# Simulator Implementation Procedures

Under the Agreement for the Promotion of Aviation Safety dated June 12, 2000

Between the

Government of the United States of America

and the

Government of Canada

# TABLE OF CONTENTS

CHAPTER I — GENERAL	
1.0 PURPOSE  1.1 AUTHORISATION  1.2 ENTRY INTO FORCE AND TERMINATION  1.3 AMENDMENTS  1.4 NATIONAL REQUIREMENTS  1.5 ACCOUNTABILITY  1.6 RESOLUTION OF DISAGREEMENTS  1.7 DEFINITIONS	
CHAPTER II — RECIPROCAL ACCEPTANCE OF SIMULATOR QUALIFICATION EVALUAT	IONS.
2.0 GENERAL 2.1 APPLICABILITY 2.2 STANDARDS USED 2.3 QUALIFICATION LEVEL 2.4 REQUESTS FOR EVALUATION 2.5 RIGHT TO MAKE INDEPENDENT VERIFICATION 2.6 EVALUATION REPORT 2.7 NOTIFICATION OF FINDINGS	
CHAPTER III — SPECIAL CONDITIONS	7
3.0 FAA SPECIAL CONDITIONS [RESERVED]	
CHAPTER IV — MUTUAL COOPERATION AND TECHNICAL ASSISTANCE	
4.0 PERIODIC MEETINGS  4.1 INFORMATION	3 3 3 2 9 9
CHAPTER V — CONTINUING VALIDITY	11
5.0 (A) UNRESTRICTED ACCESS	
CHAPTER VI — SIGNATURE IN COUNTERPARTS	11
CHAPTER VII — AUTHORITY	11

# **CHAPTER I — GENERAL**

# 1.0 Purpose

- (a) This document sets forth the Federal Aviation Administration (FAA) and the Transport Canada Civil Aviation (TC) procedures for implementing the flight simulator evaluation provisions of the Agreement for the Promotion of Aviation Safety between the Government of the United States and the Government of Canada signed June 12, 2000. The Agreement provides, in pertinent part, that the FAA and TC will pursue mutual cooperation and technical assistance in evaluation and acceptance of each other's systems and standards for flight simulator qualification evaluations. Upon mutual satisfaction with these systems, the Agreement directs the authorities to execute these procedures for reciprocal acceptance of simulator qualification evaluations.
- (b) The objective of these Implementation Procedures, in accordance with the Agreement, is to outline the terms and conditions under which the FAA and TC can accept each other's evaluations of flight simulators for findings of compliance with FAA Advisory Circular (AC) 120-40 and/or TC Aeroplane and Rotorcraft Simulator Manual (TP9685) for the purpose of Simulator Qualification only, thereby reducing redundant regulatory oversight without adversely affecting the fidelity of flight simulators and aviation safety.

#### 1.1 Authorization

The authorization for these Implementation Procedures is Article III of the Agreement for the Promotion of Aviation Safety, and in that respect, the FAA and TC have assessed each other's standards and systems relating to the evaluation and qualification of flight simulators and, as a result, have established an understanding of such standards and systems.

# 1.2 Entry into Force and Termination

These Implementation Procedures shall enter into force on the date of last signature and shall remain in force until terminated. They may be terminated upon sixty (60) days' written notice by either the FAA or TC. Termination of these Implementation Procedures will not affect the validity of activity conducted under their provisions prior to termination.

# 1.3 Amendments

- (a) These Implementation Procedures may be amended by mutual consent of the FAA and TC. They also may be supplemented by appendices. The details of any such amendment or appendix shall be recorded and signed by the representatives of the offices identified in paragraph 1.5(b), or their designees.
- (b) Suggestions for improvement of these procedures are welcome and can be addressed to either of the offices described in paragraph 1.5.
- (c) The FAA and TC recognize that significant revision by either authority to its organization, regulations, procedures, or standards may affect the basis on which these Implementation Procedures are executed. Accordingly, each authority agrees to advise the

other promptly of plans for such changes, and to give an opportunity for comment. Upon notice of such changes by one authority, the other authority may request consultation to review the need for amendment to these Implementation Procedures.

# 1.4 National Requirements

- (a) The legal standards for safety regulation by TC are contained in the Canadian Aviation Regulations (CAR), under the authority of the Aeronautics Act, and are explained in ancillary documents and procedures.
- (b) The legal standards for safety regulation by the FAA are contained in Title 14, Code of Federal Regulations (The Federal Aviation Regulations (FAR)), and are explained in ancillary documents and procedures.

# 1.5 Accountability

- (a) The designated offices for the technical implementation of these Implementation Procedures are:
  - (1) For the FAA: Manager, National Simulator Program

FAA (AFS-205)

1701 Columbia Avenue College Park, GA 30337 phone: 404-305-6100 404-305-6118 fax:

(2) For TC:

Manager, Simulator Program

Transport Canada

Tower C, Place de Ville, 4<sup>th</sup> Floor

330 Sparks Street Ottawa, Ontario **K1A 0N8** 

613-998-8283 phone: fax: 613-991-5188 (b) The designated offices for the administrative coordination of these Implementation Procedures are:

(1) For the FAA: Office of International Aviation

FAA (AIA-200)

800 Independence Avenue, S.W.

Washington, DC 20591 phone: 202-267-3213 fax: 202-267-5032

(2) For TC:

Director, Commercial & Business Aviation

Transport Canada

Tower C, Place de Ville, 4<sup>th</sup> Floor

330 Sparks Street Ottawa, Ontario

K1A 0N8

phone: 613-990-1121 fax: 613-954-1602

# 1.6 Resolution of Disagreements

Pursuant to Article IV of the Agreement for the Promotion of Aviation Safety, any disagreement regarding the interpretation or application of these Implementation Procedures shall be resolved by consultation between the FAA and TC, and, if appropriate, resolution of such disagreements will be recorded as an amendment or appendix to these Implementation Procedures, in accordance with paragraph 1.3.

# 1.7 Definitions

For the purposes of these Implementation Procedures (and notwithstanding definitions contained in Title 14, Code of Federal Regulations (the Federal Aviation Regulations (FAR)) or the Canadian Aviation Regulations (CAR)), the following definitions apply:

- (a) <u>CAR</u>. CAR means the Canadian Aviation Regulations. They may be interpreted and implemented by following CAR Standards and Guidance Material, Policy Letters and Advisory Circulars.
- (b) <u>Evaluation</u>. The measure of the simulator against the established technical criteria for that level set out in the appropriate reference document, i.e., for the FAA, AC 120-40, as amended, and for TC, TP9685, as amended. If satisfactory, the evaluation results in the issue of a Flight Simulator Qualification Level.
- (c) <u>FAR</u>. FAR means the Federal Aviation Regulations, contained in Title 14, Code of Federal Regulations, part 1 through 199. They may be interpreted and implemented by following FAA policy guidance in the form of Advisory Circulars.
- (d) <u>Finding</u>. Verification that the Flight Simulator is in compliance with the applicable requirements which will include an evaluation checklist or report compiled by the FAA or TC covering:

- i. All discrepancies noted;
- ii. Recommendations regarding correction of discrepancies; and
- iii. Recommendations regarding authorisation or limitation.
- (e) <u>Flight Simulator (Simulator)</u>. A full-size replica of a specific type or make, model and series of aircraft flight deck, including the assemblage of equipment and computer programs necessary to represent the aircraft in ground and flight operations, a visual system providing an out-of-the-flight deck view and a force cueing motion system. It is in compliance with the minimum standards for simulator qualification.
- (f) <u>Flight Simulator Operator</u>. As used in this document, identifies that person, organization or enterprise directly responsible to the FAA or TC for requesting and maintaining the qualification of a particular flight simulator.
- (g) <u>Flight Simulator Qualification Level</u>. The level of authorised use based on the technical capability of the simulator as determined by an evaluation of the simulator against the established technical evaluation criteria as defined in AC 120-40, as amended, or TP9685, as amended.
- (h) <u>Proprietary Data</u>. Proprietary Data means information, knowledge or data of an intellectual, business, technical, scientific or industrial nature in which a simulator operator or sponsor claims a proprietary or ownership interest, or has a legal or contractual duty to protect. Without limiting the generality of the foregoing, Proprietary Data shall include financial data, cost data, pricing data, marketing data, technical data, drawings, photographs, specifications, standards, manuals, reports, formulae, processes, information, lists, trade secrets, computer programs, computer software, computer databases and computer documentation. Proprietary Data may be disclosed either visually, orally or in writing.
- (i) <u>Special Conditions</u>. Special conditions are those additional requirements that are not prescribed in both sets of the standards shown in paragraph 2.2. If special conditions are required, they will be contained in Chapter III of these Implementation Procedures.

# CHAPTER II —RECIPROCAL ACCEPTANCE OF SIMULATOR QUALIFICATION EVALUATIONS

#### 2.0 General

The FAA and TC agree, subject to the terms of these Implementation Procedures, to accept each other's evaluations for findings of compliance with their respective requirements as the basis for its own qualification of a simulator.

# 2.1 Applicability

These Implementation Procedures are applicable to those Level A, B, C and D simulators that are required to have FAA and TC evaluation leading to a Qualification Level because they are used by an FAA-certificated entity (U.S. air carrier or FAR part 142 training center) and a TC-certificated entity (CAR Parts IV, VI or VII Operator Certificate holders).

# 2.2 Standards Used

- (a) Qualification evaluations will be conducted to the standards defined in AC 120-40, as amended, or TP9685, as amended. These standards incorporate the content of the International Civil Aviation Organization (ICAO) Document 9625-AN/938, "Manual of Criteria for the Qualification of Flight Simulators."
- (b) Following the mutual agreement of the FAA and TC, the standards of an earlier version of AC 120-40 (AC 120-40A) or TP9685 (Revision 0 or 1) may be applied to a particular simulator.

# 2.3 Qualification Level

The FAA or TC will qualify a flight simulator based on the findings provided by the evaluating authority. Such a qualification may be to a Qualification Level equal to or lower than the Qualification Level established by the evaluating authority and will be a function of the intended use of the flight simulator.

# 2.4 Requests for Evaluation

Requests for evaluation of simulators by either the FAA or TC will be made to the office designated in paragraph 1.5(a).

# 2.5 Right to Make Independent Verification

The FAA and TC acknowledge the right of the other authority to make its own evaluation or reevaluation of a simulator at any time.

# 2.6 Evaluation Report

The FAA and TC agree to provide the other authority at least 30 days prior to an evaluation, with the blank report form to be completed during an evaluation including any special instructions or requests.

# 2.7 Notification of Findings

The completed report shall be returned to the originating authority within 30 days of the evaluation and shall constitute the finding for a Flight Simulator Qualification Level. The report will identify the standards used, including the appropriate revision level. Notification shall be made to the respective authority's representative described in paragraph 1.5(a).

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# **CHAPTER III — SPECIAL CONDITIONS**

- 3.0 FAA Special Conditions [RESERVED]
- 3.1 TC Special Conditions [RESERVED]

### CHAPTER IV — MUTUAL COOPERATION AND TECHNICAL ASSISTANCE

# 4.0 Periodic Meetings

The FAA and TC will meet at least once a year to discuss these Implementation Procedures, on-going projects, changes in their own organisations, any revisions to their requirements, technical assistance requests, or any other matters relating to these Implementation Procedures. The frequency of these meetings will depend on the resources available to each authority, as well as the significance of any outstanding issues.

# 4.1 Information

The FAA and TC shall provide information and assistance regarding the evaluation and qualification of Flight Simulators to be performed under the terms of these Implementation Procedures, and shall develop appropriate publications and circulate these publications through established methods in their respective countries to:

- (a) Inform the public of the terms of these Implementation Procedures and/or any amendments or appendices.
- (b) Outline the regulatory requirements and special requirements necessary for persons to perform work under the terms of these Implementation Procedures.

## 4.2 Technical Assistance

The FAA and TC agree to co-operate and to provide technical assistance to each other upon request to further the purposes and objectives of these Implementation Procedures. Such areas of assistance may include, but are not limited to:

- (a) Providing recommendations or endorsements relating to evaluations conducted by the FAA or TC.
- (b) Performing surveillance and providing reports regarding continued compliance with the requirements described in these Implementation Procedures by United States or Canadian Flight Simulator Operators.
  - (c) Conducting and reporting on investigations at the request of the other authority.
  - (d) Obtaining and providing data for reports where requested.

# 4.3 Exchange of Information

The FAA and TC shall provide each other with regulations, policies, guidance, practices, and interpretations relevant to these Implementation Procedures, and shall ensure that such documents are updated in a timely manner. In addition, any FAA or TC proposal to amend such documents shall be provided to the other authority for the opportunity to review prior to the amendment being effected, consistent with their national laws and administrative procedures. Cooperation will also include a regular exchange of ideas and views on the current status and potential trend(s) in simulator technology and its application, possible exchange of technical

personnel on temporary details, joint participation in research and simulator evaluations, and any other means that further the objective of this Agreement.

# 4.4 Establishing and Amending Regulations, Policies, and Guidelines

To the extent permitted by its national laws and administrative procedures, each authority agrees to provide technical assistance to the other in efforts to establish and amend regulations, policies, guidance, practices, and interpretations relevant to these Implementation Procedures.

# 4.5 Urgent or Unusual Situations

When urgent or unusual situations develop that are within the scope of the Implementation Procedures, but not specifically addressed, the FAA and TC will review and consult together and take appropriate action, including developing amendments or appendices to these Implementation Procedures, if appropriate, as set forth under paragraph 1.3.

# 4.6 Notification of Noncompliance and Safety Issues

The FAA and TC agree to notify each other of all noncompliances with any standard or special condition set forth in these Implementation Procedures and of any other significant information that might affect an authority's qualification of a simulator. The FAA and TC also will notify each other promptly of any investigation into noncompliance or enforcement action that could result in suspension or penalty related to the Qualification Level of a flight simulator covered by these Implementation Procedures. The notification will be sent to the other authority's representative of the office identified in paragraph 1.5(a). The FAA and TC agree that, following the identification of any noncompliance, further use of the simulator concerned for any training or checking required by either authority will not be permitted unless corrected in a timely manner or addressed by placing limitations on the use of the simulator.

# 4.7 Protection of Proprietary Data and Freedom of Information Act (FOIA) and Access to Information Act (ATIA) Requests

- (a) <u>Proprietary Data</u>. Both authorities recognize that certain data submitted by a simulator operator may be the property of that operator or another person and release of that data by the FAA or TC is restricted. The FAA and TC agree that they will not copy, release, or show proprietary data obtained from either authority to anyone outside of the FAA or TC without written consent of the owner of the proprietary data.
- (b) <u>FOIA Requests</u>. The FAA often receives requests from the public under the FOIA to release information that the FAA may have in its possession. Any information that the FAA has in its possession must be disclosed under the FOIA unless it falls within certain exceptions, including trade secrets, or financial or commercial data that would be considered confidential or privileged. When the FAA receives such a request for the release of information related to a simulator located in Canada and covered by these Implementation Procedures, the FAA will advise TC of any information received from TC and submitted to the FAA that might be released. The FAA may also request TC's assistance, in cooperation with the flight simulator operator, in determining if the person submitting the information would object to release and which portions of the information received from that person or generated by TC might be withheld under the FOIA exceptions, if any.

(c) Access to Information Act (ATIA) Requests. TC often receives requests from the public under the ATIA to release information that TC may have in its possession. The ATIA provides a general right of access to records under the control of TC except in the case of specific exceptions, including trade secrets, certain financial and commercial information, or personal information as defined under the *Privacy Act*. When TC receives such a request for the release of information related to a simulator located in the United States and covered by these Implementation Procedures, TC will advise the FAA of any information received from the FAA and submitted to TC that might be released.

# 4.8 Accident/Incident Investigation Requests

When the FAA or TC needs information regarding simulators for the investigation of accidents or incidents involving aircraft for which a simulator exists, the request for information should be directed to the office identified in paragraph 1.5(a). In turn, upon receipt of the request for information, the other authority will, insofar as the information is in its possession and it is legally entitled to disclose it, provide the requested information in a timely manner.

# **CHAPTER V — CONTINUING VALIDITY**

# **5.0** The FAA and TC acknowledge that:

- (a) Unrestricted Access. Each authority should be included in the other's inspections such as the National Aviation Safety Inspection Program and National Audit Program; and that each authority may need to conduct independent evaluation or re-evaluation of a simulator at any time, and to review the other authority's surveillance records and other pertinent information on simulators, consistent with the objective of these Implementation Procedures and the authority's applicable laws and regulations.
- (b) Cooperation in Enforcement. The maximum permissible mutual cooperation and assistance in any investigation or enforcement proceedings of any alleged or suspected violations of any regulations, standards, or special conditions identified in these Implementation Procedures is essential. The FAA and the TC acknowledge that Simulator Qualification Levels issued under these Implementation Procedures remain subject to the regulatory requirements and enforcement procedures of the issuing authority.

# CHAPTER VI—SIGNATURE IN COUNTERPARTS

To facilitate execution, these Implementation Procedures may be executed in as many counterparts as may be required. It shall not be necessary that the signature of or on behalf of each party appear on each counterpart, but it shall be sufficient that the signature of or on behalf of each party appear on one or more of the counterparts. All counterparts shall collectively constitute a single agreement.

# **CHAPTER VII — AUTHORITY**

The FAA and TC agree to the provisions of these Implementation Procedures as indicated by the signature of their duly authorized representatives.

FEDERAL AVIATION ADMINISTRATION DEPARTMENT OF TRANSPORTATION UNITED STATES OF AMERICA

Name: Thomas E. McSweeny

Title: Associate Administrator for Regulation

And Certification

Date

DEC 22 2000

Location: Washington, DC

TRANSPORT CANADA CIVIL AVIATION DEPARTMENT OF TRANSPORT **CANADA** 

Name: Merlin R. Preuss

Title: Director, Commercial & Business Aviation

Location: Ottawa, Ontario