A724.115(20), H724.115(17) | 725.124(25) |
| DOC(s): | AC 700-001 | | | |

(1) All operators transport dangerous goods either as cargo, mail and/or in passenger and crew baggage.

(a) Each operator must have a Dangerous Goods SA to do so.

(2) Each operator must have either:

(a) an approved awareness training program; or

(b) an approved training program for the transport of dangerous goods as cargo and/or mail.

(3) Volume 3 of this manual series contains details on the training requirements that must be met to obtain this SA.

(4) Further guidance on dangerous goods legislation and requirements can be found in Section 10.2 of this volume.

## 5.31 Lower than Standard Take-off Weather Minima Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | A723.98(20), H723.98(17)&(18) | A724.115(21), H724.115(18)&(19) | 725.124(26) |
| DOC(s): | | | | |

(1) Guidance specific to the application for the SA for lower than standard take-off weather minima can be found in Volume 3 of this manual series.

(a) This guidance includes details on the training requirements.

## 5.32 Area Navigation Systems (RNAV) Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(15) | A723.98(21), H723.98(19) | A724.115(22), H724.115(20) | 725.124(27) |
| DOC(s): | | | | |

(1) There are a number of SAs related to the use of RNAV.

(a) Review Volume 3 of this manual series for further training requirements that need to be met in association with each SA.

### 5.32.1 Ground Training - Non-Integrated Receivers (Panel Mount GPS Receivers)

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | 724.115(22)(b) | |
| DOC(s): | | | | |

(1) Experience has demonstrated that when someone completes training for and qualifies on a particular model of GPS, he/she can be deemed competent on that GPS regardless of the aircraft it is installed on.

(a) Unless the GPSs are dissimilar types, there should only be a need for aircraft differences training.

(2) Pilot GPS certification should be deemed transportable between companies, provided that the company the pilot moves to has an approved GPS training program.

## 5.33 Transportability of a Pilot Proficiency or Competency Check – Training Required

| Subpart: | 702 | | 703 | 704 | 705 |
|---|---|---|---|---|---|
| CAR: | | | | | |
| CASS: | 722.76(11) | | A723.98(22), H723.98(20) | A724.115(23), H724.115(21) | 725.124(28) |
| DOC(s): | | | | | |

*Reserved*

### 5.33.1 Commercial Operator to Commercial Operator

(1) PPCs and PCCs continue to be transferable from one commercial operator to another commercial operator in accordance with the appropriate subsection of the CASS.

### 5.33.2 Commercial/Private to Private Operator

(1) Transportability of a PPC/PCC from a commercial operator to a private operator, or between two private operators is at the discretion of the chief pilot of the hiring operator.

(a) It is the chief pilot's responsibility to ensure that the new pilot has fulfilled all the training, competency and currency requirements necessary to satisfy the operator's training program.

### 5.33.3 Private Operator to Commercial Operator

(1) A pilot transferring from a private operator to a commercial operator will be required to meet all the training requirements of the appropriate CASS and to complete a PPC/PCC in accordance with the hiring operator's approved training program.

(a) On a case-by-case basis a Commercial Operator's Principal Operating Inspector (POI) may recognize training credits based on the similarity in training programs, standard operating procedures, and the nature of the operations conducted. However, the overriding determination will be that the pilot will satisfy all applicable CASS.

### 5.33.4 Combined Private/Commercial Operator

(1) For Commercial Operations, the CASS will take precedence for purposes of TCCA oversight; the operator will need to satisfy all CASS.

(a) The operator is free to augment any of these standards as deemed necessary to satisfy the requirements identified in his/her SMS for purposes of Private Operations.

## 5.34 Hire of Type Qualified Pilots – Training Required

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | 705.113(6) |
| CASS: | N/A | N/A | N/A | 725.124(28A) |
| DOC(s): | | | | |

(1) The term "recent type rating" is intended to mean a type rating qualification that was not followed by the issuance of a PPC under CAR Part VII.

(a) A type rating will not be considered recent after 24 months following the issuance of the type rating.

(2) The intent of CASS 725.124(28A) is to address the situation of Canadian or foreign pilots with a recent type rating and no PPC under Subpart 705, or with a type rating and an expired PPC, all under the same Standard.

(a) An operator would use the content of this Standard when they wish to hire such qualified pilot.

(3) CASS 725.124(28A) makes allowance for;

(a) a pilot who may have purchased a recent type rating on an aeroplane without doing a PPC under CAR Part VII, to be hired after having received the training specified in that paragraph and completion of a PPC and a line check; or

(b) a pilot with a type rating and an expired PPC who has some experience on the type, to do the same.

(4) It should be noted that paragraph (28A) does not provide relief from the requirements of CAR 705.113(6).

(a) An initial training is still required if the candidate does not meet the conditions of CAR 705.113(6).

## 5.35 High Altitude Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |

| | | | | |
|---|---|---|---|---|
| **CASS:** | 722.76(18) | A723.98(23) | A724.115(24) | 725.124(29) |
| **DOC(s):** | | | | |

*Reserved*

## 5.36 Survival Training

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |
| **CASS:** | 722.76(13)(a) | A723.98(25), H723.98(21) | A724.115(25), H724.115(22) | 725.124(30) |
| **DOC(s):** | | | | |

(1) The training program should at minimum address the following details:

(a) basic steps following an incident, presented in a simple, easily remembered format (i.e.; first aid, fire, signals, shelter, food);

(b) survival equipment inventory; and

(c) instructions on the use of survival equipment.

## 5.37 Aircraft Servicing and Ground Handling Training for Pilots

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | 706.10-12 | 706.10-12 | 706.10-12 | 706.10-12 |
| **CASS:** | 625.85, 722.76(8), 726.10-12 | 625.85, A723.98(23), H723.98(22), 726.10-12 | 625.85, A724.115(26), H724.115(23), 726.10-12 | 625.85, 725.124(31), 726.10-12 |
| **DOC(s):** | | | | |

(1) Training regarding ground servicing and handling requirements shall be appropriate to the operator's operation.

(2) Training is required where servicing is part of a pilot's responsibilities.

(3) Training requirements for elementary work and servicing can be found in CAR 706, and its associated standard.

(4) Training elements can be found in CASS 625.85, Appendix “A”.

## 5.38 Line Indoctrination Training for Flight Crew Members

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |

| | | | | |
|---|---|---|---|---|
| **CASS:** | N/A | N/A | A724.115(27), H724.115(24) | 725.124(32) |
| **DOC(s):** | | | | |

(1) The purpose of line indoctrination is to refine, in a line flying context, the initial training a pilot candidate has received on that aircraft type.

(a) This training should ensure that the candidate will be fully prepared to conduct operations in his/her designated position on all company routes for which he/she may be assigned.

(2) The most demanding phases of any flight are the take-off and landing and therefore, these phases of flight should be emphasized during line indoctrination training.

## 5.38.1 Line Indoctrination for Ground Servicing

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |
| **CASS:** | N/A | N/A | A724.115(27)(d), H724.115(24)(h)(iv) | 725.124(32)(d) |
| **DOC(s):** | | | | |

(1) Line indoctrination training regarding ground servicing and handling requirements shall be appropriate to the:

(a) operator's operation; and

(b) pilot’s responsibilities.

## 5.38.2 Line Indoctrination Items Covered in Simulator Training

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |
| **CASS:** | N/A | N/A | A724.115(27)(m&v) | 725.124(32)(m&v) |
| **DOC(s):** | | | | |

(1) If the following procedures were covered in simulator training, they do not need to be covered during line indoctrination:

(a) RTO procedures, and use of the brake cooling chart;

(b) emergency procedures; and

(c) engine inoperative procedures.

(2) Completion of these items during the simulator portion of training should be recorded in the pilot's training file.

### 5.38.3 Line Indoctrination for Emergency Procedures

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | N/A | A724.115(27)(v) | 725.124(32)(v) |
| DOC(s): | | | | |

(1) The emergency/abnormal conditions outlined in 725.124(14) may be covered verbally to the satisfaction of the instructor conducting the line indoctrination.

(a) It is also permissible that these items be covered during aircraft/simulator training (per 5.37.2, above).

(2) It is not intended that all of these manoeuvres be demonstrated during line indoctrination.

## 5.39 Line Indoctrination for Flight Crew Members - Sectors/Hours Requirements

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | N/A | A724.115(28) | 725.124(33) |
| DOC(s): | | | | |

(1) Training requirements for line indoctrination should start with the basic requirement to safely conduct a domestic flight or a domestic sector.

(a) A sector is considered the best reference unit because it ensures that the fundamentals of line operations will always be covered; flying hours often provide only limited exposure to an operation and not valuable practical training and experience.

(2) For those operators whose operations are more complex and/or sophisticated, the line indoctrination sectors must be representative and consistent with the company route and airport qualification requirements and with the standard.

(a) Additional line indoctrination training (more sectors) can be expected.

(3) Even if the pilot is familiar with the technology of the aircraft and/or has flown similar routes before, the sectors must meet the minimum in the standard.

## 5.40 Line Indoctrination Training for Flight Attendants

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | N/A | N/A | 725.124(34) |
| DOC(s): | | | | |

(1) The purpose of line indoctrination is to provide:

(a) operational experience and experiential learning on a real aircraft within a suitable timeframe after completion of initial training; and

(b) the operator with the opportunity to ensure that the trainee is able to apply the lessons learned and skills developed during initial training.

(2) Flight attendant trainees undergoing individual line indoctrination training may only be assigned to sit in a flight attendant seat at a flight attendant station if there are seats available.

(a) If there are an insufficient number of available seats at flight attendant stations to accommodate the flight attendant trainee, then the trainee should occupy the closest passenger seat that will provide the best vantage point to observe and be supervised by the qualified flight attendant. This then becomes the trainees assigned flight attendant station.

(3) Line indoctrination training for flight attendants may be approved separately (as part of the COM training program requirements) or as a component of the flight attendant training program.

## 5.41 Route/Area and Aerodrome Qualifications Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | H724.115(25) | 725.124(35) |
| DOC(s): | | | | |

*Reserved*

### 5.41.1 Aerodrome Qualifications Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.124(35)(a) |
| DOC(s): | | | | |

(1) PIC aerodrome qualification can be accomplished:

(a) by attending and completing an initial company training course that covers a sample of the aerodromes that the operator flies into;

(b) by a self-briefing method where the information for the various aerodromes is kept up to date and available to the PIC;

(c) by occupying the observer seat into a representative aerodrome;

(d) by having a CCP or training pilot occupy the observer seat to guide the PIC into a representative aerodrome; or

(e) by flying to the aerodrome with a CCP or training pilot in the other seat. This can be accomplished online indoctrination, a line check or other type of flight.

(2) The operator should designate:

(a) which aerodromes can be classified as similar where the qualification into one would qualify the pilot for the other similar aerodromes;

E.g.: a domestic classification could include all of those aerodromes in North America where the approach procedures and facilities do not require any special skills or knowledge.

(b) how qualification will be achieved at the various aerodromes;

E.g.: will the qualification be achieved by self-briefing, observer seat, or actual flight.

(c) the period over which the qualification for that aerodrome or similar aerodromes is valid; and

(d) how the qualification will be recorded and how it will be maintained.

(3) To designate aerodromes as similar, aerodromes should be assessed as to whether they are:

(a) within Northern Domestic Airspace;

(b) high density airports requiring special operations or procedures;

E.g.: a qualification into Chicago O'Hare could qualify for all USA high density aerodromes.

(c) gravel strips; and/or

E.g.: an initial qualification on gravel could qualify for all gravel strips

(d) surrounded by mountainous terrain.

(4) Each operator will have to review their operations to determine where additional aerodrome qualifications are appropriate, and how these aerodromes should be classified.

(5) To ensure that the standard is applied the operator must maintain a record indicating the aerodromes for which the PIC has demonstrated the appropriate knowledge.

## 5.41.2 Route/Area Qualifications Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.124(35)(b) |
| DOC(s): | | | | |

(1) PIC route qualification can be accomplished:

(a) by attending and completing an initial company training course that covers a representative sample of the operator's routes;

(b) by a self-briefing method where the information for the various routes is kept up to date and available to the PIC;

(c) by occupying the observer seat on a representative route; or

(d) by flying on that route with a CCP or training pilot in the other seat.

(2) The operator should designate:

(a) which routes can be classified as similar where the qualification for one route would qualify for the other similar routes;

E.g.: a North Atlantic classification could include all of the routes to and from Europe where the procedures and facilities are similar and do not require any other special skills or knowledge.

(b) how qualification will be achieved for the various routes;

E.g.: will the qualification be achieved by self-briefing, observer seat or actual flight.

(c) the period over which the qualification for that route or similar routes is valid; and

(d) how the qualification will be recorded and how it will be maintained, including details on how to re-qualify once a particular qualification has lapsed.

(3) To ensure that the standard is applied, the operator must maintain a record on which routes the PIC has demonstrated the appropriate knowledge.

(4) A flight may be used to accomplish both a route and an aerodrome qualification.

E.g.: an actual flight into London Heathrow could be used to qualify for both North Atlantic routes and aerodromes in Europe.

## 5.42 Extended Twin-Engine Operations (ETOPS) Training for Flight Crew Members and Maintenance Employees

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.124(36) |
| DOC(s): | TP 6327 | | | |

(1) Guidance specific to the application for the SA for ETOPS can be found in Volume 3 of this manual series.

(a) This guidance include details on the training requirements.

Note: ETOPS Training is required for AMO personnel performing maintenance on aircraft of an operator that is ETOPS rated.

## 5.43 Lower than Category I Operations Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | H723.98(18) | A724.115(29), H724.115(19) | 725.124(37) |
| DOC(s): | | | | |

(1) Guidance specific to the application for the SA for lower than Category I approaches can be found in Volume 3 of this manual series.

(a) This guidance includes details on the training requirements.

## 5.44 One-Engine Inoperative Ferry Flight Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.124(38) |
| DOC(s): | | | | |

*Reserved*

## 5.45 Fatigue Management Training Program

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 700.218(2), 700.255 | | | 700.218(1), 700.255, 705.124(4) |
| CASS: | | | | |
| DOC(s): | TP 14572-14578 | | | |

(1) Fatigue management training is mandated in CAR 700.255

(a) A list of required items for the training is in CAR 700.218

(2) Although approval is not required for FRMS documentation, it will be accepted by TC.

(a) The FRMS documentation will form part of the COM, whether contained within the COM itself or in another volume.

## 5.46 Crew Resource Management (CRM) Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(24) | A723.98(33), H723.98(25) | A724.115(38), H724.115(28) | 725.124(39) |
| DOC(s): | AC 700-042 | | | |

*Reserved*

## 5.47 Airborne Icing Training for Flight Crew

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(21) | A723.98(28) | A724.115(33) | 725.124(40) |

| DOC(s): | AC 700-030, AC 700-031 |
|---|---|

*Reserved*

## 5.47.1 General

(1) Operators may use the following material as the basis for their ground training programs for airborne icing.

(2) The information provided in this section is not as technically complete as it would be if it was intended for comprehensive teaching of the subject matter.

(a) It is provided to raise pilots' awareness of the real dangers associated with flight into icing conditions, along with some tips to recognize and avoid situations which might end tragically.

(3) Seasonal operators, or operators that employ pilots on short contracts, may apply to their CASI-Flight Operations for a reduced training requirement as an acceptable means of compliance with the applicable CASS.

(a) The reduced requirement may range from no training to an abbreviated version of the guidance material.

(b) Before approving a reduced training program CASI-Flight Operations must be satisfied that the operator's activities present minimal risks for encountering icing conditions.

(4) Flight in icing conditions is an inescapable fact of life for Canadian operators conducting all-weather operations.

(a) Given Canada's tremendous geographic extent, it is probably true that there is no time during the year that icing is not forecast somewhere in the country.

(b) Our record for safe operations in icing conditions is excellent, and our environment ensures that every IFR-rated pilot will receive initial exposure to airborne icing sometime during the first year of all-weather operations, and annual recurrent exposure every year thereafter.

(5) There are many factors involved in determining an aeroplanes capability to operate in icing conditions, and not all aeroplanes are equal in this regard.

(a) It is unlikely that there is any benefit to be gained from continued operation in icing conditions, regardless of aeroplane de-/anti-icing capability.

i. Pilot workload is increased, performance is degraded, and fuel consumption will increase through operation of engine anti-ice equipment and/or evaporative airframe de-/anti-icing systems dependent on bleed air.

(b) If the option of changing altitude and/or route to exit the conditions is available, it should almost always be used.

## 5.47.2 Basis of Certification for Flight into Known Icing Conditions

(1) Airborne icing is a very complex issue.

(a) There are environmental, aircraft design features and flight phase factors that determine the type and severity of the accumulation. These parameters all contribute to the potential icing severity.

i. The environmental component consists of liquid water content, temperature and median volume diameter (or droplet size). The environmental component can be

described as icing potential which, when a particular aircraft is flown through it, determines the intensity or severity of the icing encounter.

ii. The aircraft design features include the extent and type of ice and angle of attack.

(2) All transport category aeroplanes in Canadian commercial service certificated for flight into known icing conditions have been certificated to the standard contained in Appendix C to Chapter 525 of the Airworthiness Manual (AWM).

(a) This is identical to Appendix C to Federal Aviation Regulation (FAR) 25, the universally accepted standard for icing certification, and is also applied to aeroplanes certificated to standards other than transport category-for example, to AWM 523/FAR 23 Normal or Commuter category aeroplanes.

(b) Appendix C envelopes are the design and certification bases for operations in icing conditions inside clouds; however, even conditions within clouds sometimes exceed these envelopes.

Note: Icing conditions potential outside of cloud, such as freezing rain/drizzle are not covered by the Appendix C envelope.

(c) Design and certification of de-icing and anti-icing equipment is conducted only with respect to the requirements of Appendix C.

i. Considerable judgement by flight crews is required, as there is the potential to encounter conditions that may be outside the design and certification limits, flight regime and configuration of a particular aircraft.

(d) To fully understand what certification for flight into known icing means, it is necessary to know what in-flight icing conditions are covered by the Appendix C envelope, and what conditions are not covered.

i. Appendix C covers maximum continuous icing conditions containing water droplets up to 40 microns in median volume diameter, and maximum intermittent icing conditions containing droplets up to 50 microns.

1. It is not possible to relate these droplet sizes directly to the meteorological terms for freezing precipitation with which pilots are most familiar, such as ZR, ZL-, ZR+, etc. (TAF/METAR terminology FZRA, -FZDZ, +FZRA).

2. Freezing precipitation may contain spectra of droplet sizes that can have a droplet median volume diameter as high as 1000 microns.

(e) Ice protection equipment on aeroplanes certificated in accordance with Appendix C guidelines may not be adequate to cope with all icing conditions encountered.

### 5.47.3 Airborne Icing Definitions and Terminology

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | |
| DOC(s): | TP 14371 – MET 2.4, AIR 2.12.3.1<br>FAA AC91-51A | | | |

(1) Ground Icing - Icing accumulated while an aircraft is on the ground, up to the point of rotation, or after touchdown.

(2) Airborne Icing - Icing accumulated while the aircraft is in flight; that is, between rotation, when all protection from ground-applied anti-icing fluids ceases, and touchdown.

## 5.47.4 Aerodynamic Effects of Airborne Icing

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | |
| DOC(s): | TP 14371 – AIR 2.12.3.2-4, AC 700-031 | | | |

### 5.47.4.1 Ice Bridging versus Residual Ice

(1) Several generations of pilots operating aeroplanes with pneumatic de-icing boots have been cautioned against the dangers of ice bridging.

(a) Pilots were, and are advised against activation of the de-icing boots before sufficient ice has built up on the leading edge (generally between ¼ and 1 inch) out of concern that the ice would form around the shape of the inflated boot, resulting in the boot inflating and deflating under a shell of ice, making de-icing impossible.

(b) Despite the widespread belief in this phenomenon within the pilot community and its coverage in numerous technical publications, its existence cannot be substantiated, either technically or anecdotally.

i. Major manufacturers of de-icing boots reported that they had been unable to reproduce ice bridging under any laboratory/wind tunnel conditions, and that any operational report of ice bridging investigated by them had been determined to be a report of residual ice.

(2) Residual ice is the ice remaining on a boot surface after an inflation cycle.

(a) Wind tunnel tests have shown that a higher percentage of the ice on a boot breaks away if the ice is allowed to build up to ¼ to 1 inch prior to boot activation.

i. Even in this case, some ice may adhere to the boot after inflation, and be removed after a subsequent boot cycle.

(b) If, however, the boots are inflated with a thin layer of ice on the boot surface, as little as 40% of the ice may be removed during the inflation cycle.

i. This is not ice bridging, but residual ice.

(c) When pneumatic boots with an automatic cycle are selected "On" with a thin layer of ice on the boots, typically some residual ice will remain on the boots after the first and second inflation/deflation cycles, but be totally cleared following the third or fourth cycle.

i. If the boots are left on automatic, the clearing pattern will repeat every third or fourth cycle.

#### 5.47.4.2 Effects of Residual Ice

(1) Any contamination on a wing leading edge will degrade performance.

(a) The degree of degradation depends on many factors, and can be quite dramatic on modern high-performance airfoils at the low end of the speed range.

(b) While the effect on performance of what might appear to be insignificant amounts of residual ice may not be noticeable to the flight crew between boot cycles at cruising speed, it could seriously degrade performance as speed decreases (e.g.: while slowing the aircraft to configure for landing or in the landing flare, resulting in stalls at low altitude or unexpectedly hard landings).

(c) Pilots should respect guidance in the AFM concerning the minimum airspeeds to be maintained in icing conditions, and ensure that there is no residual ice on the boots prior to landing by cycling the boots on final approach, prior to the final flap setting for landing in IMC, or at some convenient time on final if operating VFR.

### 5.47.5 Airborne Icing Weather Patterns

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | |
| DOC(s): | TP 14371 – AIR 2.12.3.5-6 | | | |

*Reserved*

### 5.47.6 Flight Planning and In-flight Icing Information

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | |
| DOC(s): | TP 14371 – AIR 2.12.3.7 | | | |

*Reserved*

### 5.47.7 Operations of De- and Anti-Icing Equipment

#### 5.47.7.1 Operational Use of Pneumatic De-Icing Boots

(1) Pilots of aeroplanes fitted with pneumatic de-icing boots will find direction on operational use of the boots in the AFM.

(a) In most cases, the AFM will direct pilots to delay operation of the boots, either in the manual mode or automatic mode (if fitted), until ¼ to 1 inch of ice has built up on the leading edge. This guidance is almost universally included to prevent the occurrence of ice bridging.

(2) Leading edge de-icing boots should be activated as soon as the aeroplane enters icing conditions because ice bridging is not a concern in such aeroplanes, and thin amounts of rough ice can be extremely hazardous.

(3) Unless specifically prohibited by the AFM, it is recommended that pilots of turbine-powered aeroplanes equipped with pneumatic de-icing boots with an automatic cycle, select the boots on automatic as soon as the aeroplane enters icing conditions.

(a) The boots should be left on until the aeroplane has departed the icing conditions.

(b) If the automatic boots have a FAST/SLOW option, the FAST option should be selected for moderate and severe icing conditions.

### 5.47.7.2 Monitoring the Auto-pilot in Icing Conditions

(1) When the autopilot is utilized in icing conditions, it can mask changes in performance due to the aerodynamic effects of icing that would otherwise be detected by the pilot if the aeroplane were being hand flown.

(a) It is highly recommended that pilots disengage the autopilot and hand fly the aircraft when operating in icing conditions.

i. If this is not desirable for safety reasons, such as cockpit workload or single-pilot operations, pilots should monitor the autopilot closely.

1. This can be accomplished by frequently disengaging the autopilot while holding the control wheel firmly. The pilot should then be able to feel any trim changes and be better able to assess the effect of any ice accumulation on the performance of the aeroplane.

### 5.47.7.3 Ground De-Icing/Anti-Icing Of Aircraft With The Main Engines Running

(1) Aircraft and engine manufacturers, including McDonnell Douglas, Boeing, Bombardier, Rolls-Royce, Canadair, Airbus, and Fokker, have published information on the advisability of de-icing/anti-icing with the main engines running and, when they permit it, have outlined procedures to be followed in order to protect the engines, the aircraft systems, and the personnel conducting the treatment.

(a) These procedures are based on engineering tests and the experience of those air carriers who routinely de-ice/anti-ice their aircraft with the main engines running.

(2) Experience shows that problems can be minimized if precautions are taken to limit the ingestion of de-icing/anti-icing fluid by the engines.

Aircraft and company specific procedures should include the following procedures, developed to protect the aircraft during de-icing/anti-icing with the main engines running:

(a) Operate as few engines as possible during the de-icing process;

(b) Operate at the lowest practicable power setting;

(c) If possible, select air conditioning 'OFF';

(d) Avoid spraying fluid directly into the engine, APU, and air conditioning system intakes;

(e) Avoid a large run-off of fluid from adjacent surfaces into the intakes (e.g.; from a vertical stabilizer into a tail-mounted engine or APU); and

(f) Minimize the generation of spray in the vicinity of the intakes.

(3) Even in cases where substantial ingestion of fluid has occurred due to accident or mishandling, there was no observable adverse effect on the engines.

(a) If, contrary to the above procedures, the air conditioning is on during the de-icing/anti-icing treatment, the passenger cabin may fill with smoke.

i. Investigations show that even in the worst ingestion case, the possibly toxic elements are at concentrations well below hazardous levels.

ii. There is some evidence that residues may accumulate in the air conditioning system and result in malfunctions.

(4) Particular care should be exercised for the APU inlet because fluid ingestion could cause an APU runaway condition or, in an extreme case, an APU rotor burst.

(5) It has been found that, for those aircraft types for which it is technically feasible, if proper procedures are followed, de-icing/anti-icing of aircraft with their main engines running is safe for both the aircraft and de-icing/anti-icing personnel.

(a) It is understood that there are aircraft types for which de-icing/anti-icing with the main engines running is not advisable.

(6) If procedures for de-icing/anti-icing aircraft with their main engines running are clearly described in the applicable operations manuals and the operational personnel involved are adequately trained in the use of these procedures, it is not necessary for the main engines of most aircraft to be shut down before de-icing/anti-icing.

(7) It must be emphasized that the above-noted procedures are to be used only if they have been approved by the manufacturer.

## 5.48 Carry-on Bag Control Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | N/A | N/A | 725.42(5)&(7), 725.124(42) |
| DOC(s): | | | | |

*Reserved*

## 5.49 Safe Movement of Passengers to and from the Aircraft – Training Required

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | |
| CASS | N/A | | | 725.40, 725.124(46) |
| DOC(s) | | | | |

*Reserved*

## 5.50 Fuelling with Passengers on Board – Emergency Evacuation Procedures Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | | | 725.124(47) |
| DOC(s): | | | | |

*Reserved*

## 5.51 Controlled Flight into Terrain (CFIT) Avoidance Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | A723.98(29), H723.98(24) | A724.115(32), H724.115(27) | 725.124(48) |
| DOC(s): | | | | |

*Reserved*

## 5.52 Low-Energy Awareness Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | A724.115(34) | 725.124(49) |
| DOC(s): | | | | |

(1) An aircraft is not certified to successfully complete a go-around once it has entered the low-energy landing regime.

(a) The low-energy landing regime is defined as:

i. aircraft flaps and landing gear are in the landing configuration;

ii. aircraft is in descent;

iii. thrust has stabilized in the idle range;

iv. airspeed is decreasing; and

v. aircraft height is 50 feet or less above the runway elevation.

Note: 50 feet is a representative value. A given aircraft may enter the low-energy landing regime above or below 50 feet in accordance with approved landing procedures for that type.

(2) The decision to place an aircraft into the low-energy landing regime is a decision to land.

(a) If there is any doubt regarding the probability of a safe landing, a go-around or balked landing must be initiated prior to entry into this regime.

(3) An attempt to commence a go-around or balked landing while in the low-energy landing regime is a high-risk, undemonstrated maneuver.

(a) In the case where such action is required, pilots should be aware that ground contact is likely and any attempt to commence a climb before the engines have achieved go-around thrust may result in a stall.

i. Turbo-fan engines may require as long as eight seconds to accelerate from idle to go-around thrust.

(4) Operators should immediately ensure that their pilots are aware of the hazards associated with low-energy go-arounds or balked landings and verify that their training programs address this area of operation.

## 5.53 Engine Failure/Malfunction Recognition Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | | | 725.124(50) |
| DOC(s): | | | | |

*Reserved*

## 5.54 Flight Deck Admission Control Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | N/A | N/A | N/A | 725.124(51) |
| DOC(s): | | | | |

*Reserved*

## 5.55 Pacific RNP-10 Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(22) | A723.98(30) | A724.115(35) | 725.124(52) |
| DOC(s): | AC 700-006 | | | |

(1) All operators using PBN are required to provide training to maintenance personnel in accordance with the guidance provided in Volume 3 of this manual series.

(2) Guidance specific to the application for the SA for RNP-10 can be found in Volume 3 of this manual series.

(a) This guidance includes details on the training requirements.

## 5.56 Reduced Vertical Separation Minima (RVSM) Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(23) | A723.98(31) | A724.115(36) | 725.124(53) |
| DOC(s): | AC 700-039 | | | |

(1) Guidance specific to the application for the SA for RVSM can be found in Volume 3 of this manual series.

(a) This guidance includes details on the training requirements.

## 5.57 Stabilized Constant-Descent-Angle (SCDA) Non-Precision Approach Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | | A723.98(32) | A724.115(37) | 725.124(54) |
| DOC(s): | AC 700-028 | | | |

*Reserved*

## 5.58 Simultaneous Operations on Parallel or Near-Parallel Instrument Runways (ILS/PRM, LDA/PRM, SOIA) Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | |
| CASS | | | | 725.124(55) |
| DOC(s) | | | | |

(1) Guidance specific to the application for the SA for simultaneous operations IFR approaches can be found in Volume 3 of this manual series.

(a) This guidance includes details on the training requirements.

## 5.59 Unruly Passenger and Interference with a Crew Member – Training Required

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |

| | | | | |
|---|---|---|---|---|
| **CASS:** | | | | 725.124(56) |
| **DOC(s):** | AC 700-010 | | | |

*Reserved*

## 5.60 In-charge flight attendant Training

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |
| **CASS:** | N/A | N/A | N/A | 725.124(57) |
| **DOC(s):** | | | | |

*Reserved*

## 5.61 Training for flight attendants Assigned to Open More than One Exit during an Aeroplane Emergency Evacuation

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |
| **CASS:** | N/A | N/A | N/A | 725.124(58) |
| **DOC(s):** | | | | |

*Reserved*

## 5.62 Persons Assigned on Board Duties Training

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR:** | | | | |
| **CASS:** | 722.76(19) | H723.98(23) | A724.115(30), H724.115(26) | N/A |
| **DOC(s):** | | | | |

(1) The training program for persons assigned on board duties (PAOBD) should be sufficiently detailed as to ensure that these crew members can perform their assigned duties and basic emergency procedures, should an emergency situation arise.

(a) If a crew member, other than a flight crew member, has been assigned duties to be performed in the interest of the passengers, the crew member is considered a cabin crew, and would require appropriate training.

i. The scope of the designated training is reduced from that of a cabin crew, as a PAOBD would not normally be assigned these duties.

(2) For operators operating aeroplanes under Subpart 703, it is recommended that any crew member carried as a PAOBD receive the safety training as identified in CASS 724.115(30).

## 5.63 Single-engine Aeroplanes Carrying Passengers in VFR at Night or Under IFR - Pilot Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(12) | A723.98(24) | N/A | N/A |
| DOC(s): | | | | |

*Reserved*

## 5.64 Seaplane Operations Egress Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | N/A | 703.98(2)(c.1) | 704.115(2)(a.1) | N/A |
| CASS: | N/A | | | N/A |
| DOC(s): | AC 700-056 | | | |

*Reserved*

## 5.65 Aerial Work Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(6) | N/A | N/A | N/A |
| DOC(s): | | | | |

*Reserved*

## 5.66 Training for Persons who are Carried Externally

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | |
| CASS: | 722.76(20) | N/A | N/A | N/A |
| DOC(s): | | | | |

*Reserved*

## 5.67 Pilot Training for Reduced VFR Limits in Uncontrolled Airspace

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | 702.17(1)&(2) | 703.28(1)&(2) | 704.24 | |
| CASS: | 722.17(1)(d)&(2)(c) | A723.28(4), H723.28(c) | H724.24(c) | N/A |
| DOC(s): | | | | |

(1) Guidance specific to the application for the SA for reduced VFR limits in uncontrolled airspace can be found in Volume 3 of this manual series.

(a) This guidance includes details on the training requirements.

## 5.68 Flight Attendant Training

### 5.68.1 General

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR: | | | | 705.124(1)(b) 705.124(2)(b), 706.10-12 |
| CASS: | N/A | N/A | N/A | 625.85, 726.10-12 |
| DOC(s): | TP 12296, AC 705-002 | | | |

**Applicant/operator to submit:**
**Training Program – Flight Attendant**
**(May be part of COM)**
**CR TP FA 705**

**TCCA to complete:**
**CR TP FA 705**

(1) Flight attendant training items are contained in TP 12296 - *Flight Attendant Training Standard.*

(2) Where applicable, servicing and elementary work can be completed by flight attendants after they have been properly trained.

(a) The list of elementary work items are listed in CASS 625.85 Appendix “A”.

(b) Further details on elementary work and servicing can be found in sections 8.2.8 & 8.2.9 of this volume.

(3) Human Factors training is also required, as per CASS 726.12(3) for Flight Attendant personnel completing elementary work tasks.

(4) Air operators who install additional flashlights in the passenger compartment of an aircraft, where differences exist in the operations of those flashlights, shall ensure flight attendants are trained on the operational and procedural differences and these differences are reflected in the air operator’s approved flight attendant training program.

## 5.69 Maintenance Personnel Training

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR** | 706.10-12 | 706.10-12 | 706.10-12 | 706.10-12 |
| **CASS** | 726.10-12 | 726.10-12 | 726.10-12 | 726.10-12 |
| **DOC(s)** | | | | |

(1) An operator's training program for maintenance personnel shall include crew resource management.

## 6.1 General

(1) The purpose of this phase of the certification process is to ascertain, through on-site inspections, the adequacy and suitability of the applicant/operator's organizational structure, operational control system, record keeping, facilities, aerodromes, ground equipment, and associated procedures used to conduct the operations specified in the application.

## 6.2 Organizational Structure

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 702.07(2)(a)&(b) | 703.07(2)(a)&(b) | 704.07(2)(a)&(b) | 705.07(2)(a)&(b) |
| CASS | | | | |
| DOC(s) | | | | |

**TCCA to complete:**
**PA BASE 70A**

(1) During the operational inspection phase, the applicant/operator's organizational structure, managerial style, direction and philosophy will be evaluated to ensure that necessary and proper operational control can be exercised over all activities.

### 6.2.1 Management

(1) Through discussions with key management personnel and through observation, the TCCA certification team will evaluate the appropriateness of the management structure.

- (a) There should be clear lines of authority, and specific duties and responsibilities for all individuals within management.
- (b) These duties and responsibilities need to be clearly outlined in the applicant/operator's operations and maintenance control manuals.

(2) Experience has shown that the quality of an operation is directly related to the standards maintained by its management.

- (a) Competent management usually results in safe operations.
- (b) An excess of managers can lead to fragmentation of responsibility and control and to as much difficulty and inefficiency as a shortage. Either case can result in a lowering of operational standards.

(3) A sound and effective management structure is essential; it is particularly important that the operational management will have proper status in the applicant/operator’s organization and be in suitably experienced and competent hands.

(4) Through an interviewing process, the TCCA certification team will determine whether or not management personnel are qualified, experienced and competent to perform their assigned duties.

- (a) Appendix C contains sample questions that can be used as a basis for interviews with the operations manager and the chief pilot.

i. These sample questions can be used for stand-alone interviews when an operations manager or chief pilot is appointed, or during the performance assessment base inspection.

### 6.2.2 Personnel

(1) At all levels, it is necessary that the applicant/operator's personnel are thoroughly integrated into the operation and are made fully aware of the channels of communication to be used in the course of their work, and of the limits of their authority and responsibility.

(a) It must be determined that acceptable processes are established for conveying company procedures and operating instructions to the personnel involved, to keep them appropriately informed at all times.

(b) The authorities, tasks, responsibilities and relationships of each position need to be clearly understood and followed by the individuals occupying these positions.

(2) The applicant/operator's staffing level needs to be evaluated to determine whether an adequate number of personnel are employed at all levels to perform the necessary functions.

(a) The number and nature of personnel will vary with the size and complexity of the organization.

(3) Once it has been determined that the applicant/operator's organization is adequately staffed and managed, a detailed examination of the organization should be initiated, and the suitability and use of the associated COM and MCM should be assessed.

## 6.3 Operational Control System

### 6.3.1 General

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 702.12 | 703.16 | 704.15 | 705.20 |
| CASS | | | | |
| DOC(s) | | | | |

**TCCA to complete:**
**PA BASE 70A**

(1) During the process of implementation and when monitoring an operator's operational control system, a CASI will have to perform the following tasks :

(a) approval of the operational control system;

(b) approval of the operator specific operational control training program;

(c) certification of flight dispatchers;

(d) inspection of the operator dispatch facilities (dispatch centre, bases and stations) and flight dispatchers while on duty (on-the-job monitoring)

Note: Approval of check flight dispatchers may coincide with the inspection of an operational control system. However, the check flight dispatcher function is handled as an independent process, under a Ministerial Delegation of Authority program. See section 5.26.7 for further details.

## 6.3.2 Validating an Operational Control System

(1) The applicant/operator should have:

(a) an adequate number of flight dispatchers available to effectively exercise operational control;

(b) available to the flight dispatch centre the COM;

(c) the required manuals including AFM, performance, AOM, MEL, etc. for each aircraft type;

(d) guidance material available to allow operational control personnel and flight crew members to carry out their duties efficiently, effectively, and with a high degree of safety;

(e) the communications capabilities as required in the CASS;

(f) direct communications with ATC (enroute and control tower);

(g) facilities for flight watch procedures, weather and NOTAM warnings;

(h) as performed all functions as stipulated in the CARs as they pertain to operational control;

(i) in place, a system:

i. to verify what dangerous goods are on board an aircraft and that dispatchers can access this information during emergency situations;

ii. for handling the transportation of deportees, prisoners, carrying of weapons, etc., if applicable;

iii. ,with a sign off procedure, for dissemination of new information to the flight dispatchers; and

iv. to ensure mechanical defects are forwarded to the flight dispatcher (as example: maintenance personnel should advise the PIC and the dispatcher that a radar is unserviceable as soon as possible).

(2) For TCCA on-site inspection requirements of an operators' Maintenance Control System, refer to Chapter 8 of this volume.

## 6.3.3 Monitoring Flight Dispatch Centres

(1) The CASI should verify the following items during shift changes in the flight dispatch centre:

(a) The flight dispatchers should be able to answer the questions listed.

(b) Inspectors should be aware that all items or questions may not be applicable to a particular applicant/operator.

i. It is recommended that questions asked pertain to actual or possible events related to actual flights.

ii. Care shall be taken to conduct the inspection with minimal interference to regular operations.

(c) Items to inspect and questions should be selected as appropriate.

### 6.3.3.1 At Start of Shift

(1) The CASI should verify the following applicant/operator procedures during shift changes in the flight dispatch centre:

(a) The incoming dispatcher must verify weather data and become familiar with the overall weather effecting the areas of operation.

(b) The departing dispatcher must brief the incoming dispatcher on the following:

i. weather at departure/alternate/arrival and enroute airports under the dispatcher's jurisdiction, and on any other system or route limitation that may affect flight operations;

ii. PIREPS from flights during the previous shift;

iii. all aircraft deviations and NOTAM information effecting operations; and

iv. any additional items that may affect the safety of flights under the dispatcher's jurisdiction such as any abnormal incident that may have occurred during the previous shift.

#### 6.3.3.2 During shift

(1) The CASI should:

(a) monitor the flight dispatcher's ability to exercise flight watch during the shift. Flight watch consists of monitoring weather, NOTAMs, aeroplane position and passing to the flight any information that may affect the flight's safety;

(b) verify that flight reports are directed to the flight dispatcher as per 725.20, Type A (5)(c);

(c) verify the flight dispatcher is thoroughly checking the runway limitations requirements;

(d) check the de-briefing process after a flight has terminated; and

(e) verify timely communications.

#### 6.3.3.3 Dispatcher's General Knowledge

(1) The CASI should verify that the flight dispatcher:

(a) has knowledge of abnormal operations;

(Example: fuel calculations for gear down operations, landing distances for anti-skid inoperative, conditions requiring specific paperwork/authorization from TCCA or the operator, etc.)

(b) has a good working knowledge of TCCA and the operator's emergency procedures;

(c) is familiar with the documents required for off line operations, government requirements or unscheduled landings; and

(Example: permit to proceed in the U.S., handling of contracting agencies at unscheduled airports, etc.)

(d) knows where to find data for airports for unscheduled landings (where it is found in the Canada Air Pilot, company charts, etc.).

#### 6.3.3.4 Additional Check Items

(1) The CASI should also check the following:

(a) ensure all flights have been authorized by a dispatcher;

(b) monitor the flight release to make sure the time and date specified is consistent with the operational flight plan;

(c) ensure the dispatcher is aware of ATC requirements during an emergency; and

(e.g. the difference between a company requesting ERS and ATC requesting ERS)

(d) check the dispatcher's ability to react to emergency or abnormal operations.

### 6.3.4 During Inflight Inspections

(1) A CASI may ask the flight crew to communicate with the flight dispatcher and ask for a briefing.

(a) The following items should be verified:

i. timely communication; and

ii. the quality of the briefing itself (weather, routes, alternates, NOTAMS, etc.).

### 6.3.5 Operations Coordination Representatives

(1) Applicant/Operators commonly have operations coordination representatives at line stations or central locations. These persons are not authorized to exercise any operational control or release of flights.

(a) CASIs conducting inspections should be familiar with the COM sections that outline the responsibilities of operations co-ordination personnel and their relationship with the operational control of flight operations.

## 6.4 Record Keeping

### 6.4.1 General

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR** | 702.14, 702.77 | 703.16-18, 703.37, 703.99 | 704.15-17, 704.32, 704.117 | 705.20-22, 705.39, 705.127 |
| **CASS** | 722.14 | 723.16, 723.18 | 724.15, 724.17, 724.32 | 725.20, 725.22, 725.39 |
| **DOC(s)** | | | | |

**TCCA to complete:**
**PA BASE 70A**

(1) Procedures for record keeping shall be examined for:

(a) potential accuracy and care in preparation;

(b) classification and effectiveness of the filing system;

(c) completeness of coverage;

(d) compliance with required recording periods; and

(e) security of access to records and protection from disasters.

(2) The review should cover at least the proposals for the handling of records for the following:

(a) operational control;

(b) operational flight planning;

(c) flight crew members, including duty periods, rest periods and flight time;

(d) flight attendants;

(e) flight dispatchers; and

(f) other operational personnel.

(3) An operator is required to maintain records pertaining to the conduct of the operations for a minimum period of 90 days, unless otherwise agreed to between the operator and TCCA.

## 6.4.2 Operational Control Records

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 702.12 | 703.16 | 704.15 | 705.20 |
| CASS | 722.12 | 723.16 | 724.15 | 725.20 |
| DOC(s) | | | | |

(1) The proposals for operational control system records shall be checked to ensure that:

(a) an operational control log will be maintained;

(b) all operational control duties will be adequately documented; and

(c) if applicable, all flights will be planned and conducted with the active participation of the flight dispatcher on duty in accordance with the procedures laid down in the operations manual.

### 6.4.2.1 Operational Flight Plans

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 702.14 | 703.18 | 704.17 | 705.22 |
| CASS | 722.14 | 723.18 | 724.17 | 725.22 |
| DOC(s) | | | | |

(1) The inspection shall verify the procedures for the keeping of records related to individual flights are in place, to ensure that:

(a) an operational flight plan will be completed and retained;

(b) the operational flight plan provides for all of the information required by the operations manual;

(c) flight preparation forms will be completed and recorded; and

(d) oil and fuel records will be kept.

(2) The pertinent details of each flight must always be in the possession of, and available to, a responsible, ground-based authority.

(a) An electronic or hard copy may be left at a departure station or stored in a central location.

(b) This copy needs to be immediately available for reference should it be required by anyone involved in flight watch, operational control or accident alarm procedures in connection with the flight.

(3) The operator must substantiate that they have appropriate facilities to store operational flight plans:

(a) For paper copies of the OFP, storage facilities must be:

i. secure and fire-proof;

ii. accessible to operational control staff; and

iii. sufficient in capacity to store records for as long as has been stated in the COM for document retention periods.

(b) If handling the OFP electronically, the following criteria must be met:

i. the operator shows that they have a system for safe storage of electronic data;

ii. a hard copy is retained for documents that require verification unless the operator has a system of electronic document verification;

iii. the operator has a documented plan detailing procedures for the recovery of all stored data; and

iv. stored data can be presented to TCCA in an acceptable hard copy format within 72 hours of a request.

#### 6.4.2.1.1 Informal OFP

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | |
| CASS | | 723.18 | N/A | N/A |
| DOC(s) | | | | |

(1) In the case where a number of short flights are made that are of a routine nature, then an operational flight plan annotating the stops, the fuel on board and the passengers boarded would be sufficient.

#### 6.4.2.2 Aircraft Weight and Balance Documents

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 706.06(3) | 703.37, 706.06(3) | 704.32, 706.06(3) | 705.39, 706.06(3) |
| CASS | | 723.37 | 724.32 | 725.39 |
| DOC(s) | ICAO TI 9284 | | | |

(1) The inspection shall confirm that aircraft will be safely and correctly loaded in accordance with all Subparts, including, but not limited to:

(a) the requirements for the computation of aircraft weight and balance in the operations manual;

(b) regulations restricting weight to meet aircraft performance requirements;

(c) weight and centre of gravity limitations as specified in the aircraft flight manual and the operations manual;

(d) limitations on deck and bulkhead loading as specified in the aircraft flight manual and the operations manual; and

(e) limitations in respect of the transport of dangerous goods as specified in the current edition of the ICAO *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284).

(2) The inspection should also be used to evaluate the applicant/operator's method of exercising overall weight control.

(a) The CASI-Airworthiness must examine the system and methods whereby aircraft weight is checked and maintained, to ensure that weight fluctuations due to modifications and other causes are fully taken into account, and that the weight statement is accurate.

(3) TCCA must be able to recreate the operational flight data for the purpose of audit, inspection, investigation and flight safety:

(a) The operator is required to retain copies of the weight and balance documentation when not incorporated in the operational flight plan.

(b) The period of retention of the weight and balance forms, including amendments to the forms, will be not less than six months.

i. The period of retention of weight and balance will be designated in the COM and will be at least equal to the retention time for the operational flight plan.

(c) Weight and balance data may be stored electronically if the following criteria are met:

i. the operator shall show that the electronic storage system is safe;

ii. a hard copy of the data shall be retained for documents that require signature verification unless the operator has a system of electronic document verification;

iii. the operator shall have a documented plan detailing procedures for the recovery of all stored data; and

iv. stored data must be presented to TCCA in an acceptable hard copy format within 48 hours from the time of a request.

### 6.4.2.3 Fuel computation procedures

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | 703.20 | 704.20 | 705.25 |
| CASS | | | | 725.25 |
| DOC(s) | | | | |

(1) This inspection shall determine whether the applicant/operator's aircraft will be dispatched with adequate fuel loads, calculated in accordance with the applicable Subpart, and the policy set forth in the COM.

(a) The fuel computation policy shall be examined, and the fuel to be carried validated, against expected aircraft performance, with appropriate corrections for wind conditions and flight levels enroute.

i. Sample operational flight plan fuel calculations should be provided by the operator to reflect typical flights dispatched from different bases, on routes and route sectors calling for wide differences in fuel requirements, including sectors on which aircraft fuel capacity is critical.

(b) The fuel policy should consider the additional fuel necessary to proceed to an adequate aerodrome in the event of failure of one engine or loss of pressurization, at the most critical point while enroute, whichever is higher.

## 6.4.3 Crew Training and Qualifications Records

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 702.77 | 703.99 | 704.117 | 705.127 |
| CASS | | | | |
| DOC(s) | | | | |

(1) An inspection should be conducted prior to the commencement of operations and should include a review of operational personnel records to determine that the qualifications of operational personnel are current.

### 6.4.3.1 Flight Crew Records

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 702.91(1) | 700.20, 700.101(1) | 700.20, 700.101(1) | 700.20 |
| CASS | | | | |
| DOC(s) | | | | |

(1) The inspection of flight crew records should verify that the proposed system of the operator will be able to effectively monitor flight time and flight duty time limitations, along with rest periods.

(a) This system should be able to proactively predict when a crew member will exceed these limitations or requirements.

(2) The inspection should also review the system of recording reports from the PIC when using discretion to extend duty or reduce rest periods.

(3) Where the operator conducts (or plans for) single-pilot IFR operations, the operator's system for tracking flight time limitations should account for this.

(a) The system should be checked for proper implementation of the 8-hour limitation in any 24 hour period:

i. If the pilot has flown any single pilot IFR flights (irrespective of the length of time as IFR), the total flight time limitation for that pilot is 8 hours in 24, for all types of flying (single pilot, or two crew inclusive).

(4) The inspection needs to verify that operators have ensured that:

(a) all flight time accumulated by flight crew are counted when determining compliance with CARs subsection 702.92/700.27/700.103, Flight Time Limitations.

(b) flight duty period and any associated rest period accumulated by flight crew are considered in flight duty period calculations; and

(c) a system for monitoring the flight times and flight duty periods for those flight crew members engaged in flights other than those related to company operations is established.

### 6.4.3.2 Flight Crew Personal Records

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 401.08, 702.91(1) | 401.08, 700.26(4), 700.101(2) | 401.08, 700.26(4), 700.101(2) | 401.08, 700.26(4) |
| CASS | | | | |
| DOC(s) | | | | |

(1) Flight crew members are required to inform the operator if any flight time or flight duty period assignment will cause him/her to exceed a flight time or flight duty period limitation.

(a) This applies to assignments from the operator and to any flight time or flight duty period completed for another operator, private operator or any private or military flying.

### 6.4.3.3 Flight attendant records

(1) These records should make provision for the following information:

(a) Aircraft models on which the flight attendant is qualified.

(b) Date(s) the flight attendant completed any required training:

i. initial;

ii. annual;

iii. requalification;

iv. aircraft type;

v. crew resource management;

vi. live firefighting;

vii. ditching (if applicable);

viii. first aid;

ix. line indoctrination; and

x. in-charge (if applicable).

(c) information respecting any failure to successfully complete any required training.

## 6.4.4 Operational Personnel Records

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 702.77 | 703.99 | 704.117 | 705.127 |
| CASS | | | | |
| DOC(s) | | | | |

(1) The inspection shall cover the procedures for the keeping of records relating to operational personnel training.

#### 6.4.4.1 Flight dispatcher records

(1) Flight operations officer / flight dispatcher records shall contain the following information:

(a) certificate and validity;

(b) Aircraft qualifications;

(c) route or area qualification;

(d) maintenance of competency; and

(e) duty time records.

## 6.5 Facilities - Base/Sub-base

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 702.07(2)(c) | 703.07(2)(c) | 704.07(2)(c) | 705.07(2)(d) |
| CASS | | A723.07(3)<br>H723.07(2)(d) | A724.07(3)<br>H724.07(5) | 725.07(4) |
| DOC(s) | | | | |

**TCCA to complete:**
**PA BASE 70A**

### 6.5.1 Facilities

(1) Facilities inspections should verify if the bases and sub-bases planned for use by the applicant/operator:

(a) are properly equipped;

(b) are provided with the necessary:

i. sanitary facilities;

ii. security and emergency controls and warnings;

iii. equipment; and

(c) are adequate for the operation to be conducted.

(2) Where possible, facilities inspections should include planned bases and sub-bases located in Canada, and also in other countries (if applicable).

(3) The inspection should include all facilities planned/utilized by the operator, including:

(a) hangars;

(b) administrative staff and operations personnel offices;

(c) passenger service areas;

(d) cargo storage; and

(e) handling buildings.

(4) Under exceptional circumstances, where an on-site inspection is difficult to accomplish, this inspection may be replaced by an assessment based upon sufficient documentation provided by the applicant/operator.

(a) The extent of documentation required will be determined by the CPM.

i. If insufficient documentation can be provided to TCCA, then an inspection will be required.

## 6.5.2 Operational Support Equipment & Services

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 702.07(2)(c) | 703.07(2)(c) | 704.07(2)(c) | 705.07(2)(d) |
| CASS | | A723.07(3)<br>H723.07(2)(d) | A724.07(3)<br>H724.07(5) | 725.07(4) |
| DOC(s) | | | | |

(1) The operational support services to be utilized by the applicant/operator must be inspected, to the extent possible, with primary emphasis on adequacy, suitability, and the safety aspects of its use.

(2) Operation support equipment would include (but is not limited to):

(a) fuelling vehicles;

(b) ground power units;

(c) oxygen and compressed gas servicing equipment;

(d) towing tugs;

(e) cargo and baggage handling equipment;

(f) catering vehicles;

(g) sanitary servicing trucks; and

(h) de-icing equipment.

(3) An evaluation of the mobile equipment and the procedures for their use, performed by an audit organization using suitable and recognized evaluation systems, may be acceptable to TCCA (at TCCA's discretion).

(a) Examples of acceptable audits are:

i. Equipment inspections conducted as part of industry-recognized fuel quality audits.

ii. De-icing/anti-icing quality control audits.

iii. Audits for ground operations.

## 6.5.3 Aerodromes and Heliports – On-site Inspections

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | |
| CASS | | | | |

| DOC(s) | |
|---|---|

### 6.5.3.1 Airports/Aerodromes/Heliports for Air Service Operations

(1) The destination and alternate aerodromes or heliports to be utilized in the operation should be inspected to determine their adequacy for operational use.

(a) This inspection requirement may be waived in those cases where the TCCA CASI is already familiar with the aerodrome or heliport and its associated facilities and is satisfied that they are adequate for the proposed operation.

(b) In those cases where the proposed operation covers a large part of the world, it will not be feasible for the TCCA certification team to determine the adequacy of all the aerodromes or heliports of potential use.

i. The TCCA certification team should consider inspecting only those considered by the applicant/operator to be for major use.

(2) Before issuing the AOC, the COM should:

(a) contain the list of aerodromes that are considered adequate for use; and

(b) specify that the use of other aerodromes or heliports in the approved area of operations is prohibited without prior approval of TCCA.

(3) In conjunction with the aerodrome inspection, the CASI should determine:

(a) the adequacy of the applicant/operator's procedures for acquiring current aerodrome data and instrument procedure charts; and

(b) the applicant/operator’s ability to distribute these to all personnel who require such information in their performance of duty.

(4) Approval of a particular aerodrome or heliport may be granted without inspection by TCCA if;

(a) the operator evaluates the facility as adequate for its operations, using an acceptable documented process;

(b) establishes operating minima and appropriate procedures; and

(c) TCCA accepts this evaluation and the subsequent operating limitations.

### 6.5.3.2 Uncertified Aerodrome/Heliport Inspections for Scheduled Service Operations

(1) The following procedures will be followed by Flight Operations and Aerodrome Safety CASIs when conducting an on-site inspection of an aerodrome/heliport:

(a) In order to deal effectively with these requests, it is desirable that the Flight Operations CASI involved be type qualified, or where a type qualification is not required, be thoroughly knowledgeable with the operation and systems associated with the aircraft to be used in the scheduled operation.

Note: It is important to note that the Flight Operations CASI and the Aerodrome Safety CASI shall draw upon their own practical experience and knowledge, and if necessary, may consult any specialist (internally and externally) required to establish an equivalent level of safety for the kind of operation being sought.

(b) In conjunction with the applicant/operator, the Flight Operations and Aerodrome Safety CASIs shall review the request, and develop an inspection plan.

i. The inspection plan shall include the dates when the on-site inspection, operational evaluation, and technical analysis (aerodrome/heliport) will take place.

ii. In addition, a study shall be conducted on aviation accidents and incidents relating to the type of aircraft to be used in this type of operation. The objective of this exercise is to determine if any of the accidents/incidents detected were caused by any weaknesses/malfunctions of the aircraft systems, operating procedures, training, and also if it occurred in an operation similar to the one being assessed.

(c) An on-site inspection shall be conducted and the aerodrome/heliport in question shall be evaluated in accordance with the applicable Airport Standards in order to determine its certifiability.

i. This evaluation shall be conducted by the Aerodrome Safety CASI.

ii. Inspections should cover at least the following items as applicable:

1. runways;
2. clearways;
3. stopways;
4. taxiways;
5. apron and parking areas;
6. lighting (including approach lighting);
7. visual and non-visual approach aids;
8. navigation facilities;
9. communications services;
10. Air traffic service (ATS);
11. meteorological services;
12. aeronautical information services;
13. aerodrome/heliport service equipment (e.g. runway contaminant sweepers, snowploughs);
14. ground de-icing installations and equipment;
15. rescue and firefighting equipment and services;
16. availability of equipment and handling procedures for fuel and lubricants;
17. public protection, including security precautions;
18. obstacles affecting flight operations;
19. instrument departure, arrival and approach procedures and associated charts; and
20. aerodrome/heliport operating minima.

(d) If it is determined that it is not possible/practical to certify the aerodrome/heliport, then an equivalent level of safety shall be determined by both CASIs by:

i. observing and conducting an “on the ground” evaluation of the applicant/operator’s aircraft operations including the approach, landing, manoeuvring on the ground, taking-off, and climbing (departure path) from the aerodrome/heliport in question;

ii. if deemed necessary, (Flight Operations CASI) conducting an in-flight evaluation on board the applicant/operator's aircraft or the company's current operating procedures, in and out of the aerodrome/heliport in question;

iii. (Flight Operations CASI) conducting an operational evaluation of the suitability of each runway, taxiway and apron associated with the:

1. aircraft dimensions (wings, fuselage, and distance between wheels);
2. aircraft weight;
3. aircraft performance (in accordance with the Aircraft Flight Manual (AFT), if applicable);
4. aircraft equipment/systems available (nose wheel steering, gravel kit, types of tires used, reverse thrust capabilities);
5. short take-off and landing (STOL) characteristics of the aircraft;
6. other factors such as wind, temperature, atmospheric pressure, air density, and precipitation (i.e. snow and rain);
7. current operating procedures established by the applicant/operator;
8. qualification and training of pilots;

iv. (Aerodrome Safety CASI) conducting a technical analysis in accordance with the applicable Airport Standards and listing all improvements to be done by the aerodrome operator. These improvements are to be determined by taking into consideration all factors found during the operational evaluation phase; and

v. (Flight Operations CASI) approving the applicant/operator's operating procedures and any additional training requirements needed, as determined by the operational evaluation and technical analysis, and if operating into and out of unprepared surfaces, ensure that these procedures and training are in compliance with the applicable standards.

(e) The applicant/operator's COM, SOP, and Training Program, as applicable, shall be amended to include all established procedures for this operation;

(f) An assessment of the pilot's competency for this operation shall be evaluated during the annual PPC;

(g) A company representative shall be present at the aerodrome/heliport for all departures and arrivals of the operator's flights and shall:

i. provide runway/helipad condition and any other necessary information to pilots to ensure a safe operation by the means of two way radio communication and telephone;

ii. ensure that the runway/helipad is maintained and clear of any obstructions;

iii. restrict access to the aerodrome/heliport by any unauthorised persons; and

iv. maintain a journal listing the conditions of the runways/helipads at the time of departures and arrivals of the company aircraft.

(h) The aerodrome/heliport operator shall carry out any improvements required to maintain the equivalent level of safety as determined in the technical analysis; and

(i) Inspections shall be carried out to ensure that the operator and the aerodrome/heliport operator have complied with all conditions listed above.

(2) Once the operator has commenced its operation into and out of the aerodrome/heliport, several inspections should be conducted throughout the year in order to ensure the operator is in compliance with all listed conditions. If the aerodrome/heliport is to be used year-round, inspections should be conducted during the summer (no snow) and winter (snow) months.

## 6.6 Aircraft

### 6.6.1 General

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 702.07(2)(d)&(g) | 703.07(2)(d)&(g) | 704.07(2)(e)&(h) | 705.07(2)(f)&(i) |
| CASS | | | | |
| DOC(s) | | | | |

**TCCA to complete:**
For Aeroplanes - PA AIRCRAFT A 70A
For Helicopters - PA AIRCRAFT H 70A

(1) The adequacy of the applicant/operator's aircraft equipment will relate to:

(a) the conditions under which it is to be operated;

I.E.; Instrument Flight Rules (IFR), Visual Flight Rules (VFR), day, night; areas of operation relative to flight instruments and equipment; emergency and lifesaving equipment and other equipment requirements;

(b) its operating performance limitations (as set out in the AFM or the AOM) relative to available runway lengths at designated bases and scheduled points, alternate airports and terrain, Minimum Enroute Altitude (MEA), Long Range Navigation (LRN) etc.; and

(c) any SAs it wishes to utilize.

Note: SA's are covered in Volume 3 of this manual series, and may require specific aircraft inspections as part of the processing of requests to add them.

### 6.6.2 Two Way Communication with the flight crew members

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 702.23 | 703.39 | 704.33(1)(e), 704.34 | 705.16(3)(c), 705.73-74 |
| CASS | | | | |
| DOC(s) | | | | |

(1) Passengers and flight crew members shall be able to communicate with each other during normal, abnormal and emergency situations.

(2) A means of communication can be anything that permits information and instructions to flow unobstructed to and from the flight deck. This can be through interphones, megaphones or through spoken or shouted words or any other means that allows both parties to be heard and understood.

### 6.6.3 Cabin Inspection

(1) Where possible, the cabin inspection should be completed by a CASI-Cabin Safety.

(a) For subpart 705, this is a requirement.

(b) For subparts 704, 703 (and 702), this is desirable, but will depend upon the availability of CASI-Cabin Safety individuals.

(2) Cabin inspections may be completed as a separate inspection, or in concurrence with a cabin demonstration activity.

(a) See section 7.3.5 for guidance on cabin demonstrations.

(3) The CASI shall inspect the cabin of the aircraft for the following (as applicable, dependent upon the configuration of the aircraft):

(a) placards;

(b) safety equipment;

(c) portable equipment, including:

i. first aid kits;

ii. medical kit;

iii. megaphones;

iv. ELT;

v. crash axe;

vi. life preservers;

vii. flashlights;

viii. fire extinguishers;

ix. cargo firefighting equipment;

x. safety features cards;

xi. protective breathing equipment; and

xii. oxygen.

(d) floor proximity emergency escape path lighting;

(e) communication systems, including interphone system and P.A. system;

(f) fixed equipment, including:

i. flight attendant stations;

ii. flight attendant safety belts and harnesses;

iii. passengers' seats and safety belts;

iv. doors to compartments;

v. exits and aisles;

vi. life rafts and slide rafts;

vii. survival equipment;

viii. carry-on baggage restraints;

ix. table trays;

x. video monitors;

xi. fixed passenger oxygen system; and

xii. curtains and bulkheads.

(g) galley equipment, including compartments and service carts; and

(h) lavatory fire protection, including fire extinguishers, ashtrays, placards and smoke detectors.

## 6.7 Cabin Emergency Evacuation Trainer Approval

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | N/A | N/A | N/A | 705.126 |
| CASS | N/A | N/A | N/A | 725.126 |
| DOC(s) | | | | |

(1) Section 705.126 of the CARs and its associated standard specify the requirements for cabin emergency evacuation trainers.

(a) The regulation and its standard do not address other types of cabin training devices, free-standing exit trainers, or part-task trainers.

(2) The approval process of a cabin emergency evacuation trainer should begin once documentation is submitted by the operator advising that a cabin emergency evacuation trainer is to form part of their training program.

(3) Prior to granting approval, the cabin emergency evacuation trainer is to be inspected to ensure that the aeroplane type is accurately represented and the requirements of section 705.126 of the CARs are met.

(4) Where an operator wants to use a trainer that does not or cannot meet the requirements (e.g.; a former aeroplane that has had its wings and tail removed cannot meet all of these requirements), a request for an exemption from those elements of section 725.126 that the proposed training device cannot meet would be required.

(5) Approval is contingent on the compatibility of the cabin emergency evacuation trainer to the related components of the training program.

(6) Prior to approval, the applicant/operator may be required to demonstrate the use of the trainer to TCCA.

(a) Details on emergency evacuation demonstrations are contained in Section 7.5 of this volume.

## 7.1 General

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR** | 602.58-66, 702.07(2)(d), 702.42-46 | 602.58-66, 703.07(2)(d), 703.64-71, 703.82 | 602.58-66, 704.07(2)(e), 704.62-71, 704.83-84 | 602.58-66, 705.07(2)(f), 705.67-84, 705.89-97 |
| **CASS** | | | | 725.81, 725.90-91, 725.95 |
| **DOC(s)** | | | | |

**TCCA to complete:**
PA DEMO 70A

(1) Demonstration flights may be required when assessing an applicant/operator for issuance of a certificate.

(a) The requirement for demonstrations, and the number and frequency of these flights should be discussed and agreed to in the formal application meeting.

(b) The timeline for demonstrations should be documented in the Schedule of Events.

(2) Demonstration flights may be used to validate any aspect of an applicant/operator's processes.

(3) Training or positioning flights observed by a TCCA CASI may be credited towards meeting the demonstration flight requirements.

(4) Emergency evacuation and ditching demonstrations may also be required during this phase of the assessment of the operator's capabilities.

## 7.2 Plan for Review - Demonstrations (SOE)

(1) The Plan for Review of the demonstration elements comes from the Schedule of Events provided by the applicant/operator.

(a) As these are events where the CASI merely observes the applicant/operator performing operational activities, these events have to be planned by the applicant/operator.

## 7.3 Demonstration Flights

### 7.3.1 General

(1) Following the ground operations phase of the inspection program prior to certification, it is necessary, particularly in the case of new operators, to carry out a series of validations in the course of flight.

(a) Such flights provide an opportunity for the applicant/operator to demonstrate the ability to carry out the proposed operations in accordance with applicable regulations.

(2) Fare-paying passengers shall not be carried during demonstration flights prior to certification.

(3) Observer personnel on board the aircraft should be kept to a minimum on demonstration flights, and shall always be confirmed with and agreed to by TCCA.

(a) It is generally desirable for the applicant/operator to have on board company personnel who can make decisions and/or commitments on behalf of the applicant/operator concerning actions to correct deficiencies observed during the flight

### 7.3.2 Planning

(1) The applicant/operator and the TCCA certification team should plan well in advance for the conduct of the flight operations demonstration program.

(a) All concerned need to have a clear understanding and agreement as to what needs to be accomplished by the applicant/operator.

(2) General objectives for pre-certification demonstration flights should include the determination of the adequacy of:

(a) in-flight procedures laid down in the COM, and compliance with those procedures;

(b) the facilities and equipment provided to the flight crew to conduct the flight safely and in accordance with regulations;

(c) the support provided by the operational control system to the flight crew;

(d) the general provision made for ground handling of the aircraft and assisting the flight crew to carry out their duties at all aerodromes utilized by the applicant/operator along the routes; and

(e) enroute facilities.

### 7.3.3 Pre-flight Demonstration

(1) The pre-flight procedures followed by the flight crew, and the assistance rendered by the ground organization, during this phase should include the following:

(a) meteorological and route briefing, provision of NOTAMs;

(b) filing of the ATS flight plan;

(c) flight planning;

(d) fuel computation;

(e) measures taken by the PIC concerning the:

i. airworthiness of the aircraft, including the maintenance release, and use of the MEL and, if available, the CDL;

ii. complement of instruments and equipment required to be on board;

iii. preparation of the operational flight plan;

iv. fuel required and the fuel and oil on board the aircraft;

v. weight of the aircraft and the centre of gravity location;

vi. capability to comply with the aircraft weight and performance limitations, climb gradient and obstacle clearance requirements;

vii. correct calculation of critical speeds (V1, Vr, V2, etc.) appropriate to the runway and take-off conditions;

viii. security of the load and its correct distribution;

ix. information concerning dangerous goods;

x. completion and signing of the operational flight plan and the aircraft weight and balance form; and

xi. carriage of the required publications and manuals;

(f) boarding of all crew, including personnel in excess of the minimum crew;

i. passenger briefing on the location and use of emergency equipment, passenger information signs, use of safety belts, location and use of emergency exits, etc.;

1. If conducting the flight under Subpart 705, this information should meet the regulatory requirements of CAR 705.31 and 705.43.

Note: Crew members require the briefing detailed in CAR 705.31, and all others carried (including TCCA CASIs) are passengers and require the briefings per CAR 705.43.

2. For operations under Subpart 704, the requirements are stated in CAR 704.34.

3. For Subpart 703 operations, CAR 703.39 should be followed.

4. for Subpart 702 operations, CAR 702.23 should be met.

5. If not conducting the operation under CAR Part VII, then the passenger safety briefing shall meet the requirements of CAR 602.89.

(g) external and internal aircraft inspection by flight crew;

i. for subpart 705 operations, cabin inspection by flight attendant;

(h) preparatory radio and navigation equipment settings, including data entry in flight management avionics, if available;

(i) inertial equipment initializing and cross-checking;

(j) flight deck preparation;

(k) the use of checklists; and

(l) crew coordination.

### 7.3.4 In-flight Demonstration

(1) Prior to take-off, the CASI should observe the following procedures:

(a) preparations for starting engines;

(b) engine start-up procedures;

(c) proper communication and coordination with the ground crew regarding:

i. engine start-up procedures;

ii. removal of chocks; and

iii. push-back and ground towing, if so required, prior to taxiing.

(d) taxiing and use of aerodrome chart;

(e) use of checklists;

(f) acceptance and recording of ATC clearance; and

(g) briefing of the flight crew for take-off, departure and initial climb, including use of navigation aids.

(2) During the flight, the CASI should check the following items:

(a) adequacy of flight deck procedures;

(b) crew discipline, coordination and vigilance;

(c) altitude control and procedures for altitude/level change;

(d) requirements that may arise during flight;

(e) use of flight deck security procedures;

(f) competence of all crew members, including the language proficiency of flight crew members in the language used for radiotelephony communications;

(g) flight crew use of company frequencies and operational control of the flight;

(h) use of enroute and terminal navigation facilities;

(i) flight crew member knowledge of routes and aerodromes, including departure contingency procedures;

(j) adequacy of weather information and environmental data provided and used by the flight crew;

(k) use of air to ground communications;

(l) use of navigation procedures and equipment;

(m) use of checklists for each phase of flight;

(n) adherence to ATC clearances and to changes to clearances;

(o) compliance with meteorological reporting procedures and with procedures for reporting hazardous flight conditions;

(p) use and availability of flight documents, whether these are provided electronically or as hard copy;

i. Special notice should be taken of the manner in which the maps and charts contained in the route guide section of the COM are used in flight and in the conduct of departure, arrival, approach and missed approach procedures;

(q) adequacy and use of breathing oxygen in flight;

(r) flight crew use of safety harnesses;

(s) use of passenger information signs;

(t) general compliance with the CARs and regulations of other States concerned with the operation;

(u) flight crew management of the flight, including CRM, and proficiency in the manual and automatic control of the aircraft in all phases of flight;

(v) conduct of flight crew arrival, approach and landing briefing;

(w) adherence to aerodrome and/or heliport operating minima; and

(x) conduct of approach and landing procedures, after landing procedures, taxi and shut-down procedures and use of appropriate checklists.

### 7.3.5 Cabin Demonstration

(1) During the in-flight demonstration, the CASI-Cabin Safety shall observe that flight attendants are provided with, and occupy, for take-off and landing, forward or rearward facing seats.

(2) Flight attendants should be questioned regarding their familiarity with the location and use of various types of emergency equipment, and with their specific duties in the event of an emergency situation or evacuation.

(a) This discussion with the flight attendants provides an opportunity to assess the effectiveness of their training.

(3) The performance of flight attendants will be observed with regard to the effectiveness in performing their assigned duties and responsibilities, such as:

(a) pre-flight crew briefing;

(b) pre-flight safety and emergency equipment checks;

(c) passenger boarding procedures;

(d) door closing and, if applicable, associated slide arming procedures;

(e) pre-flight passenger safety briefings and/or demonstrations;

(f) pre-flight and pre-landing warnings and checks, and securing of cabins and galleys;

(g) silent review;

(h) post take-off procedures;

(i) in-flight procedures pertaining to safety;

(j) cabin unserviceability's reporting/recording; and

(k) in-flight turbulence procedures.

(4) Cabin demonstrations may occur as a separate event, or in conjunction with (typically following) cabin inspections.

(a) See section 6.6.2 for guidance on cabin inspections.

### 7.3.6 Post-flight Demonstration

(1) The following should be observed:

(a) use of appropriate after shut-down checklists;

(b) completion by the PIC of the journey log book or technical log and the reporting of any aircraft unserviceability;

(c) availability and, if necessary, completion of appropriate reports regarding incidents, near misses, bird strikes, lightning strikes, volcanic ash encounters or ingestion and any other unusual occurrences of operational significance;

(d) where a stopover is scheduled for crew rest, the adequacy of the accommodation provided and the actual rest period available; and

(e) where the stop is an intermediate stop, the arrangements made to assist the crew in the preparation for the next stage of the flight.

### 7.3.7 Flight Demonstration deficiencies

(1) Unsatisfactory conditions noted by the CASI during any part of the flight demonstration will be brought to the attention of the applicant/operator for corrective action.

(a) The opportunity should be provided for the applicant/operator to remedy any deficiencies affecting the safety of the operation before any further flights are undertaken.

(b) All discrepancies and items of non-compliance need to be corrected or resolved, with acceptable records of the corrective actions taken being kept, to the satisfaction of the TCCA certification team and TCCA prior to the inauguration of commercial service.

(2) Some examples of deficiencies requiring corrective action are:

(a) flight crew member not properly trained

(e.g.; assistance from the applicant/operator's supervisors or a CASI required);

(b) flight crew member not familiar with aircraft, systems, procedures, or performance;

(c) flight attendant not properly trained in emergency evacuation procedures or in the use of emergency equipment or not familiar with the location of that equipment;

(d) numerous aircraft deficiencies and/or system malfunctions;

(e) inadequate weight and balance or load control;

(f) unsatisfactory operational control

(e.g.; improper flight planning and flight release procedures);

(g) unacceptable maintenance procedures or practices; and

(h) Improper aircraft servicing and ground handling procedures.

## 7.4 Training Programs

(1) Training programs may be monitored during the performance phase.

(a) This monitoring will be required if a conditional approval of the training program has been granted (Subpart 7054 & 705).

i. See section 5.2.5 of this volume for guidance on validating conditionally approved training programs.

(b) This monitoring is optional otherwise, and would likely be necessary when TCCA needs to validate that the applicant/operator's training program is:

i. effective; and

ii. as described in the applicant/operator's submissions.

## 7.5 Emergency Evacuation Demonstration

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | N/A | N/A | N/A | 705.135, 705.139, 705.204, 705.205, 705.224 |
| CASS | N/A | N/A | N/A | |
| DOC(s) | AC 705-009 | | | |

**TCCA to complete:**

PA EED 705

(1) A demonstration of emergency evacuation procedures involves any scenario where the aeroplane remains in the normal ground attitude with landing gear extended.

(a) Typically, the scenario simulates a rejected take-off (i.e.; the most commonly performed type of demonstration).

(b) All operators should expect to conduct this demonstration for each aeroplane model configured to carry 44 or more passengers.

(2) Where a demonstration of emergency evacuation procedures is required by section 705.204 of the CARs, the certification inspection team shall require a demonstration of:

(a) the adequacy of aircraft emergency procedures;

(b) crew member emergency evacuation training; and

(c) emergency equipment.

(3) Specific points to be noted during an evacuation demonstration are:

(a) the location of each crew member during the demonstration;

(b) the adherence by crew members to the execution of assigned duties and responsibilities;

(c) the effectiveness of crew members in performing assigned duties and responsibilities

(for example, a flight attendant's effectiveness in assessing outside conditions, opening exits, and passenger evacuation commands);

(d) the coordination and communication between the flight crew members and flight attendants;

(e) the operation of emergency equipment; and

(f) any other deficiencies or delays encountered.

(4) In making their report on the demonstration, CASIs should ensure that each designated exit was opened, and each slide was deployed and ready for use within 15 seconds.

(a) The TCCA team member assigned to each exit will determine if their assigned exit was opened and each slide or slide raft was ready for use before the termination signal was heard.

(5) If a demonstration is not successful:

(a) the applicant/operator should identify the cause(s) and correct any deficiencies that may have contributed to the failure prior to conducting another demonstration; and

(b) TCCA should be informed of the cause(s) of the unsuccessful demonstration and the corrective action(s) taken by the applicant/operator before the demonstration is repeated.

(6) If the deficiency cannot be corrected immediately:

(a) the applicant/operator should ensure that corrective action is taken prior to rescheduling the demonstration.

i. These corrective actions may include, but are not limited to:

1. revising evacuation procedures;
2. improving crew training;
3. modifying or changing the safety and emergency equipment used;
4. changing the passenger compartment arrangement;
5. reducing total passenger seating capacity; and
6. increasing the number of flight attendants.

## 7.6 Ditching Demonstration

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR** | N/A | N/A | N/A | 602.63, 705.135, 705.139, 705.206, 705.207, 705.224 |
| **CASS** | N/A | N/A | N/A | |
| **DOC(s)** | AC 705-009 | | | |

**TCCA to complete:**
PA EED 705

(1) Where a ditching demonstration is required by section 705.206 of the CARs, the TCCA certification team shall require a simulated ditching demonstration for each model of aeroplane that will be operated on extended over-water flights.

(2) The following aspects of the demonstration will be noted and evaluated:

(a) the adequacy of the preparation of passengers and the cabin for the anticipated ditching;

(b) the location and quantity of safety and emergency equipment available on board;

(i.e.; life rafts, slide rafts, life preservers, medical kits, first aid kits and emergency locator transmitter)

(c) proper stowage and accessibility of safety and emergency equipment;

(Could it be readily removed or ejected from the aeroplane in the time specified?)

(d) the availability, adequacy and use of means to prevent emergency equipment from drifting away from survivors;

(e) full inflation of the life raft, slide raft, and life preservers within acceptable time limits;

(f) serviceability of other relevant safety and emergency equipment; and

(g) the adherence to procedures and effectiveness of crew members in performing assigned duties and responsibilities.

(For example, where able-bodied passengers (ABPs) assist in launching life rafts during a ditching demonstration, the flight attendant's instructions to the ABPs should conform to the information provided in the operator's manual)

(3) In observing the demonstration, to assist in the assessment of the ditching demonstration, the TCCA CASIs should record the following was ensured:

(a) the passengers and flight attendants were ready for a water landing within fifteen minutes, or a time period based on the operator's ditching procedures; and

(b) life rafts were efficiently removed from stowage and each designated life preserver, life raft, and slide raft was properly inflated.

(4) If a demonstration is not successful:

(a) the applicant/operator should identify the cause(s) and correct any deficiencies that may have contributed to the failure prior to conducting another demonstration; and

(b) TCCA should be informed of the cause(s) of the unsuccessful demonstration and the corrective action(s) taken by the applicant/operator before the demonstration is repeated.

(5) If the deficiency cannot be corrected immediately:

(a) the applicant/operator should ensure that corrective action is taken prior to rescheduling the demonstration.

i. These corrective actions may include, but are not limited to:

1. revising evacuation procedures;
2. improving crew training;
3. modifying or changing the safety and emergency equipment used;
4. changing the passenger compartment arrangement;
5. reducing total passenger seating capacity; and
6. increasing the number of flight attendants.

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| **CAR** | 702.07(1)(d), 702.07(2)(i), 702.15, 706 | 703.07(1)(d), 703.07(2)(i), 703.19, 706 | 704.07(1)(d), 704.07 (2)(j), 704.18, 706 | 705.07(1)(d), 705.07 (2)(k), 705.23, 705.151, 705.154, 706 |
| **CASS** | 726 | 726 | 726 | 726 |
| **DOC(s)** | AC 700-042, TP 13094, TP 14408, TP 14427 | | | |

## 8.1 General

(1) The purpose of this chapter is to summarize the requirements of an air operator's maintenance control system, to assist an applicant/operator in applying for or amending an AOC. The applicant/operator should always refer to CAR Part 7 Subpart 6 (CAR 706) and Standard 726.

(2) An applicant/operator must demonstrate to the Minister that they have a maintenance control system defined within their MCM that complies with the maintenance requirements of CAR 706, and that any aircraft in their custody and control is maintained in accordance with their MCM and the approved maintenance schedule.

  (a) Whether the aircraft are owned or leased, the AOC holder must demonstrate the ability to properly control all maintenance activities on all aircraft they operate.

(3) The applicant/operator is required to demonstrate that an organization with the necessary qualified staff, equipment and facilities is set up and responsible for ensuring that the aircraft remain in an airworthy condition for the duration of their operational life.

  (a) This is referred to as managing the continuing airworthiness of the aircraft.

(4) A CASI-Airworthiness will be responsible for determining whether or not an applicant/operator has demonstrated the ability to meet the maintenance conditions of issue for an AOC.

  (a) Their findings will be provided to the CASI-Flight Operations who has the delegation to issue the AOC.

  (b) An AOC cannot be issued until the CASI-Airworthiness verified that the applicant/operator has demonstrated the ability to meet the maintenance requirements.

(5) It is assumed that in the case of an applicant/operator seeking authority to operate leased aircraft registered in a different State, suitable arrangements have been made between TCCA and the State of Registry regarding responsibility for the continuing airworthiness of the aircraft.

  (a) See Volume 3 of this manual series for details on the lease, charter and interchange of aircraft.

# 8.2 Maintenance Control System

## 8.2.1 General

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 706.02 | 706.02 | 706.02 | 706.02 |
| CASS | 726.02 | 726.02 | 726.02 | 726.02 |
| DOC(s) | | | | |

(1) A CASI-Airworthiness shall determine that the applicant/operator's maintenance control system meets the regulator requirements.

(a) Where they appear in the applicant/operator's manuals and supporting document, the following sub-topics should be reviewed for compliance

## 8.2.2 Duties of Certificate Holder

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 706.03 | 706.03 | 706.03 | 706.03 |
| CASS | 726.03 | 726.03 | 726.03 | 726.03 |
| DOC(s) | | | | |

*Reserved*

## 8.2.3 Maintenance Personnel and Facilities

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 706.04 | 706.04 | 706.04 | 706.04 |
| CASS | 726.04 | 726.04 | 726.04 | 726.04 |
| DOC(s) | | | | |

*Reserved*

## 8.2.4 Defect Rectification and Control Procedures

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 706.05 | 706.05 | 706.05 | 706.05 |
| CASS | 726.05 | 726.05 | 726.05 | 726.05 |
| DOC(s) | TP 9155 | | | |

*Reserved*

### 8.2.5 Technical Dispatch Procedures

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 706.06 | 706.06 | 706.06 | 706.06 |
| CASS | 726.06 | 726.06 | 726.06 | 726.06 |
| DOC(s) | | | | |

*Reserved*

### 8.2.6 Quality Assurance Program

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 706.07 | 706.07 | 706.07 | 706.07 |
| CASS | 726.07 | 726.07 | 726.07 | 726.07 |
| DOC(s) | | | | |

(1) Although the program is under the control of the maintenance manager, the operator remains responsible to ensure that corrective actions are taken in respect of any quality assurance program findings.

### 8.2.7 Maintenance Control Manual

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 706.08 | 706.08 | 706.08 | 706.08 |
| CASS | 726.08 | 726.08 | 726.08 | 726.08 |
| DOC(s) | TP 13094, TP 14408, TP 14427 | | | |

(1) For guidance on MCM development and review, see section 4.6 of this volume.

### 8.2.8 Maintenance Arrangements

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 706.09 | 706.09 | 706.09 | 706.09 |
| CASS | 726.09 | 726.09 | 726.09 | 726.09 |
| DOC(s) | | | | |

*Reserved*

### 8.2.9 Elementary Work

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | 706.10 | 706.10 | 706.10 | 706.10 |

| | | | | |
|---|---|---|---|---|
| **CASS** | 726.10 | 726.10 | 726.10 | 726.10 |
| **DOC(s)** | | | | |

*Reserved*

### 8.2.10 Servicing

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR** | 706.11 | 706.11 | 706.11 | 706.11 |
| **CASS** | 726.11 | 726.11 | 726.11 | 726.11 |
| **DOC(s)** | | | | |

*Reserved*

### 8.2.11 Training Program

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR** | 706.12 | 706.12 | 706.12 | 706.12 |
| **CASS** | 726.12 | 726.12 | 726.12 | 726.12 |
| **DOC(s)** | AC 700-042 | | | |

(1) For guidance on maintenance personnel training programs, see section 5.70 of this volume.

### 8.2.12 Personnel Records

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR** | 706.13 | 706.13 | 706.13 | 706.13 |
| **CASS** | 726.13 | 726.13 | 726.13 | 726.13 |
| **DOC(s)** | | | | |

*Reserved*

### 8.2.13 Service Difficulty Reporting

| **Subpart:** | **702** | **703** | **704** | **705** |
|---|---|---|---|---|
| **CAR** | 706.14 | 706.14 | 706.14 | 706.14 |
| **CASS** | 726.14 | 726.14 | 726.14 | 726.14 |
| **DOC(s)** | | | | |

*Reserved*

### 8.2.14 Safety Management System

| Subpart: | 702 | 703 | 704 | 705 |
|---|---|---|---|---|
| CAR | | | | 706.15 |
| CASS | | | | |
| DOC(s) | | | | |

(1) For guidance on maintenance aspects of safety management systems, see section 3.5 of this volume.

# Chapter 9 – Administrative Functions

## 9.1 General

(1) This section contains information on post review/demonstration/performance activities, to include administrative procedures associated with issuing/denying of the AOC.

(2) Links to all templates for the letters/emails listed in this chapter can be found in the Tools List document (RDIMS# 13610357).

## 9.2 Confirmation Letters/Emails

(1) Letters/Emails will be generated to confirm:

(a) Applicant/Operator is prepared, and the formal application package is complete.

(b) All formal application submissions are acceptable.

(c) All inspections and/or demonstrations are acceptable.

## 9.3 Explanation Letters/Emails

(1) Letters/Emails will provide explanations of TCCA findings:

(a) Applicant/Operator is not ready to proceed with the application process.

(b) Formal application is not acceptable and needs to be revised.

(c) Applicant/Operator is not prepared (formal application package is incomplete).

(d) All formal application submissions are not acceptable.

(e) Any inspection and/or demonstration is not acceptable.

## 9.4 Termination Letters/Emails

(1) A letter/email will be provided to the applicant/operator as formal notice that the application process has been terminated:

(a) During the Pre-Application phase.

(b) During the Formal Application phase.

## 9.5 Approval Letters

(1) Approval letters may be sent by regular mail or electronically as a PDF attachment.

### 9.5.1 Conditional Approval Letters

(1) Conditional approval letters for Subparts 704 & 705 Pilot and Flight Attendant training programs should include the following information:

(a) subject of the submission;

(b) date the submission was sent or received;

(c) regulatory reference(s) for the requirement(s);

(d) standard(s) used for the evaluation;

(e) confirmation that the submission was evaluated to receive conditional approval;

(f) information relating to final approval (i.e.; issuance will occur upon satisfactory inspection or any other specified conditions);

(g) identify that should training, upon completion of an inspection, prove to be unsatisfactory, all further training using the conditionally approved program must be suspended until identified findings have been amended; and

(h) signature of the person delegated approval authority.

### 9.5.2 Final Approval Letters

(1) Final approval letters are issued when it has been determined that all applicable regulatory requirements and standards applicable to a document have been met.

(2) Final approval letters should include the following information:

(a) subject of the submission;

(b) date the submission was sent or received;

(c) regulatory reference(s) for the requirement(s);

(d) standard(s) used for the evaluation;

(e) confirmation that the person/submission was evaluated and meets all regulatory requirements and standards;

(f) identification of the approval being granted; and

(g) signature of the person delegated approval authority.

(3) Final approval letters are generated for:

(a) Operations Manager (Subpart 703, 704, 705 operations).

(b) Chief Pilot (Subpart 703, 704, 705 operations).

(c) Maintenance Manager.

(d) Flight Attendant Manager (Subpart 705 operations).

(e) Company Operations Manual.

(f) Aircraft Operations Manual(s) (Subpart 705 operations).

(g) Flight Attendant Manual (Subpart 705 operations).

(h) Training Program(s).

(i) Minimum Equipment List(s).

(j) Maintenance Control Manual.

## 9.6 Acceptance Letters/Emails

(1) Although not required by regulation, acceptance letters/emails may be issued for items that must meet a standard but are not required to be approved.

(a) Examples of such items include:

i. flight attendant training and qualification records;

ii. safety features cards;

iii. Aircraft Operations Manual(s) for Subpart 704

iv. Standard Operating Procedures (when not included in an approved AOM); and

v. supplemental briefing cards.

(2) Acceptance letters/emails should include the following information:

(a) subject of the submission;

(b) date the submission was sent or received;

(c) regulatory reference(s) for the requirement(s);

(d) standard(s) used for the evaluation;

(e) confirmation that the submission was evaluated and meets the requirements of the standards; and

(f) signature of the person delegated approval authority.

(3) Acceptance letters/emails may be sent electronically and need not follow the same process as formal approval letters, provided that all of the pertinent information is included.

## 9.7 Non-Compliance Letters/Emails

(1) Non-compliance letters/emails are sent when a CASI determines that an item in a submission, either in the original submission or a subsequent amendment, does not meet applicable regulatory requirements and/or standards.

(2) Non-compliance letters/emails should include the following information:

(a) subject of the submission;

(b) date the submission was sent or received;

(c) statement that the submission does not meet regulatory requirements/standards and identification of the specific regulatory requirements/standards that fail to be met;

(d) findings (this information can be included as an attachment to the letter/email);

(e) notification of any impact this will have on the operator's AOC or application, if applicable; and

(f) signature of the person delegated approval authority.

(3) As with acceptance letters/emails, non-compliance letters/emails may be sent electronically, and need not follow the same process as formal approval letters, provided that all of the pertinent information is included.

## 9.8 Refusal to Issue/Amend/Suspension/Cancellation Letters

(1) Letters to be generated when an application has been submitted and accepted, and subsequently the activity does not result in a certificate being issued:

(a) Letter of intent to refuse to issue.

(b) Notice of refusal to issue.

(c) Notification of suspension of certificate activity.

(d) Certification process cancellation on request of the applicant/operator (Reconciliation of account).

(e) Notification of certification job closure.

(f) Final letter of certification job closure.

(2) The notification must be given in writing by TCCA, and sent by personal service or by registered or certified mail to the applicant/operator's latest known address.

## 9.9 Other Letters/Emails

(1) Letters/Emails to be generated for other purposes:

(a) Cover letter/email for AOC issuance.

## 10.1 Canadian Aviation Security Regulations, Secure Air Travel Act and Secure Air Travel Regulations

### 10.1.1 Transport Canada Aviation Security Directorate

(1) Transport Canada, Aviation Security Directorate (AVSEC) develops, administers and oversees policies, programs and regulations to ensure the security of Canada's air transportation system, while respecting the rights of passengers.

(2) AVSEC fulfills its responsibility by establishing security requirements and conducting oversight and enforcement on the following:

(a) aerodromes and air carriers;

(b) screening of air travellers, baggage, non-passengers and vehicles; and

(c) air cargo and supply chain goods.

### 10.1.2 Aviation Security Requirements

(1) All operators must be compliant with the *Aeronautics Act.* Sections 4.7 to 4.87 of Part I of the *Aeronautics Act* enable the development of aviation security requirements, including regulations, orders, and measures.

(2) The *Canadian Aviation Security Regulations, 2012* (CASR, 2012), supplement sections 4.7 to 4.87 of the *Act*.

(3) All operators must also comply with the *Secure Air Travel Act* (SATA); and the *Secure Air Travel Regulations* (SATR).

### 10.1.3 Submission and Review of Applicant/Operator Documentation Related to Security

(1) Applicant/Operators will submit their security procedures and training programs to TCCA, through the CASI-Cabin Safety or CASI-Flight Operations.

(2) The CASI shall forward the relevant security information to the Aviation Security Directorate, National Oversight - Aviation Security Operations (HQ), at:

TC.ABACCIssuesManagement-GestionEnjeuxABACC.TC@tc.gc.ca

Note: Only information related to domestic operations should be sent to Aviation Security Operations (HQ). FAOC/AOC with International LPD applications must continue to be sent to the International Programs Branch (IPB), per previously established procedures.

(a) It is important for the CASI to clearly identify the portions of the documentation that are required to be reviewed by Aviation Security.

(b) The CASI must also provide Aviation Security with the following:

i. The applicant/operator's contact information, for use in the event that further information is required for the review;

ii. The appropriate point of contact at TCCA;

iii. If the submission requiring review is for a new applicant, the location of the applicant's base of operations;

iv. The type of operation the applicant/operator will be conducting (size of aircraft, scheduled vs. unscheduled flights, Air Terminal Building vs. Fixed Base Operation, etc.);

v. A realistic deadline by which the review should be completed; and

vi. Any supporting documentation submitted by the applicant/operator.

A template for the request for AVSEC review can be found in the TP 4711 Tools List.

(3) National Oversight - Aviation Security Operations (HQ) will forward the submitted documents requiring review to the appropriate regional office to be assigned to a Transportation Security Inspector (TSI). The assigned TSI will review the security documentation and liaise with the CASI and directly with the applicant/operator as required during the review.

(4) Once it has been determined that the security procedures and training programs are in line with current regulatory requirements, the regional TSI will advise the CASI that the documents have been reviewed and meet all requirements.

(5) Once the security information, in its entirety, meets all applicable regulatory requirements, the approval/acceptance process will be indicated through approval/acceptance of the manual the security information is contained within.

(a) When sending the approval or denial letter to the applicant/operator, the CASI will provide a copy of the letter to the Aviation Security Directorate, at:

TC.ABACCIssuesManagement-GestionEnjeuxABACC.TC@tc.gc.ca

### 10.1.4 Following AOC Issuance

(1) Once the AOC is issued, operators must obtain access to AVSEC's secure system, which provides access to all legal instruments related to aviation security to which an air carrier must comply. Guidance materials are also available on this platform.

(a) AVSEC Program Development is the point of contact for this access. Please email:

AviationSecurity-sûretéaérienne@tc.gc.ca to request access this system.

(2) Security training inspections are conducted by Aviation Security Inspectors on a yearly basis. They observe one initial and one annual aviation security training session for crew members.

## 10.2 Transportation of Dangerous Goods Act

### 10.2.1 Transportation of Dangerous Goods Regulations

(1) All operators must comply with the *Transportation of Dangerous Goods* (*TDG) Act*, *1992*, and the *Transportation of Dangerous Goods Regulations*.

(2) The *TDG Act* and *Regulations* also apply to aircraft registered in Canada but operated outside Canada.

(3) Operators must maintain operational support services for dangerous goods and have approved dangerous goods procedures described in their COM, and an approved dangerous goods training program.

(a) Each operator is responsible to contact the TCCA, Transport Dangerous Goods Directorate (TDGD) at TC.TDGAviation-TMDAviation.TC@tc.gc.ca

(b) Applicant/Operators must submit to TDGD for review, their dangerous goods policies & procedures along with their dangerous goods training program(s), and completed Form 16-0090.

(c) Operators must also submit all amendments to their dangerous goods policies, procedures and/or training programs for review and acceptance by TDGD.

(4) When an operator has met all regulatory requirements, an operations specification will be issued in the form of a Dangerous Goods SA.

(a) Further guidance on operator requirements and information on the process for obtaining the Dangerous Goods SA can be found in Volume 3 (Operations Specifications) of this manual series.

## 10.3 Canada Transportation Act

### 10.3.1 Canadian Transportation Agency Designated Provisions Regulations

(1) In general, in addition to obtaining a CAR Part VII operator certificate from TCCA, all applicant/operators proposing to operate a domestic or international air transport service require a licence from the Canadian Transportation Agency (CTA) before commencing operations.

(a) Applicant/operators not requiring a CTA License are covered below, in section 10.3.2.

(2) In order to obtain a licence from the CTA, an applicant/operator must meet the applicable sections of the *Air Transportation Regulations.*

(3) An applicant/operator for a CTA licence, or for an amendment to or a renewal of such a licence, shall submit to the CTA documentary evidence to establish that they:

(a) have appropriate nationality:

i. For Domestic or Non-scheduled International licenses - are Canadian, or are exempted from that requirement (see Section 62 of the *Canada Transportation Act)*;

ii. For Scheduled International licenses – are Canadian, or can meet the conditions as set out in Section 69(3) of the *Canada Transportation Act*.

(b) hold an AOC issued by TCCA that is valid in respect of the air service to be provided under the CTA licence;

(c) have the liability insurance coverage required in respect of the air service to be provided (see Section 7 of the *Air Transportation Regulations*); and

(d) when they are Canadian, have met the financial requirements (per Section 8.1 of the *Air Transportation Regulations*).

(4) Canadian new entrants and existing operators applying for a licence to operate an air service must normally meet the nationality and financial requirements when:

(a) they are using medium aircraft (more than 39 but not more than 89 passengers);

(b) they are using large aircraft (more than 89 passengers); or

(c) their licence has been suspended for 60 days or longer.

(5) The financial requirements normally don't apply to those requesting issuance or reinstatement of a licence to operate an air service, which include:

(a) using medium aircraft if they already operate an air service using medium or large aircraft, or

(b) using large aircraft if they already operate an air service using large aircraft.

(6) All cargo applicant/operators are exempt from the financial requirements, but must be Canadian;

(7) For new applications or when the CTA license may change, applicant/operators should be advised that TCCA will not process an AOC or AOC amendment until proof has been provided that the CTA has determined the operator meets the requirements.

(8) In the interests of making the best use of public resources, the CTA will make a determination of whether or not an applicant/operator meets the requirements as prescribed in the *Canada Transportation Act* and the *Air Transportation Regulations* as soon as possible after it receives a licence application, and before TCCA processes an AOC or AOC amendment.

(9) All applicant/operators for a new AOC or AOC amendment to an existing document that have not yet complied with the requirements, and have questions about the CTA's licence application form, should be referred to CTA licensing officers.

(a) Commercial Flight Standards (AARTF) in Ottawa will be advised of the referral, and should be sent a copy of the CTA's determination.

(10) Holders of CTA licenses are required to file a declaration in the form set out in Schedule II to the CTA annually. (see Section 10 & 15, and Schedule II in the *Air Transport Regulations*).

## 10.3.2 Canadian Transportation Agency Licence Exclusions - Specialty Services

(1) An applicant/operator wishing to operate a specialty service is exempt from the requirement to obtain and hold a CTA licence.

(a) Specialty Services include:

i. aerial advertising;
ii. aerial construction;
iii. aerial fire-fighting;
iv. aerial forest fire management;
v. aerial inspection;
vi. aerial photography;
vii. aerial reconnaissance;
viii. aerial sightseeing;
ix. aerial spray;
x. aerial spreading;
xi. aerial survey;
xii. aerial weather altering;
xiii. aircraft demonstration;
xiv. air cushion;
xv. air flight training;
xvi. external Heli-transport;
xvii. glider towing;
xviii. hot air balloon;
xix. parachute jumping;
xx. rocket launching; and
xxi. transportation services for the retrieval of human organs for human transplant.

## 10.3.3 ATR 42 and Dash 8, Series 100 or 200 – Special Condition

(1) The CTA finds that the Dash 8, Series 100 or 200 aircraft with a 40 seats configuration is a "medium aircraft" within the meaning of the *Air Transportation Regulations* (ATR).

(a) A similar determination by TCCA is that this same Special Condition can be applied to the ATR 42.

(2) When a Canadian Air Operator Certificate contains a Special Condition limiting the carrying capacity of an ATR 42, or a Dash 8, Series 100 or 200 aircraft, to no more than 39 passengers, any application for a license filed to CTA in that regard will be dealt with as an application for a license "using small aircraft".

(a) The AOC ***Special Condition***s section must contain either of the following wordings (as applicable):

"Per CAR 705.08(g)(xi), the operations of the ATR 42 aircraft, registration C-XXXX, is restricted to a maximum of 39 passengers"

"Per CAR 705.08(g)(xi), the operations of the Dash 8-100/200 aircraft, registration C-XXXX, is restricted to a maximum of 39 passengers"

Note: The "XXXX" should be replaced by the applicable aircraft registration(s).

(3) Should such ATR 42/Dash 8 aircraft be converted to more than 39 seats, the Agency must be advised accordingly, and then the Agency will consider this aircraft as "medium aircraft", thus requiring a License change.

## 10.3.4 CTA Licence Application

(1) The applicant/operator must be made aware of the fact that a parallel activity involving the Canadian Transportation Agency is occurring along with their application to TCCA.

(a) The CTA's licensing requirements need to be met.

(b) The CTA will likely assess the operator's financial resources and ability to support the proposed operations.

(2) It is essential that the applicant/operator understands that the financial, economic and legal assessments should be commenced early.

(a) An AOC should not be granted without TCCA receiving proof of a satisfactory assessment of these aspects from the CTA.

## 10.3.5 The Status of the Assessment by the CTA

(1) At any point in the AOC application process the applicant/operator should be able to supply TCCA with an update of the status of their assessment by the CTA.

(a) The applicant/operator can provide a verbal confirmation of this status.

(2) If status is not known by the applicant/operator, the CPM should endeavour to find out the status from the CTA directly.

Note: The applicant/operator should be aware of the fact that without a positive confirmation from the CTA that the operator is likely to receive a CTA Licence, TCCA will not proceed with the application.

## 10.3.6 CTA Notification of AOC amendments

(1) Regions shall send notification of AOCs amendments (such as suspensions, reinstatements, cancellations, and updates) to the Canadian Transportation Agency (CTA).

(a) The mailbox that should be used is: licence@otc-cta.gc.ca.

Note: The NACIS mailbox should be cc'd, at: TC.NACIS-SINCA.TC@tc.gc.ca.

# 10.4 Canada-United States-Mexico Agreement (CUSMA)

## 10.4.1 General

(1) A Canadian air operator can operate Specialty Air Services (SAS) aerial work operations in the United States of America or in the United Mexican States in accordance with Chapter Fifteen and Annex I - Canada, of the *Canada-United States-Mexico Agreement* (CUSMA).

## 10.4.2 Background

(1) Ratified by Canada, the United Mexican States and the United States of America, the *North American Free Trade Agreement* (NAFTA) came into force on January 1, 1994.

(2) Among other things, NAFTA opened up cross-border trade in specialty air services (SAS), defined in article 1213 of NAFTA as aerial mapping, aerial surveying, aerial photography, forest fire management, firefighting, aerial advertising, glider towing, parachute jumping, aerial construction, heli-logging, aerial sightseeing, flight training, aerial inspection, aerial surveillance, and aerial spraying services.

- (a) The effective date of NAFTA coverage for some of these services was January 1, 1994, while coverage for other services was to be phased in for each signatory country over the next six years.

(3) In November 2018 an agreement was signed between the three countries to replace the existing NAFTA.

- (a) One year later, Canada, the United States of America and the United Mexican States agreed to update certain elements of the revised NAFTA, to better support the already existing terms of the agreement.
- (b) Canada went on to finalize our agreement documentation on March 13, 2020, naming it as the *Canada-United States-Mexico Agreement* (CUSMA). This agreement came into force on July 1, 2020.

(4) The enactment of the changes to NAFTA have led to each signing authority labelling their internal agreement documents differently:

- (a) Canada is using “Canada-United States-Mexico Agreement (CUSMA)”;
- (b) the United States of America is using “United States-Mexico-Canada Agreement (USMCA)”; and
- (c) the United Mexican States is using “Treaty between Mexico, United States and Canada (T-MEC)”.

Air operators should be aware of this difference when conducting business within the related countries.

## 10.4.3 NAFTA to CUSMA Changes

(1) Regarding aviation transportation services, the only substantial change is the renaming of the agreement. Consequently, what operators understood to be the process to obtain NAFTA authority in the past will essentially be the same for CUSMA.

## 10.4.4 Definitions and Abbreviations

(1) The following terms and definitions are referenced in this section:

- (a) **Dirección General de Aeronáutica Civil** (DGAC), United Mexican States;

(b) **Federal Aviation Administration** (FAA), United States of America;

(c) **Flight Training** is a term that applies to the following:

i. **Certified Flight Schools**: Those schools that hold an operating permit or certificate issued by the CAA to conduct approved training for any pilot qualification.

ii. **Flight Training Operators**: Those operators conducting training for an agricultural rating, a seaplane rating, a multi-engine rating, a type rating, an instrument rating, an airline transport pilot licence, or currency requirements.

iii. **SAS Operators**: Those operators conducting specific operational training for a particular SAS. Type-rating training may be included if the aircraft is used in that specific operation and is specified on the air operator certificate or the CUSMA operating authority.

(d) **Host CAA**: The CAA of a CUSMA country in which cross-border SASs are being conducted.

(e) **National CAA**: The CAA responsible for the regulatory control of an operator when it applies for operating authority in another CUSMA country. The national CAA will normally be the same as the state of registry for the aircraft and will be responsible for the regulatory oversight of aircraft on its register, including, but not limited to, maintenance and inspection requirements.

(f) **Operator**: The organization engaged in a commercial SAS operation.

(g) **Specialty Air Services** (SAS): The following is a list of SASs identified by NAFTA, and adopted by CUSMA. CUSMA SASs are specialized commercial aviation operations involving the performance of the following:

i. **Aerial Mapping**: The operation of an aircraft for the purpose of mapping by use of a camera or other measuring and recording devices.

ii. **Aerial Surveying**: The operation of an aircraft for the purpose of surveying by use of a camera or other measuring and recording devices.

iii. **Aerial Photography**: The operation of an aircraft for the purpose of taking photographs or recording information by use of a camera or other measuring and recording devices.

iv. **Forest Fire Management**: The operation of an aircraft for the purpose of fire detection and control as well as for the purpose of dispensing any substance intended for forest fire suppression and prevention. This does include carrying fire fighters, fire bosses and/or managers from the base camp into the fire area or the actual fire site as well as within the fire zone.

v. **Firefighting**: The operation of an aircraft for the purpose of dispensing water, chemicals, and fire retardants intended for suppressing a fire.

vi. **Aerial Advertising**: The operation of an aircraft for the purpose of skywriting, banner towing, displaying airborne signs, dispensing leaflets, and making public address announcements.

vii. **Glider Towing**: The towing of a glider by a powered aircraft equipped with a tow hitch.

viii. **Parachute Jumping**: The operation of an aircraft for the purpose of allowing a person to descend from that aircraft in flight using a parachute during all or part of that descent.

ix. **Aerial Construction**: The operation of a rotorcraft for the purpose of conducting external load operations in support of construction, hoisting of utilities, power line construction, and erection of special purpose towers.

x. **Heli-logging**: The operation of rotorcraft for the purpose of transporting timber suspended from the fuselage.

xi. **Aerial Sightseeing**: The operation of an aircraft for the purpose of providing recreation to passengers. This flight originates and terminates at the same airport or the same aerodrome.

xii. **Flight Training**: Training provided by certified flight schools and flight training operators who follow an approved ground and flight syllabus that permits students to meet all certification requirements for obtaining an airman certificate or rating. Flight training also includes operational training provided by SAS operators.

xiii. **Aerial Surveillance and Inspection**: The operation of an aircraft for the purpose of conducting aerial observation and patrols for surface events and objects.

xiv. **Aerial Spraying**: The operation of an aircraft for the dispersal of products.

(h) **Transport Canada Civil Aviation** (TCCA), Canada.

## 10.4.5 CUSMA Cross-border SAS Operations

### 10.4.5.1 General Requirements

#### 10.4.5.1.1 Validity

(1) A CUSMA authorization, unless amended, suspended or revoked, will normally be valid for a maximum of one year and can be renewed.

(a) Periods of validity may be shorter than one year.

(b) Periods will not be longer than one year.

(2) The renewal process will be the same as the original authorization process.

#### 10.4.5.1.2 Authorization Process

(1) The SAS operator must:

(a) be equipped and able to operate in each SAS applied for;

i. Must hold a 702 certificate if they plan to conduct aerial work activities.

ii. Must hold a Part IV Flight Training Unit operator certificate if they plan to conduct flight training activities.

iii. Must hold a 703, 704 and/or 705 certificate if they plan to conduct aerial sightseeing activities.

(b) apply for and obtain authorization from the national CAA;

i. If not holding a 702 certificate, the applicant must apply for this certificate.

1. Applications should be sent to the Regional TCCA office the operator normally deals with.

ii. The CUSMA SA must also be applied for.

(c) apply for and obtain authorization from the host CAA(s); and

i. For operations in the United States of America, the operator must contact the FAA.

ii. For operations in the United Mexican States, the operator must contact the DGAC.

(d) make application in the official language(s) of the host country.

#### 10.4.5.1.3 Foreign Contact Information

| Country | CAA Contact Office | Phone and Fax Numbers |
|---|---|---|
| United Mexican States | Dirección Técnica<br>Dirección General de Aeronáutica Civil<br>Providencia 807-4o Piso<br>Col. del Valle<br>C.P. 03100, México, D.F. | Phone: (525) 687-76-80<br>Fax: (525) 523-67-40 |
| United States of America | General Aviation and Commercial Division, AFS-800<br>800 Independence Avenue Southwest<br>Washington, DC 20591 | Phone: (202) 267-3411<br>Fax: (202) 267-5094 |
| U.S. Drug and Alcohol Program Office | Implementation and Special Projects Branch, AAM-810<br>800 Independence Avenue Southwest<br>Washington, DC 20591 | Phone: (202) 267-8976<br>Fax: (202) 267-5200 |

### 10.4.5.2 Operational Conditions

#### 10.4.5.2.1 Aircraft

(1) Aircraft operated under CUSMA must have a current and valid certificate of airworthiness and certificate of registration.

(2) Aircraft must have an original FAA or TCCA civil type certificate for all SAS operations.

(a) Ex-military aircraft that have restricted-category certification based on military experience only are not eligible,

(b) Ex-military aircraft that are operating as civil types may be eligible provided they meet civil standards and are in a civil type configuration.

(3) Foreign (third-country) type-certificated aircraft must have both an FAA and a TCCA type certificate.

(4) Changes in type designs (that is, supplemental type certificates or repair design certificates) issued by third-countries on their own designs and manufactured products will be acceptable provided there is a bilateral airworthiness agreement or the equivalent with either the FAA or TCCA that specifically addresses design standards.

(5) Primary-category aircraft will not be used for flight training.

(a) Standard-category airworthiness certificates will normally be required, except as otherwise approved by the host CAA.

(b) SAS operators may conduct operational training in aircraft that are approved for the particular SAS.

**10.4.5.2.2 SAS Operations**

(1) As required by Annex 2 to the Convention on International Civil Aviation, operators must comply with the general operating and flight rules of the host country.

(a) Operators should be aware that there are significant differences in the visual flight rules for each country.

(2) Operators must deal with government agencies, including customs, trade and commerce, immigration, environment, and other applicable agencies, as necessary.

(3) The SAS operator must contact the host CAA(s) (see 10.4.5.1.3, in this section):

(a) prior to commencing initial SAS operations in each geographic area;

(b) upon changing the type of SAS operation being conducted; or

(c) upon subsequently returning to the original geographic area.

(4) Operators based in one host country and operating in another host country require authorization from each host CAA.

(5) As a minimum, a current and valid commercial pilot licence issued by the national CAA is required for the specific operation.

(6) Flight instruction towards the issuance of:

(a) national CAA licences, permits, and ratings may be conducted in any host country by a person who holds a valid commercial pilot licence or flight instructor rating, as applicable, for the type of instructional activity, and who satisfies the requirements of the national CAA.

(b) host CAA licences, permits and, ratings may be conducted in any host country by a person who holds a valid commercial pilot licence or flight instructor rating, as applicable, for the type of instructional activity, and who satisfies additional requirements specified by the applicable host CAA. (see 10.4.8, in this section).

(7) Flight-training operating authority will be granted to certified flight schools, flight training operators, and SAS operators according to the conditions specified by the host CAA.

(a) Canadian operators must hold a Part IV Flight Training Unit Operator Certificate.

(8) Agricultural aircraft may be operated at an increased maximum take-off weight (MTOW) if an increased MTOW has been authorized by the national CAA and the increase does not exceed 1.25 times the MTOW.

(9) Maintenance shall be performed in accordance with the requirements of the national CAA.

(10) Sightseeing operations shall be conducted by operators certificated by their national CAA for commercial passenger-carrying operations.

(a) Canadian operators must hold 702, 703 and/or 704 certificates with “Aerial Work – Aerial Sightseeing” endorsed upon them; or

(b) Canadian operators may conduct Aerial Sightseeing operations with a Part IV Flight Training Unit Operator Certificate.

(11) The movement of essential personnel from a base camp to a fire zone is not deemed to be air transportation, nor is the movement of essential personnel from one base camp to another to continue firefighting. These are operational necessities included under SAS for firefighting purposes.

#### 10.4.5.3 Specific Requirements

##### 10.4.5.3.1 Operators Applying to the National CAA (Canada)

(1) See TP 4711 Volume 3, Section 5.11.12 CUSMA – SPECIALTY AIR SERVICES OPERATIONS

##### 10.4.5.3.2 Operators Applying to a Host CAA (Mexico and/or U.S.A)

(1) The National CAA authorization is required as part of the Host Application Process.

(2) The host CAA will provide an information package outlining the application requirements.

###### 10.4.5.3.2.1 For Operations in the United Mexican States

(1) Operators must provide the DGAC with the name of the appropriately rated repair station(s) where maintenance can be performed.

(2) The *PUBLICACIÓN DE INFORMACIÓN AERONÁUTICA* (PIA) must be used for all operations and carried on board the aircraft.

(3) Proof of insurance must be provided with the application before a permit can be issued and must be carried on board the aircraft (see 10.4.7, in this section).

(4) Operations will be conducted from approved runways or sites, unless otherwise authorized.

(5) A special permit must be obtained for handling fuel other than at approved fuelling facilities.

(6) Operators must participate in alcohol- and drug-testing programs when conducting SAS operations.

(7) Operators must comply with the survival equipment requirements applicable to the operations conducted (see 10.4.6, in this section).

(8) All night flights under visual flight rules must have a SA.

(9) Flight training schools must obtain a public education certificate or a letter of authorization from the *Secretaría de Educación Pública* to teach ground school.

(10) In addition to the DGAC authorization, operators of SAS (aerial photography, aerial surveying, and aerial mapping) must obtain permission from the *Secretaría de la Defensa Nacional*.

###### 10.4.5.3.2.2 For Operations in the United States of America

(1) See **FAA AC 00-60B** *North American Free Trade Agreement and Specialty Air Services Operations* for details on the process; the document can be found suing the following website:

https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/1023506

Note: This document has not been updated to reflect the changes of NAFTA to CUSMA.

(2) Operators must participate in alcohol- and drug-testing programs when conducting sightseeing operations from a base in the U.S. (see 10.4.5.1.3 for contact information).

(3) The maintenance and alteration of emergency parachutes must be certified by a person authorized by the FAA.

(4) U.S. Department of Transportation Order 97-7-03 *Specialty Air Service Operators of Canada and Mexico* must be carried on board the aircraft.

## 10.4.6 Foreign Country Survival Equipment Requirements

### 10.4.6.1 Operations in the United Mexican States:

(1) Survival equipment must be carried to satisfy standards 191, 193, 194, and 195 of the *Reglamento de la Ley de Aviación Civil*.

(a) This equipment includes provisions for a first aid kit, shelter, flotation devices (for over-water operations), a fire extinguisher, an emergency locator transmitter, emergency rations and clothing, and signalling.

(b) Emergency rations and clothing are required for remote locations only, appropriate to the area being overflown.

(2) This information can be obtained by contacting the DGAC by phone at (525) 687-76-80 or by fax at (525) 523-67-40. The information will be sent by fax.

## 10.4.7 Insurance Requirements

### 10.4.7.1 United Mexican States

(1) SAS operators must meet the insurance requirements contained in article 64 of the *Reglamento de la Ley de Aviación Civil* and have passenger and third-party liability coverage to the limits specified.

### 10.4.7.2 United States of America

(1) Sightseeing operators must meet the insurance requirements contained in Part 402 of the *Department of Transportation Regulations* and have passenger and third-party liability coverage to the limits specified.

## 10.4.8 Flight Training

### 10.4.8.1 General

#### 10.4.8.1.1 Certified Flight Schools

(1) Includes all training authorized under a certificate. See:

(a) section 406.02 of the Canadian Aviation Regulations;

(b) article 39 of the *Reglamento de la Ley de Aviación Civil*; and the *Reglamento de Escuelas Técnicas de Aeronáutica* (11-X-1951) ; and

(c) paragraphs 141.11 and 141.57 of the Federal Aviation Regulations.

(2) The flight training listed below includes specific training activities that must be conducted under the authority of a certified flight school:

(a) Recreational

(b) private — aeroplane and helicopter

(c) commercial — aeroplane and helicopter

(d) flight instructor rating - aeroplane and helicopter

(e) night flying privileges - aeroplane and helicopter

#### 10.4.8.1.2 Flight Training Operators

(1) Includes specialized training facilities (for example, Flight Safety International)

(2) The flight training listed below may be conducted by certified flight schools or by instructors operating under the authority of a flight training operator:

(a) agricultural licence (DGAC);

(b) seaplane rating;

(c) multi-engine rating;

(d) type rating;

(e) instrument rating;

(f) airline transport pilot licence; and

(g) currency requirements.

**10.4.8.1.3 SAS Operators**

(1) Includes training of pilots included, regardless of whether they are employed by that operator.

(2) The flight training listed below may be conducted by an instructor operating under the authority of a SAS under CUSMA for that type of SAS operation:

(a) type rating; and

(b) currency requirements.

**10.4.8.2 Additional Pilot/Instructor Qualifications**

**10.4.8.2.1 Night Training in the United Mexican States**

(1) A Canadian instructor must hold an instrument rating.

**10.4.8.2.2 Aerobatics Training in the United Mexican States**

(1) Canadian instructors who wish to teach aerobatics must hold a special permit and/or authorization.

# Appendix A – Domestic Operator Certificate

## A1.0 AOC Part I – AIR OPERATOR CERTIFICATE

### A1.1 Certificate Section - General

(1) Part I of the AOC is called the Certificate section.

(2) This section contains what is referred to as the “tombstone data” and includes information about the company, including its legal and trade names, contact information and operational points of contact. It also includes the AOC number and signature of the Minister or Delegate.

**AIR OPERATOR CERTIFICATE**

**CERTIFICAT D'EXPLOITATION AÉRIENNE**

**CANADA**

Transport Canada Transports Canada

AOC No. / CEA n° : 1.

Legal Name / Dénomination sociale : 3.
**(Name of Company)**

Expiry Date / Date d'expiration : 2.

**Valid until suspended, cancelled or revoked**

**Valide jusqu'à suspendu, annulé ou révoqué**

Operator address / Adresse de l'exploitant : **(Address)** 4.

Telephone / Téléphone : **(Telephone)**
Fax / Télécopieur : **(Fax, if applicable)**
E-mail / Courriel : **(Email Address)**

Operational Points of Contact / Points de contact opérationnels : 5.

**Contact details, at which operational management can be contacted without undue delay are listed in the Operations Manual Chapter 1. Section A. (E.g. 123)**

**Les coordonnées permettant de joindre sans délai excessif le service de gestion de l'exploitation figurent dans le chapitre 1. sectior A. du manuel d'exploitation.**

This document certifies that **(Name of Company)** is authorized to perform the air operations as defined in the attached operations specifications, in accordance with the approved Operations Manual, *Canadian Aviation Regulations*, *Commercial Air Service Standards* and any special conditions attached.
Note: The term "Specific Approval" is interchangeable with the term "Special Authorization". 6.

Le présent document atteste que **(Name of Company)** a reçu l'autorisation d'effectuer les opérations de transport aérien indiquées dans les spécifications d'exploitation ci-jointes, conformément au Manuel d'exploitation, au *Règlement de l'aviation canadien*, aux *Normes de service aérien commercial* et si applicable aux conditions spéciales ci-jointes.
Remarque: Le terme «approbation spécifique» est interchangeable avec le terme «autorisation spéciale».

Date of Issue / Date de délivrance :

7. **(Date in YYYY-MM-DD)**

Name and Signature / Nom et signature : **(Name of Issuing Authority)**
Title / Fonction : **Technical Team Lead, Flight Operations / Chef d'équipe technique, Opérations aériennes**

8.

**On behalf of the Minister of Transport - Au nom du ministre des Transports**

I hereby certify that the attached document is a true copy of the **(Name of Company)** Air Operator Certificate (AOC) and associated operations specifications. Transport Canada Civil Aviation last revised this document in Ottawa, Ontario Canada on

Je certifie que le document ci-joint est une copie conforme du certificat d'exploitation aérienne (CEA) de **(Name of Company)** et des spécifications d'exploitation associées. Transports Canada Aviation civile a effectué la dernière révision du présent document, à Ottawa, Ontario Canada

Dated at Ottawa, Ontario Canada on **(Date)** on behalf of the Minister of Transport.

Fait à Ottawa, Ontario Canada, **(Date)** au nom du ministre des Transports.

**On behalf of the Minister of Transport - Au nom du ministre des Transports**

**This certificate supersedes and replaces the certificate currently in force, where applicable.**
**Ce certificat annule et remplace le certificat présentement en vigueur, le cas échéant.**

## A1.2 AOC Number (1.)

(1) The five digit 5258 number will be assigned by TCCA Information Management (IM), upon request after the submission of form 26-0380. This file number is used for operator operations activities.

(2) The AOC number is the 5260 file number which is generated by NACIS and is used for operator certification activities.

(3) While different legal entities are each given a unique company 5258 file number, the 5260 number is specific to each AOC under the 5258 file.

(4) A legal entity with a single 5258 file number may hold multiple AOCs in certain circumstances, each having a unique 5260 file number.

(5) The AOC number never changes when an AOC is amended or suspended.

## A1.3 Expiry Date (2.)

(1) Transport Canada AOCs are valid until cancelled, suspended or revoked.

## A1.4 Legal Name (3.)

(1) The law requires that the AOC holder must be a natural person or have legal personality as a type of entity. This includes:

- (a) a natural person (a private individual, as opposed to a legal entity);
- (b) a group of natural persons;
- (c) an incorporated company or association;
- (d) a group of incorporated companies or association; and
- (e) a body corporate or politic created by statute.

(2) While trade names may be identical to legal names, it is possible that a single legal name may have multiple trade names.

(3) It is not possible to have multiple legal names on a single AOC.

(4) An AOC is **not** transferrable.

(5) For all guidance on changes to the legal name on an AOC, refer to Volume 1 of this manual series.

## A1.5 Address (4.)

(1) The address on the AOC shall be the principal place of business of the operator.

- (a) It may be different from the mailing address.

(2) A post office box is not acceptable on the AOC.

(3) An email address is mandatory.

## A1.6 Operational Points of Contact (5.)

(1) The Operational Points of Contact portion contains the contact details where operational management can be contacted without undue delay for issues related to flight operations, airworthiness, flight attendant competency, dangerous goods and other matters, as appropriate.

## A1.7 Statement of Authorization (6.)

(1) The Statement of Authorization directs the holder to comply with the provisions of the AOC, specifying the name of the legal entity and its responsibility to comply with the CARs, CASS, and any special conditions included within the Canadian Aviation Document.

## A1.8 Date of Issue (7.)

(1) The Date of Issue denotes the date that the current issuance of the AOC was signed.

(2) The format of the date shall be YYYY-MM-DD.

## A1.9 Name and Signature (8.)

(1) This section include the Name, Title and signature of The Minister or Delegate.

(2) All signatures are now digital only. An AOC is not valid without the signature of an individual holding the proper delegation of authority granted by The Minister.

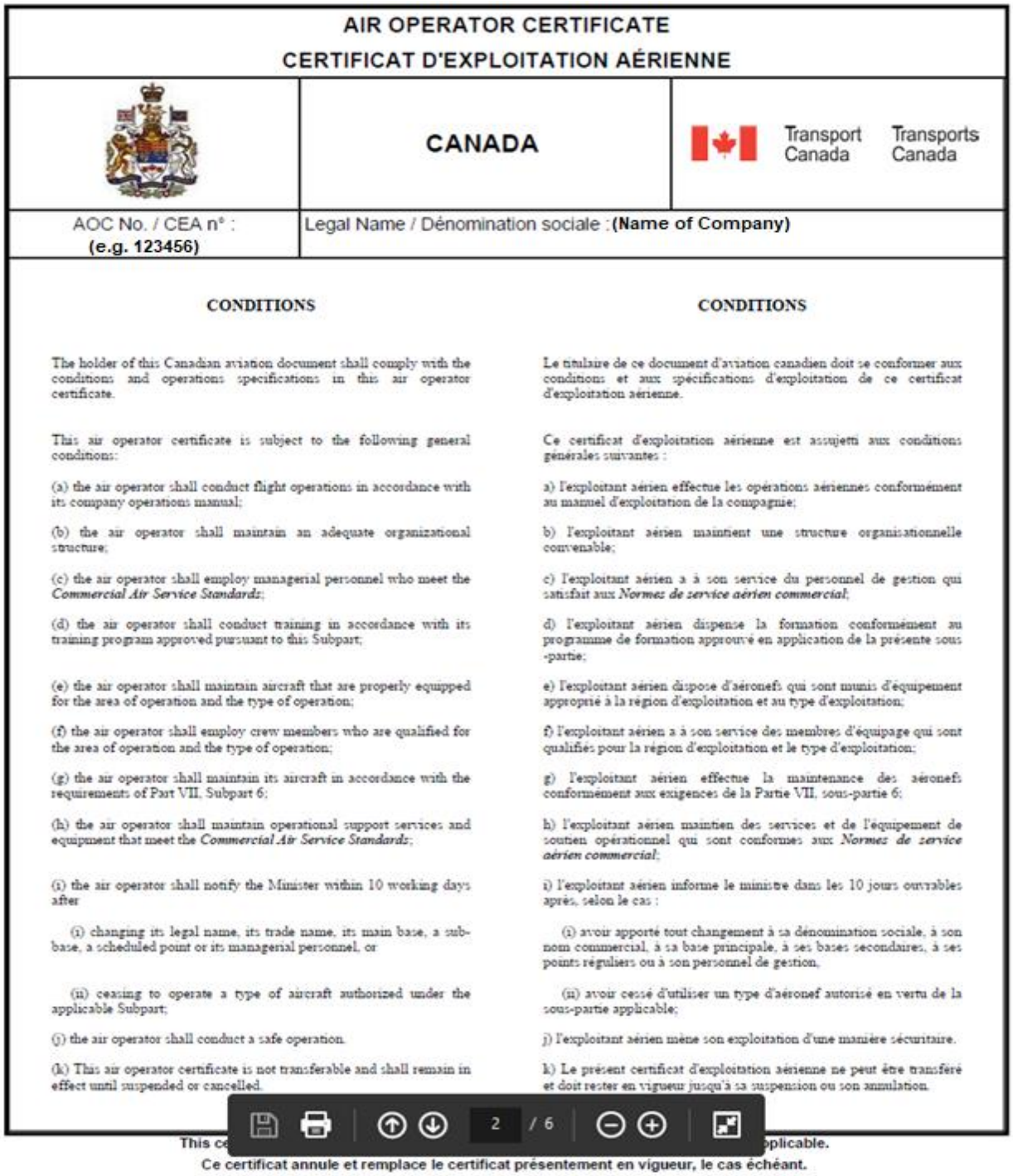
(3) The signature is “signed” in Ottawa to reflect that the server and digital signatures stored within are located in HQ.

(4) The following positions have authority to sign a domestic AOC under Subpart 702, 703, 704 and 705:

- (a) Director General, Civil Aviation;
- (b) Regional Director General;
- (c) Regional Director, Civil Aviation / Director, National Operations, Civil Aviation;
- (d) Associate Director, Operations, Civil Aviation / Chief, National Flight Operations, National Operations; and
- (e) TTL, Flight Operations, Regional Operations / TTL, National Flight Operations, Certification and Quality Assurance, National Flight Operations, National Operations.

## A1.10 General Conditions

(1) The General Conditions page of the AOC will always appear as page 2.



AIR OPERATOR CERTIFICATE
CERTIFICAT D'EXPLOITATION AÉRIENNE

CANADA

Transport Canada Transports Canada

| AOC No. / CEA n° : (e.g. 123456) | Legal Name / Dénomination sociale : (Name of Company) |
|---|---|

**CONDITIONS**

The holder of this Canadian aviation document shall comply with the conditions and operations specifications in this air operator certificate.

This air operator certificate is subject to the following general conditions:

(a) the air operator shall conduct flight operations in accordance with its company operations manual;

(b) the air operator shall maintain an adequate organizational structure;

(c) the air operator shall employ managerial personnel who meet the *Commercial Air Service Standards*;

(d) the air operator shall conduct training in accordance with its training program approved pursuant to this Subpart;

(e) the air operator shall maintain aircraft that are properly equipped for the area of operation and the type of operation;

(f) the air operator shall employ crew members who are qualified for the area of operation and the type of operation;

(g) the air operator shall maintain its aircraft in accordance with the requirements of Part VII, Subpart 6;

(h) the air operator shall maintain operational support services and equipment that meet the *Commercial Air Service Standards*;

(i) the air operator shall notify the Minister within 10 working days after

(i) changing its legal name, its trade name, its main base, a sub-base, a scheduled point or its managerial personnel, or

(ii) ceasing to operate a type of aircraft authorized under the applicable Subpart;

(j) the air operator shall conduct a safe operation.

(k) This air operator certificate is not transferable and shall remain in effect until suspended or cancelled.

**CONDITIONS**

Le titulaire de ce document d'aviation canadien doit se conformer aux conditions et aux spécifications d'exploitation de ce certificat d'exploitation aérienne.

Ce certificat d'exploitation aérienne est assujetti aux conditions générales suivantes :

a) l'exploitant aérien effectue les opérations aériennes conformément au manuel d'exploitation de la compagnie;

b) l'exploitant aérien maintient une structure organisationnelle convenable;

c) l'exploitant aérien a à son service du personnel de gestion qui satisfait aux *Normes de service aérien commercial*;

d) l'exploitant aérien dispense la formation conformément au programme de formation approuvé en application de la présente sous-partie;

e) l'exploitant aérien dispose d'aéronefs qui sont munis d'équipement approprié à la région d'exploitation et au type d'exploitation;

f) l'exploitant aérien a à son service des membres d'équipage qui sont qualifiés pour la région d'exploitation et le type d'exploitation;

g) l'exploitant aérien effectue la maintenance des aéronefs conformément aux exigences de la Partie VII, sous-partie 6;

h) l'exploitant aérien maintien des services et de l'équipement de soutien opérationnel qui sont conformes aux *Normes de service aérien commercial*;

i) l'exploitant aérien informe le ministre dans les 10 jours ouvrables après, selon le cas :

(i) avoir apporté tout changement à sa dénomination sociale, à son nom commercial, à sa base principale, à ses bases secondaires, à ses points réguliers ou à son personnel de gestion,

(ii) avoir cessé d'utiliser un type d'aéronef autorisé en vertu de la sous-partie applicable;

j) l'exploitant aérien mène son exploitation d'une manière sécuritaire.

k) Le présent certificat d'exploitation aérienne ne peut être transféré et doit rester en vigueur jusqu'à sa suspension ou son annulation.

2 / 6

This ce… …pplicable.
Ce certificat annule et remplace le certificat présentement en vigueur, le cas échéant.

## A1.11 Special Conditions

(1) Any discrepancy in the Operations Specifications (not including the SA portion) is to be mitigated by a statement in the Special Conditions page of the AOC, itself.

(2) Special Conditions may denote conditions, restrictions or other deviations.

(3) If required, a Special Conditions page will print as page 3 of the AOC.

(a) If the AOC has no Special Conditions, page 3 will be the first page of the Operations Specifications.

# A2.0 AOC Part II – OPERATIONS SPECIFICATIONS

## A2.1 Operations Specifications Section - General

(1) Part II of the AOC is referred to as the Operations Specifications section. It covers all aspects of the operation itself and includes special limitations and/or authorizations and appropriate criteria.

(2) Operations Specifications contain the authorizations, conditions and limitations associated with the AOC and subject to the conditions in the COM and are an integral part of the authorization under which an operator conducts operations.

(3) Although TCCA follows the CAST ICAO taxonomy of Aircraft Make, Model, Series (or Master Series, if one exists) to process all Operations Specifications, limitations within NACIS currently group all Operation Specifications by manufacturer.

(4) If authorizations and limitations are identical for two or more models, these models may be grouped in a single list.

| OPERATIONS SPECIFICATIONS<br>SPÉCIFICATIONS D'EXPLOITATION<br><br>subject to the approved conditions in the Operations Manual /<br>sous réserve des conditions approuvées figurant dans le Manuel d'exploitation | | | | | |
|---|---|---|---|---|---|
| 1. Issuing Authority Contact Details / Coordonnées de l'autorité de délivrance | | | | | |
| Telephone /<br>Téléphone : | | Fax /<br>Télécopieur : | | E-mail /<br>Courriel : | |
| AOC No. /<br>CEA n° : | Legal Name / Dénomination sociale : | | | Date of Issue /<br>Date de délivrance : | _____<br>On behalf of the Minister of Transport<br>Au nom du ministre des Transports |
| CAR Rule / Règle du RAC : | 2. | | | | |
| Aircraft /<br>Aéronef : | 3. | | | | |
| Type(s) of Operation /<br>Type(s) d'exploitation : | 4. | | | | |
| Type(s) of Service /<br>Type(s) de service : | 5. | | | | |
| Type(s) of Aerial Work /<br>Type(s) de travail aérien : | 6. | | | | |
| Area(s) of Operation /<br>Zone(s) d'exploitation : | 7. | | | | |
| Special Limitation(s) /<br>Restriction(s) spéciale(s) : | 8. | | | | |

| SPECIFIC APPROVAL<br>APPROBATIONS PARTICULIÈRES | CAR<br>RAC | DESCRIPTION<br>DESCRIPTION | REMARKS<br>OBSERVATIONS |
|---|---|---|---|
| DANGEROUS GOODS / MARCHANDISES DANGEREUSES | | | |
| DANGEROUS GOODS (DG)<br><br>MARCHANDISES DANGEREUSES (MD) | 9. | | |

## A2.2 Issuing Authority Contact (1.)

(1) Inspector information is taken from the TCCA Directory.

## A2.3 CAR Rule (2.)

(1) The CAR Rule field identifies the CAR Subpart that the aircraft in this Operations Specification will be operating under.

(2) The following are the Subparts that can be contained on an AOC:

(a) **700 - Specialty Air Service under CUSMA**

i. National Operations – Foreign Operations (AAROF) in Ottawa is responsible for activities relating to SAS under CUSMA.

(b) **701 - Foreign Air Operations**

i. National Operations – Foreign Operations (AAROF) in Ottawa is responsible for activities relating to Subpart 701.

(c) **702 - Aerial Work**

(d) **703 - Air Taxi Operations**

(e) **704 - Commuter Operations**

(f) **705 - Airline Operations**

## A2.4 Aircraft (3.)

(1) An operator for an AOC must have legal custody and control of at least one aircraft.

## A2.5 Types of Operation (4.)

(1) The following are the **Types of Operation** options available:

(a) For Subpart **703**, **704** and **705**:

i. **Aerial Work**; and

Note: Aerial work involving Sightseeing operations is an activity under Subpart 703, 704 or 705, depending on the aircraft used.

ii. **Air Transport Service**;

1. **Passenger**;

2. **Cargo**;

(b) For Subpart **702** only:

**i. Aerial Work**

## A2.6 Types of Service (5.)

(1) The following are the **Types of Service** options available for Subpart 703, 704 and 705 operations:

(a) **Domestic Service**;

(b) **Scheduled International Services**; and

(c) **Non-scheduled International Services**.

## A2.7 Types of Aerial Work (6.)

(1) The following are the **Types of Aerial Work** available:

(a) for Subpart 702 operations:

**i. The Carriage of Persons Other Than Flight Crew Members**

1. Aerial Inspection and Surveillance
2. Aerial Mapping
3. Aerial Photography
4. Aerial Surveying
5. Forest Fire Management
6. Flight Testing
7. Parachute Jumping
8. Wildlife Management

**ii. The Carriage of Helicopter Class B, C or D External Loads**

1. Aerial Construction
2. Aerial Harvesting
3. External Load
4. Heli-logging
5. Wildlife Management

**iii. The Towing of Objects**

1. Aerial Advertising
2. Airborne Support
3. Glider Towing

**iv. The Dispersal of Products**

1. Aerial Advertising
2. Aerial Spraying
3. Fire Fighting
4. Forest Fire Management
5. Wildlife Management

Note: Legacy Aerial Work types, listed under each of the four categories, are supplied for information purposes only; legacy Aerial Work types will no longer be listed on AOC's.

(b) for Subpart 703, 704 and 705 operations:

i. **Aerial Sightseeing**.

## A2.8 Area of Operation (7.)

(1) The ICAO format for geographical areas of authorized operation requires this to be listed as geographical coordinates or specific routes, flight information regions or national or regional boundaries.

(2) The available options for Areas of Operation are:

(a) North America (**NAM**);

(b) Caribbean (**CAR**);

(c) South America (**SAM**);

(d) North Atlantic (**NAT**);

(e) Pacific (**PAC**);

(f) Africa – Indian Ocean (**AFI**);

(g) Middle East / Asia (**MID/ASIA**);

(h) Europe (**EUR**); and

(i) **Canada** (reserved for Foreign Operations use only).

(3) The AOC shall contain an authorization for each area of operations that permits an operator to operate within, to and from that area

(a) Issuance depends upon the operator complying of associated communication, navigation and surveillance capabilities.

(4) There is no blanket authority for an operator to conduct operations globally.

(a) An operator seeking the addition of a particular Area of Operation to their AOC will have to demonstrate compliance with the Area of Operation criteria.

(5) Further detailed guidance on the approval of area(s) of operation can be found in Volume 3 of this manual series.

(6) For reference purposes, Appendix B of Volume 3 of this manual series contains a map of the ICAO areas of operation.

### A2.9 Special Limitations (8.)

(1) The general options for **Special limitations** section are:

(a) **Day VFR**;

(b) **Night VFR**;

(c) **IFR**; and

(d) **VFR OTT**.

### A2.10 Special Authorizations/Specific Approvals (9.)

(1) Some operations specifications are issued in the form of special authorizations/specific approvals (SA).

(2) As with other operations specifications, SAs are issued pursuant to the CARs, and are SAs, conditions and limitations associated with the AOC, and subject to the conditions in the approved COM.

(3) For details on all available SAs, see Volume 3 of this manual series.

## A3.0 AOC Part III - BASES AND SCHEDULED POINTS

### A3.1 General

(1) CAR Part VII provides that an AOC issued pursuant to Subparts 702, 703, 704 and 705, shall contain specific conditions with respect to:

(a) the main base;

(b) if applicable, sub-bases; and

(c) if applicable, all scheduled points.

(2) This information reflects that the suitability, from an aviation safety and security perspective, of any bases / sub-bases and all scheduled points, has been determined.

(3) An operator who intends to operate a scheduled air service for the purpose of transporting persons shall operate the service:

(a) between airports or heliports, or between an airport or heliport and a military aerodrome; and/or

(b) between an airport and an aerodrome, or between two aerodromes, if the operator is authorized to do so in its operator certificate.

(4) It is not necessary to repeat as scheduled points the names of the bases of operation and sub-bases that are appearing on the AOC.

(5) Refer to sections 4.2.13.2.1 and 6.5.3.2 of this volume for the Procedures for Approving a Scheduled Service for the Transport of Passengers to/from Uncertified Aerodromes.

(6) The available options for **Bases and Scheduled Points** are:

(a) **Main base**;

(b) **Sub-base**;

(c) **Domestic point**;

(d) **Foreign point**; and

(e) **Maintenance**.

| **BASES AND SCHEDULED POINTS / BASES ET POINTS RÉGULIERS**<br>**subject to the approved conditions in the Operations Manual / sous réserve des conditions approuvées figurant dans le Manuel d'exploitation** | | |
|---|---|---|
| AOC No. / CEA n° :<br>1. | Legal Name / Dénomination sociale :<br>2.<br>Trade Name(s) / Nom(s) commercial(aux) : | |
| **BASES AND SCHEDULED POINTS<br>BASES ET POINTS RÉGULIERS** | **ISSUED 8.<br>DÉLIVRÉE** | **AIRCRAFT 9.<br>AÉRONEFS AUTORISÉS** |
| **MAIN BASE / BASE PRINCIPALE** 3. | | |
| CYUL - MONTRÉAL / PIERRE ELLIOTT TRUDEAU INTL | YYYY-MM-DD | |
| **SUB-BASE / BASE SECONDAIRE** 4. | | |
| CYND - OTTAWA / GATINEAU | YYYY-MM-DD | |
| **SCHEDULED POINTS / POINTS RÉGULIERS 5.<br>DOMESTIC POINT / POINT INTERIEUR** | | |
| CYGK - KINGSTON | YYYY-MM-DD | |
| **SCHEDULED POINTS / POINTS RÉGULIERS 6.<br>FOREIGN POINT / POINT ETRANGER** | | |
| CYZV - SEPT-ILES | YYYY-MM-DD | |
| **SCHEDULED POINTS / POINTS RÉGULIERS 7.<br>MAINTENANCE / ENTRETIEN** | | |
| CYVR - VANCOUVER INTL | YYYY-MM-DD | |

# Appendix B – Forms & Documents

| ✓ = Applicable to Subpart<br>A = as required, based on operations | Subpart | | | |
|---|---|---|---|---|
| | 702 | 703 | 704 | 705 |
| **FORMS AND REPORTS TO BE COMPLETED BY THE APPLICANT/OPERATOR:** | | | | |
| **24-0055AE** - Small Aircraft Maintenance Schedule Approval | ✓ | ✓ | ✓ | ✓ |
| **24-0055BE** - Large Aircraft Maintenance Schedule Approval | ✓ | ✓ | ✓ | ✓ |
| **24-0055CE** - Maintenance Schedule Amendment Request | ✓ | ✓ | ✓ | ✓ |
| **26-0045E** - Air Operator Certificate Application – Bases and Scheduled Points (AOC Part III) | ✓ | ✓ | ✓ | ✓ |
| **26-0046E** - Air Operator Certificate Application – Aircraft (AOC Part II) | ✓ | ✓ | ✓ | ✓ |
| **26-0047E** - Air Operator Certificate Application - Contact & Personnel (AOC Part I) | ✓ | ✓ | ✓ | ✓ |
| **26-0048E** - Air Operator Certificate Application - Maintenance | ✓ | ✓ | ✓ | ✓ |
| **26-0380E** - Statement of Intent – Commercial Services | ✓ | ✓ | ✓ | ✓ |
| **26-0462E** - Estimate of Certificate Application Costs | ✓ | ✓ | ✓ | ✓ |
| **26-0622E** - Agreement for Recovering the Incremental Costs of Providing Services Inside/Outside Canada (Cost Recovery) | ✓ | ✓ | ✓ | ✓ |
| **CR COM 702** - Conformance Report - Company Operations Manual – Subpart 702 – Aeroplanes & Helicopters | ✓ | | | |
| **CR COM 703** - Conformance Report - Company Operations Manual – Subpart 703 – Aeroplanes & Helicopters | | ✓ | | |
| **CR COM 704** - Conformance Report - Company Operations Manual – Subpart 704 – Aeroplanes & Helicopters | | | ✓ | |
| **CR COM 705** - Conformance Report - Company Operations Manual – Subpart 705 – Aeroplanes & Helicopters | | | | ✓ |
| **CR AOM/SOP 70A** - Conformance Report – Aircraft Operating Manual / Standard Operational Procedures – All Subpart 7 – Aeroplanes & Helicopters | A | A | A | ✓ |
| **CR MEL 70A** - Conformance Report - Minimum Equipment List – All Subpart 7 – Aeroplanes & Helicopters | A | A | A | ✓ |
| **CR FAM 705** - Conformance Report - Flight Attendant Manual | | | | ✓ |
| **CR GIP 70A** - Conformance Report - Ground Icing Program – Subpart 7 – Aeroplanes & Helicopters | ✓ | ✓ | ✓ | ✓ |
| **CR TP 702** - Conformance Report - Training Program – Subpart 702 – Aeroplanes & Helicopters | ✓ | | | |
| **CR TP 703** - Conformance Report - Training Program – Subpart 703 – Aeroplanes & Helicopters | | ✓ | | |
| **CR TP 704** - Conformance Report - Training Program – Subpart 704 – Aeroplanes & Helicopters | | | ✓ | |
| **CR TP 705** - Conformance Report - Training Program – Subpart 705 | | | | ✓ |
| **CR TP FA 705** - Conformance Report – Training Program - Flight Attendant | | | | ✓ |
| **CR TP GIP 70A** - Conformance Report – Training Program - Ground Icing Program – Subpart 7 – Aeroplanes & Helicopters | ✓ | ✓ | ✓ | ✓ |
| **SUPPORTING DOCUMENTS TO BE SUBMITTED BY THE APPLICANT/OPERATOR:** | | | | |
| Proof of Canadian citizenship | ✓ | ✓ | ✓ | ✓ |
| Proprietorship/Partnership/Business documents | ✓ | ✓ | ✓ | ✓ |
| Operations Manager - Resume & Qualifications | ✓ | ✓ | ✓ | ✓ |
| Chief Pilot - Resume & Qualifications | ✓ | ✓ | ✓ | ✓ |

| | | | | |
|---|---|---|---|---|
| Assistant Chief Pilot - Resume & Qualifications | A | A | A | A |
| Aircraft Certificate(s) of Airworthiness | ✓ | ✓ | ✓ | ✓ |
| Aircraft Certificate(s) of Registration | ✓ | ✓ | ✓ | ✓ |
| Aircraft Lease Agreement(s) | A | A | A | A |
| Facilities ownership/lease | ✓ | ✓ | ✓ | ✓ |
| Local Airport Authority (LAA) approval letter(s) | A | A | A | A |

**FORMS, REPORTS AND CHECKLISTS TO BE COMPLETED BY TCCA:**

| | | | | |
|---|---|---|---|---|
| **JA 70A** - Job Aid – Part 7 – Aeroplane & Helicopter | ✓ | ✓ | ✓ | ✓ |
| **SI 106-001 App A** - Accountable Executive - Validation form | ✓ | ✓ | ✓ | ✓ |
| **24-0055AE** - Small Aircraft Maintenance Schedule Approval | ✓ | ✓ | ✓ | ✓ |
| **24-0055BE** - Large Aircraft Maintenance Schedule Approval | ✓ | ✓ | ✓ | ✓ |
| **24-0055CE** - Maintenance Schedule Amendment Request | ✓ | ✓ | ✓ | ✓ |
| **26-0462E** - Estimate of Certificate Application Costs | ✓ | ✓ | ✓ | ✓ |
| **26-0622E** - Agreement for Recovering the Incremental Costs of Providing Services Inside/Outside Canada (Cost Recovery) | ✓ | ✓ | ✓ | ✓ |
| **CR COM 702** - Conformance Report - Company Operations Manual – Subpart 702 – Aeroplanes & Helicopters | ✓ | | | |
| **CR COM 703** - Conformance Report - Company Operations Manual – Subpart 703 – Aeroplanes & Helicopters | | ✓ | | |
| **CR COM 704** - Conformance Report - Company Operations Manual – Subpart 704 – Aeroplanes & Helicopters | | | ✓ | |
| **CR COM 705** - Conformance Report - Company Operations Manual – Subpart 705 – Aeroplanes & Helicopters | | | | ✓ |
| **CR AOM/SOP 70A** - Conformance Report – Aircraft Operating Manual / Standard Operational Procedures – All Subpart 7 – Aeroplanes & Helicopters | A | A | A | ✓ |
| **CR MEL 70A** - Conformance Report - Minimum Equipment List – All Subpart 7 – Aeroplanes & Helicopters | A | A | A | ✓ |
| **CR FAM 705** - Conformance Report - Flight Attendant Manual | | | | ✓ |
| **CR GIP 70A** - Conformance Report - Ground Icing Program – Subpart 7 – Aeroplanes & Helicopters | ✓ | ✓ | ✓ | ✓ |
| **CR TP 702** - Conformance Report - Training Program – Subpart 702 – Aeroplanes & Helicopters | ✓ | | | |
| **CR TP 703** - Conformance Report - Training Program – Subpart 703 – Aeroplanes & Helicopters | | ✓ | | |
| **CR TP 704** - Conformance Report - Training Program – Subpart 704 – Aeroplanes & Helicopters | | | ✓ | |
| **CR TP 705** - Conformance Report - Training Program – Subpart 705 | | | | ✓ |
| **CR TP FA 705** - Conformance Report – Training Program - Flight Attendant | | | | ✓ |
| **CR TP GIP 70A** - Conformance Report – Training Program - Ground Icing Program – Subpart 7 – Aeroplanes & Helicopters | ✓ | ✓ | ✓ | ✓ |
| **PA BASE 70A** – Inspection Report - Main Base, Sub-base – Subpart 7 | ✓ | ✓ | ✓ | ✓ |
| **PA AIRCRAFT A 70A** – Aircraft Inspection Report – Aeroplane – Subpart 7 | ✓ | ✓ | ✓ | ✓ |
| **PA AIRCRAFT H 70A** - Aircraft Inspection Report – Helicopter – Subpart 7 | A | A | A | A |
| **PA EED 705** – Emergency Evacuation and Ditching Demonstration Report – Subpart 705 | A | A | A | A |
| **PA DEMO 70A** - Demonstration Flight Report – Subpart 7 | A | A | A | A |

# Appendix C – Sample Questionnaire for Prospective Operations Manager / Chief Pilot

1) Which Subpart(s) of the *Canadian Aviation Regulations* governs the commercial operation of aircraft in your company?
2) Define "Operations Specification" and list several that are applicable to your company.
3) What radio navigation equipment is required to dispatch an aircraft for IFR flight?
4) Can GPS be used as a navigation aid for IFR operations? Explain.
5) Explain the type of Operational Control system used by your company. What are your responsibilities under this system?
6) What is an operational flight plan and when must it be completed? How long must the operational flight plan be retained by the company following completion of the flight?
7) Who is responsible for amending and controlling distribution of your Company Operations Manual? Describe the amendment procedure.
8) How is the distribution of Company Operations Manuals controlled within your company?
9) Is it necessary to carry the Company COM on board your aircraft? What other documents are required on board?
10) When is high altitude training required for flight crew members?
11) Before a pilot is assigned to flying duty with your company, what initial training must be completed?
12) If an aircraft becomes damaged in service, what steps must be taken before the aircraft may be flown again?
13) What document outlines your company's area of operation, types of commercial air services, types of aircraft authorized, and bases?
14) Where actual weights are not known, what standard weights would be used for the winter period for males, females, gender "x", and children? Does this include carry-on baggage?
15) Explain the weight and balance system used by your company. When is a weight and balance calculation required?
16) When are you required to carry emergency survival gear? Where can you find a list of survival gear required for your aircraft? How often must the food contents of the survival kit be inspected?
17) Where would you find the training requirements your flight crews need to maintain currency?
18) Does your company have dangerous goods authority? If yes, what document gives you this authority?
19) Explain the management structure and reporting relationships within your company.
20) Describe the company's procedure for disseminating operational information.
21) Where can you find the qualification requirements for chief pilots and operations managers?
22) What annual training is required to keep your pilots current?
23) Who are the personnel that should be issued a copy of the Company Operations Manual?
24) What are company's procedures for reporting aircraft defects? When must they be reported?
25) What are your company's procedures for handling defects away from a company base?

26) How far in advance of the expiry date may annual training and PPCs be completed and still maintain the original expiry date?

27) Who is responsible for approving and signing an operational flight plan?

28) Who has overall responsibility for safe flight operations within your company?

29) Explain flight and duty time limitations as they apply to your pilots. What system is employed to ensure pilots do not exceed the limitations?

30) How are company routes established in uncontrolled airspace?

31) What is the purpose of the Company Operations Manual?

32) Where can you find the required minimum contents of a Company Operations Manual?

33) Define:

- Airtime
- Flight Time

Which applies to maximum flying time limitations?

34) Where would you find information on aircraft accidents or incidents, and what constitutes an "aviation occurrence" or a "reportable aviation incident"?

35) What is your company's procedure for an overdue or missing aircraft?

36) What is accelerate-stop distance? Are you required to calculate it in your operation? If yes, how is it done?

37) Does your company have authority for lower than standard take-off or landing limits? If yes, what document authorizes the lower limits and what are the conditions associated with their use?

38) Describe your company's flight watch or flight following procedures for flights operating outside normal working hours.

39) What are the fuel requirements for a VFR flight? For an IFR flight?

40) Define "Operational Support Services and Equipment". Who is responsible for ensuring that these services and equipment are in place?

41) Who is responsible for the professional standards of flight crews within a company?

42) When carrying passengers and freight, (no baggage compartment), how should the freight be loaded?

43) Where could you find the information as to whether an aircraft has sufficient equipment for IFR flight at night?

44) How do you determine that an aircraft is capable of operating safely from an airport which has not previously been used by your company?

45) How do pilots in your operation calculate take-off and landing performance data?

46) How are obstacles in the net take-off flight path determined by your pilots and what method do they use to ensure obstacle clearance. How do you ensure that obstacle data is accurate and up to date?

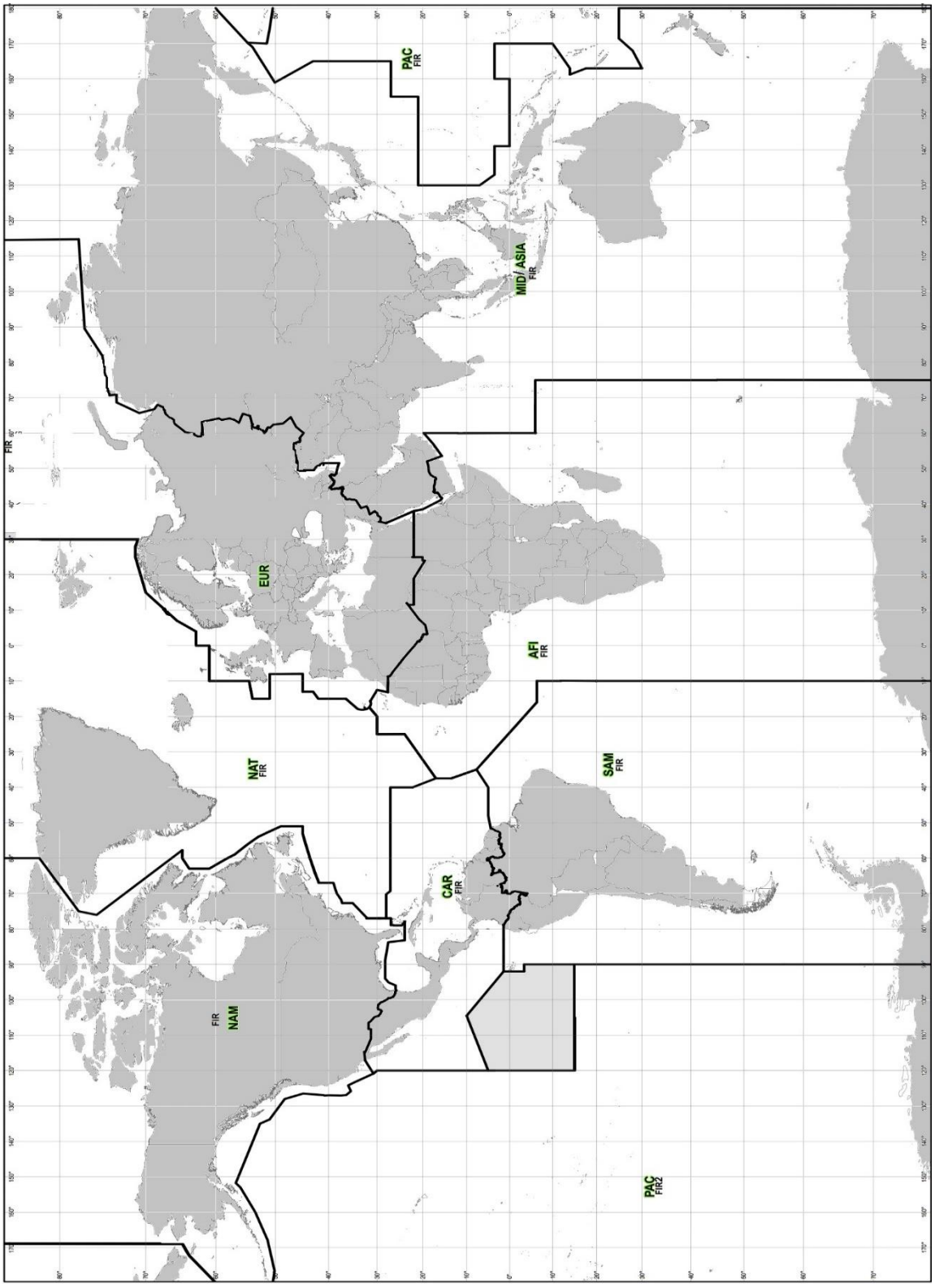
47) Describe in detail the communications system used for flight following or flight watch including off-line/charter procedures.

48) What conditions apply to refuelling with passengers on board the aircraft?

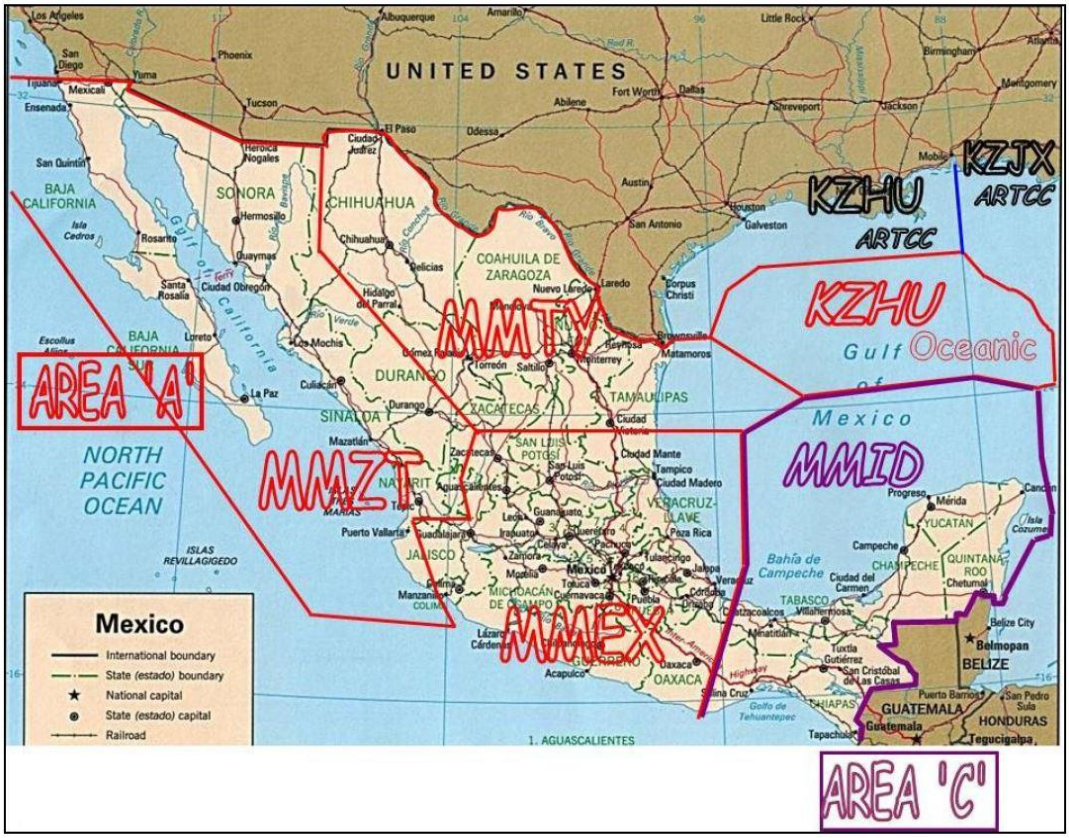
49) Who is responsible for developing or amending Standard Operating Procedures?

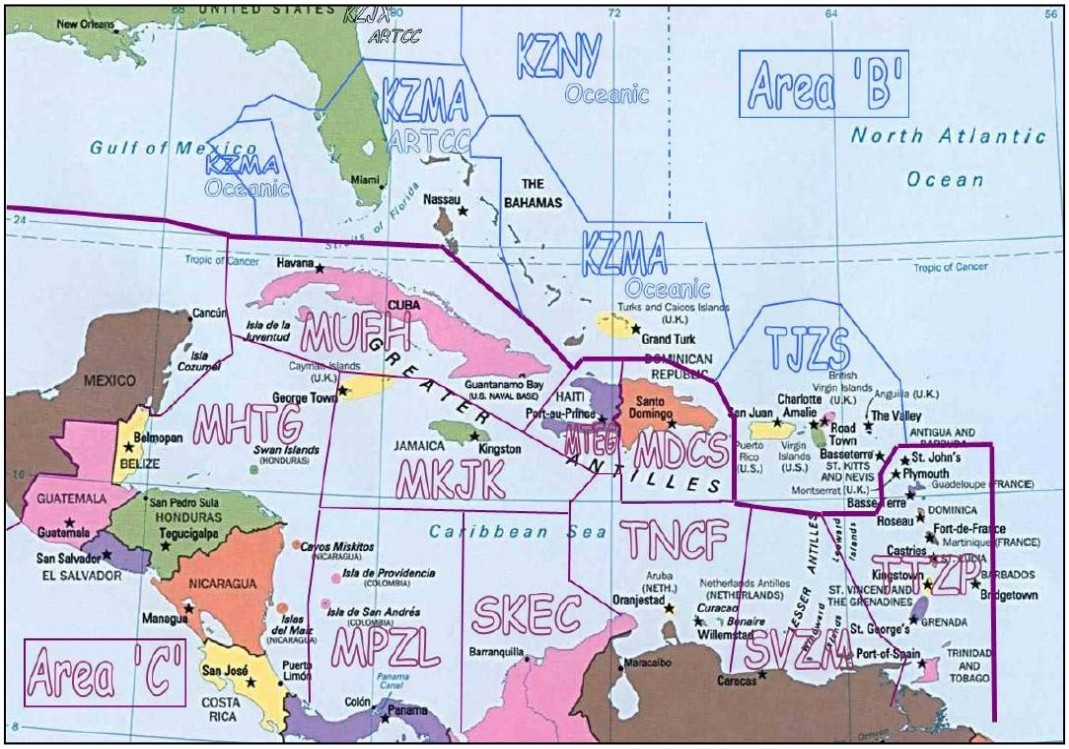
50) Is "No Alternate Aerodrome IFR Flight" authorized for your company? If yes, what conditions apply?

# Appendix D – ICAO Areas of Operation Map



# Appendix E – Caribbean Fuel Map of Areas A, B and C



# Appendix F – Cabin Safety Related MEL Items

## References from the *MEL Guidance Book*:

https://tc.canada.ca/en/aviation/aircraft-airworthiness/master-minimum-equipment-list-mmel/mmel-guidance-book

ATA 21 AIR CONDITIONING

- 21-60-1 Crew Rest Facility – Bunk

ATA 23 COMMUNICATIONS

- 23-30-1 Public Address System
- 23-30-2 Pre-Recorded Announcement (Passenger Briefing System)
- 23-30-3 Active Noise and Vibration Suppression System
- 23-40-1 Crew Member Interphone System
- 23-40-2 Alerting System
- 23-40-3 Handsets

ATA 25 EQUIPMENT/FURNISHING

- 25-10-1 Flight Deck Crew Member Safety Belts (Includes Shoulder Harness)
- 25-10-3 Observer Seat (Including Associated Equipment)
- 25-10-4 Flight Deck Door Surveillance Systems
- 25-20-1 Passenger Convenience Items/Non-essential Equipment & Furnishings
- 25-20-2 flight attendant Seat/Seat Assembly (Single and Dual Position)
- 25-20-3 Passenger Seats
- 25-20-4 “Fasten Seat Belt While Seated” Signs or Placards
- 25-20-5 Overhead Storage Bin(s)/Cabin and Galley Storage Compartments/Closets
- 25-20-6 Overhead (Stowage) Rack with Restraining Device
- 25-40-1 Exterior Lavatory Door Ashtrays
- 25-40-2 Lavatory No Smoking Placards
- 25-50-2 Crew Rest Facilities – Bunk
- 25-60-1 Emergency Locator Transmitter
- 25-60-2 First Aid Kit
- 25-60-3 Emergency Medical Kit
- 25-60-4 Megaphone
- 25-60-5 flight attendant Flashlights/Flashlight Holders

ATA 26 FIRE PROTECTION

- 26-10-6 Lavatory Smoke Detection Systems
- 26-10-7 Crew Rest Facility – Bunk Smoke Detection System
- 26-20-3 Lavatory Fire Extinguishing Systems
- 26-20-4 Portable Fire Extinguishers

ATA 33 LIGHTS

- 33-20-1 Passenger Compartment Lighting
- 33-20-2 No Smoking/Fasten Seat Belt/Return to Cabin Lights
- 33-20-3 Crew Rest Facility – Bunk Interior Lighting
- 33-50-1 Floor Proximity Emergency Escape Path Markings
- 33-50-2 Emergency Lighting, Internal
- 33-50-3 Emergency Lighting, External

ATA 35 OXYGEN

- 35-10-1 Flight Deck Oxygen System
- 35-20-1 Passenger Oxygen System
- 35-20-2 Passenger Service Units (Drop-Down Oxygen)
- 35-20-3 Lavatory Oxygen
- 35-20-4 Crew Rest Facility – Bunk Drop-Down Oxygen Masks
- 35-30-1 Portable Oxygen Dispensing Units (Bottle and Mask)
- 35-30-2 Protective Breathing Equipment

ATA 38 WATER/WASTE

- 38-10-1 Potable Water Systems
- 38-30-1 Lavatory Waste Systems

ATA 52 DOORS

- 52-10-1 Emergency Exits and Escape Slides (Passenger Carrying Operations)
- 52-10-2 Emergency Exits and Escape Slides (Aircraft Crew Only)
- 52-10-3 Narrow-Body All Cargo Aircraft Slide Relief
- 52-50-1 Enhanced Flight Deck Security Door
- 52-70-1 External Door(s) Indication System