<u>Simulator</u>

Implementation Procedures

Under the Agreement between The Government of the United States of America and The Government of the United Kingdom of Great Britain and Northern Ireland For the Promotion of Aviation Safety

> Revision 2 Effective: January 25, 2022

Revision and History Log

Version #	Date	Revision Description	Prepared By
Original	December 20, 1995	Original Version	
Rev. 1	October 6, 2005	This revision incorporated updates from changes in rules and procedures adopted by both organizations.	
Rev. 2	January 25, 2022	This revision reflects multiple updates, including changes as a result of the FAA's establishment of 14 CFR part 60, the dissolution of the Joint Aviation Authorities (JAA), and the UK's updated rules due to the exit from the European Union (EU). As a result, the authorities' regulatory bases have changed and the Special Conditions (Appendix 1) have been updated. While this revision updates the terms of the authorities' interaction, the SIP's foundational purpose, to permit the FAA and the CAA to accept each other's evaluations of Full Flight Simulators for findings of compliance, remains unchanged.	

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CHAPTER I – GENERAL

1.0 Purpose

(a) This document sets forth the Federal Aviation Administration (FAA) and the United Kingdom Civil Aviation Authority (CAA) procedures for implementing the Full Flight Simulator(s) (FFS) evaluation provisions of the Agreement for the Promotion of Aviation Safety between the Government of the United States and the Government of the United Kingdom signed December 20, 1995. The Agreement provides, in pertinent part, that the FAA and the CAA shall pursue mutual cooperation and technical assistance in evaluation and acceptance of each other's systems and standards for FFS qualification evaluations. Upon mutual satisfaction with these systems, the Agreement directs the Authorities to execute these procedures for reciprocal acceptance of FFS qualification evaluations.

(b) The objective of these Simulator Implementation Procedures, in accordance with the Agreement, is to outline the terms and conditions under which the FAA and the CAA can accept each other's evaluations of FFSs for findings of compliance with FAA Simulator Standards and CAA Simulator Standards, thereby reducing redundant regulatory oversight without adversely affecting the fidelity of FFS and aviation safety.

1.1 Authorization

The authorization for these Simulator Implementation Procedures is Article III of the Agreement. These Simulator Implementation Procedures are not in and of themselves a treaty. Pursuant to the Agreement, the FAA and the CAA have assessed each other's standards and systems relating to the evaluation and qualification of FFS. As a result, the systems were considered sufficiently equivalent or compatible to permit acceptance of FFS evaluations made by one Authority for the other Authority.

1.2 Amendments

(a) These Simulator Implementation Procedures may be amended by mutual consent of the FAA and the CAA. The details of any such amendment or appendix shall be recorded and signed by the representatives of the offices identified in paragraph 1.5(c), or their designees.

(b) Suggestions for improvement are encouraged and may be addressed to the designated FAA or the CAA policy offices that are identified in paragraph 1.5(c) of these Simulator Implementation Procedures.

(c) The FAA and the CAA recognize that revisions by either Authority to its organization, regulations, procedures, or standards may affect the basis on which these Simulator Implementation Procedures are executed. Accordingly, each Authority shall advise the other of plans for such changes at the earliest possible opportunity and discuss the extent to which such planned changes affect the basis of these Simulator

Implementation Procedures. If consultations result in an agreement to amend these Simulator Implementation Procedures, the Authorities shall seek to ensure that such an amendment enters into force at the same time as, or as soon as possible after, the entry into force or implementation of the change that prompted such an amendment.

1.3 FAA and CAA Responsibilities

(a) Under the terms of these Simulator Implementation Procedures, the CAA, on behalf of the FAA, shall:

- (1) Provide recommendations to the FAA for qualification of FFSs pursuant to Title 14 of the Code of Federal Regulations (14 CFR) part 60, and the renewal and amendment of the qualification for FFSs located in the UK; and
- (2) Perform surveillance and provide reports regarding the continued compliance with these Simulator Implementation Procedures.

(b) Under the terms of these Simulator Implementation Procedures, the FAA on behalf of the CAA, shall:

- (1) Provide recommendations to the CAA for certification of FFSs pursuant to Annex VII Regulation (EU) 1178/2011 as applicable and amended in the UK through the European Union (Withdrawal) Act 2018, and the renewal and amendment of the qualification for FFSs located in the United States; and
- (2) Perform surveillance and provide reports regarding the continued compliance with these Simulator Implementation Procedures.

1.4 Applicable Requirements

(a) The CAA legal standards for safety regulations are contained in Commission Regulation (EU) No. 1178/2011, as applicable and amended in the UK through the European Union (Withdrawal) Act 2018. Guidance material and policy are contained in Acceptable Means of Compliance (AMC) and Guidance Material (GM).

(b) The legal standards for safety regulation by the FAA are contained in Title 49 of the United States Code (49 U.S.C.), Subtitle VII, Part A, Subparts I, III, and IV; and 14 CFR Chapter I, Subchapters A, C, G, and H. Guidance material and policy are outlined in ancillary documents and procedures, such as FAA orders, policy memoranda, and advisory circulars (AC).

1.5 Communications and Cooperation

(a) The FAA and the CAA shall exchange contact points for the various technical aspects of these Simulator Implementation Procedures.

(b) When urgent or unforeseen situations develop, each Authority's contacts shall communicate with each other and ensure that the appropriate immediate actions are taken.

(c) The designated offices for the technical coordination and implementation of these Simulator Implementation Procedures are:

 (1) For the FAA: Office of International Affairs (signature authority) FAA (API-1)
 600 Independence Avenue, SW
 Washington, DC 20591
 USA
 Telephone: +1-202-267-1000

> Flight Standards Service (policy) Training and Simulation Group (AFS-280) 1701 Columbia Avenue College Park, GA 30337 USA Telephone: +1-404-474-5620 9-ASO-AVS-SIM-TEAM@faa.gov

(2) For the CAA: Civil Aviation Authority Safety & Airspace Regulation Group Aviation House Beehive Ring Road Crawley West Sussex RH6 0YR UK Telephone: +44 3301383196 BilateralSafetyArrangements@caa.co.uk

1.6 Interpretation and Resolution of Disagreements

(a) In accordance with Article IV of the Agreement, any disagreement regarding the interpretation or application of these Simulator Implementation Procedures shall be resolved by consultation between the FAA and the CAA. If appropriate, resolution of such disagreements shall be recorded as an amendment or appendix to these Simulator Implementation Procedures, in accordance with paragraph 1.2 above.

(b) In the case of conflicting interpretations between the FAA and the CAA regarding the laws, regulations, standards, requirements, or acceptable means of compliance pertaining to certifications, approvals, or acceptance under these Simulator Implementation Procedures, the interpretation of the Authority whose laws, regulations,

standards, requirements, or acceptable means of compliance are being interpreted shall prevail.

1.7 Definitions

For the purpose of these Simulator Implementation Procedures, in addition to the definitions found in Article II of the Agreement, the following definitions shall apply:

(a) "Aviation Authority" or "Authority" means a responsible government agency or entity that exercises aviation safety oversight over regulated entities and determines their compliance with applicable standards, regulations, and other requirements within its jurisdiction. For the purpose of these Simulator Implementation Procedures, for the United States, the Authority is the Federal Aviation Administration (FAA); and for the United Kingdom of Great Britain and Northern Ireland, the Authority is the Civil Aviation Authority (CAA).

(b) "Defect" is an irregularity or area of noncompliance of an FFS found during an evaluation. The Defect may be referred to as either an item or discrepancy in reporting documentation.

(c) "Full Flight Simulator (FFS)" means a full-size replica of a specific type or make, model, and series of aircraft flight deck/cockpit, including the assemblage of all equipment and computer programmes necessary to represent the aircraft in ground and flight operations, a visual system providing an out-of-the-flight-deck/cockpit view, and a force cueing motion system.

(d) "FFS Operator" identifies the organization directly responsible to the CAA, for requesting and maintaining the qualification of a particular FFS and which has to comply with Regulation (EU) No. 1178 /2011 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and its AMC and GM.

(e) "FFS Qualification Level" means the level of compliance based on the technical capability of the FFS as determined by an evaluation of the FFS against the established technical evaluation criteria as defined in the applicable requirements. FFSs are categorised as level A, B, C, D. Additionally, some UK qualified devices hold qualification level AG, BG, CG, DG under Grandfather Rights.

(f) "Finding" means a verification whether the FFS operator is in compliance or noncompliance with the applicable requirements and which shall be recorded as results/discrepancies in the evaluation report or UK CAA as applicable.

- (g) "Flight Simulation Training Device" (FSTD) means:
 - (1) For the UK CAA, a training device which is, in the case of airplanes, a full flight simulator (FFS), a flight training device (FTD), a flight and navigation procedures trainer (FNPT), or a basic instrument training device (BITD).

(2) For the U.S. FAA, a training device which is, in the case of airplanes, a full flight simulator (FFS) or a flight training device (FTD).

(h) "FFS Sponsor" identifies the organization directly responsible to the FAA for requesting and maintaining the qualification of a particular FFS and which has to comply with 14 CFR part 60 requirements.

(i) "FFS Evaluation" is measure of the FFS against the established technical criteria for that level leading to a qualification as defined on the CAA qualification certificate or FAA Statement of Qualification (SOQ).

- (j) "Grandfather Rights" or "Deemed Rights" means:
 - (1) For the United States, the ability of an FSTD operator/sponsor to retain the qualified level granted under a previous advisory circular (AC).
 - (2) For the United Kingdom, the right of an FSTD operator/sponsor to retain the qualified level granted under a previous regulation. It also means the right for an FSTD user to retain the training, testing, and checking credits that were gained under that previous regulation.

(k) "Master Qualification Test Guide" (MQTG) means the FAA or CAA (as applicable) approved Qualification Test Guide (QTG) which incorporates the results of tests witnessed by the relevant Authority. The MQTG serves as the reference for future evaluations.

(I) "Qualification Test Guide" (QTG) means a document designed to demonstrate that the performance and handling qualities of an FFS are within prescribed limits with those of the aircraft and that all applicable requirements have been met. The QTG includes both the data of the aircraft and FFS data used to support the validation.

(m) "Regulated Entity" means any natural or legal person whose civil aviation safety and environmental testing and approval activities are subject to the statutory and regulatory jurisdiction of one or both of the Authorities.

(n) "Special Conditions" means those requirements that have been found, based on a comparison of the respective regulatory systems related to evaluation and qualification of FFS, not to be common to both systems and which are significant enough to be addressed in Appendix 1, Special Conditions, of these Simulator Implementation Procedures.

CHAPTER II – RECIPROCAL ACCEPTANCE OF FINDINGS OF COMPLIANCE

2.0 General

(a) The FAA and the CAA shall accept, subject to the terms of these Simulator Implementation Procedures, each other's evaluations for findings of compliance with their respective requirements as the basis for its own qualification of an FFS.

(b) Qualification Level. The FAA or CAA may qualify an FFS 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 FFS.

(c) Eligibility. These Simulator Implementation Procedures are applicable to those Fixed Wing Level C and D FFSs that are required to have FAA and CAA evaluation leading to a Qualification Level. FFSs that hold a current qualification in accordance with the applicable CAA or FAA requirements are eligible for evaluation.

(d) Standards Used. Qualification evaluations will be conducted according to requirements as outlined in 14 CFR part 60 and Regulation (EU) No. 1178 /2011 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and its AMC and GM.

2.1 Requests for Evaluation

Requests for evaluation of FFSs under this agreement will be made by the FFS operator to the office responsible for the qualification as designated in paragraph 1.5(c).

2.2 Evaluation Instructions

The FAA and CAA agree to provide the other Authority at least 30 days prior to an evaluation, with any special instructions or requests to be completed during an evaluation.

2.3 Notification of Findings

The completed evaluation report will be made available and shared in the event the sponsor does not provide a copy to the Authority responsible for the qualification as described in paragraph 1.5(c) within 30 days of the evaluation and shall constitute the basis for the finding for a FFS Qualification Level. The report will identify the standards used, including the appropriate revision level.

2.4 Independent Inspections

The FAA and CAA acknowledge the right of the other Authority to make its own evaluation or re-evaluation of an FFS at any time. The FAA or CAA may conduct independent evaluations or assessments in cases of specific safety concerns.

2.5 Joint Evaluations

At the request of either Authority, the FAA and the CAA may agree to conduct joint evaluations.

CHAPTER III – MUTUAL COOPERATION AND TECHNICAL SUPPORT

3.0 Periodic Meetings

The FAA and the CAA shall meet at least once a year to discuss these Simulator Implementation Procedures, ongoing projects, changes in their own organizations, any revisions to their requirements, technical support requests, or any other matters relating to these Simulator 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.

3.1 Information

The FAA and the CAA shall provide information and assistance regarding the evaluation and qualification of FFSs to be performed under the terms of these Simulator Implementation Procedures to their respective stakeholders.

3.2 Technical Support

The FAA and the CAA agree to provide technical support to each other, upon request, to further the purposes and objectives of these Simulator Implementation Procedures. The FAA and the CAA may decline to provide such technical support due to lack of resource availability, because the activity is not within the scope of these Simulator Implementation Procedures, or because there is no regulatory involvement with the training facility. Such areas of support may include, but are not limited to:

- (a) Providing recommendations or endorsements relating to evaluations conducted by the FAA or the CAA;
- (b) Providing reports regarding any noncompliance with the requirements described in these Simulator Implementation Procedures by FFS operators in the UK and the United States;
- (c) Verification of a declared closed Defect;
- (d) Conducting and reporting on investigations at the request of the other Authority;
- (e) Obtaining and providing data for reports where requested; and
- (f) Conducting a special evaluation of an FFS in the event of a relocation or modification of the device.
- 3.3 Exchange of Information

The FAA and the CAA shall provide each other with regulations, policies, guidance, practices, and interpretations relevant to these Simulator Implementation Procedures,

and shall ensure that such documents are updated in a timely manner. In addition, any FAA or CAA proposal to issue or amend such documents shall be provided to the other Authority for the opportunity to review prior to the amendment being affected, consistent with their national laws and administrative procedures. Cooperation may also include a regular exchange of ideas and views on the current status and potential trend(s) in FFS technology and its application, possible exchange of technical personnel on temporary details, joint participation in research and FFS evaluations, and any other means that further the objective of the Agreement.

3.4 Urgent or Unforeseen Situations

When urgent or unforeseen situations develop, the FAA's and the CAA's contact points shall communicate and ensure that the appropriate immediate actions are taken. The information should be directed to the representatives identified in paragraph 1.5(c) above.

3.5 Notification of Investigation or Enforcement Action

(a) The FAA and the CAA shall provide, subject to applicable laws and regulations, mutual cooperation and assistance in any investigation or enforcement proceedings of any alleged or suspected violation of any laws or regulations under the scope of these Simulator Implementation Procedures. In addition, each Authority shall notify the other promptly of any investigation when mutual interests are involved.

(b) The FAA and the CAA shall notify each other of noncompliances with regulations and Special Conditions set forth in these Simulator Implementation Procedures and of any other significant information that might affect an Authority's qualification of an FFS. The Authorities shall also notify each other promptly of any investigation into a noncompliance or enforcement action that could result in suspension or penalty related to the Qualification Level of an FFS covered by these Simulator Implementation Procedures. The notification shall be sent to the other Authority's representative identified in paragraph 1.5(c). The FAA and CAA shall ensure that noncompliances are addressed in a timely manner.

(c) The FAA and the CAA retain the right to take enforcement action. However, in some cases, an Authority may choose to review a remedial action taken by the other Authority. The enforcement consultation process under these Simulator Implementation Procedures will be subject to a regular joint review by the FAA and the CAA.

3.6 Protection of Proprietary Data and Requests for Information

(a) The FAA and the CAA recognize that information related to these Simulator Implementation Procedures submitted by a regulated entity, an Authority, or another person may contain intellectual property, trade secrets, confidential business information, proprietary data, or other data held in confidence by that regulated entity (Restricted Information). Unless required by law, neither Authority shall copy, release, or show information identified as restricted to anyone other than an employee of that Authority without prior written consent of the person or entity possessing confidentiality interests in the Restricted Information.

(b) Requests from the public for information referred to in paragraph 3.6(a), including access to documents, will be addressed in accordance with the applicable laws and regulations of the Authority receiving such requests. An Authority receiving a request for such information supplied by the other Authority, or its regulated entities, shall consult with that Authority prior to releasing such information. The FAA and the CAA shall provide assistance to each other in responding to these requests, as necessary.

3.7 Accident/Incident Investigation Requests

When the FAA or the CAA need information regarding use of FFSs for the investigation of accidents or incidents involving aircraft for which an FFS exists, the request for information should be directed to the technical points of contact that are identified in paragraph 1.5(c). In turn, upon receipt of the request for information, the other Authority shall provide the requested information in a timely manner.

3.8 Unimpeded Access

For purposes of surveillance and inspections, each Authority shall assist the other with gaining unimpeded access to regulated entities in its jurisdiction, to include contractors and subcontractors.

CHAPTER IV – TRANSITION PROVISIONS, CONTINUED CONFIDENCE, AND FEES

4.0 Notification of Simulator Implementation Procedures

The FAA and the CAA agree to exchange and accept evaluations, inspections, and surveillance of FFSs pursuant to these Simulator Implementation Procedures. In order to be able to carry out this objective:

(a) Each Authority shall provide and maintain a list of FFSs and FFS operators currently under the provisions of these Simulator Implementation Procedures.

(b) Each Authority shall, for each FFS to be evaluated, provide to the other, upon request, information that may include the last two evaluation reports, relevant findings, and any followup actions.

(c) FFSs operating under previous versions of these Simulator Implementation Procedures will be evaluated in accordance with the current revision during the next scheduled evaluation.

(d) The Authorities shall develop a mutually acceptable plan for alignment of recurrent FFS evaluations.

(e) The Authorities shall conduct evaluations on eligible FFSs in accordance with any Special Conditions listed in Appendix 1 of these Simulator Implementation Procedures.

(f) In accordance with paragraph 4.1(b):

- (i) The CAA is authorized to deliver decisions on the CAA qualification of an FFS of an operator located in the United States, issued according to the provisions of the Simulator Implementation Procedures, directly to the address of this FFS operator; and
- (ii) The FAA is authorized to deliver statements on the FAA qualification of an FFS of an operator located in the United Kingdom, issued according to the provisions of the Simulator Implementation Procedures, directly to the address of this FFS operator.
- 4.1 Continued Confidence
 - (a) Unrestricted Access. Each Authority should be included in the other's activities. Each Authority may need to conduct independent evaluation or reevaluation of an FFS at any time, and to review the other Authority's surveillance records and other pertinent information on FFS, consistent with the objective of these Simulator 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 Simulator Implementation Procedures is essential. The FAA and the CAA acknowledge that FFS Qualifications issued under these Simulator Implementation Procedures remain subject to the regulatory requirements and enforcement procedures of the issuing Authority.

4.2 Fees

Each Authority shall endeavor to ensure that fees imposed on applicants and regulated entities for certification and approval of related services under these Simulator Implementation Procedures are just, reasonable, commensurate with the services, and in accordance with applicable regulatory requirements. FAA fee-for-service charges will apply in accordance with 14 CFR part 187 and FAA AC 187-1, Flight Standards Service Schedule of Charges Outside the United States (as amended). CAA fee-for-service charges will apply in accordance with the CAA Scheme of Charges in Official Record Series 5.

CHAPTER V – ENTRY INTO FORCE AND TERMINATION

5.0 Entry into Force and Termination

(a) These Simulator Implementation Procedures shall enter into force on January 25, 2022, provided that they have been signed by the duly authorized representatives of both the FAA and the CAA.

(b) These Simulator Implementation Procedures shall remain in force until terminated. Either Party may terminate these Simulator Implementation Procedures at any time by providing sixty (60) days' notice in writing to the other Party. Termination of these Simulator Implementation Procedures will not affect the validity of activity conducted thereunder prior to termination.

(c) These Simulator Implementation Procedures shall remain in force, contingent upon the Agreement remaining in force, unless these Simulator Implementation Procedures are otherwise terminated in accordance with paragraph 5.0(b) above.

(d) Upon entry into force of these Simulator Implementation Procedures, the FAA and CAA must comply with these Simulator Implementation Procedures for FFSs located in the United States certificated by the CAA under Regulation (EU) 1178/2011 and qualified by the FAA as an FFS under 14 CFR part 60.

(e) Upon entry into force of these Simulator Implementation Procedures, the CAA and FAA must comply with these Simulator Implementation Procedures for FFSs located in the UK certificated by the FAA as a 14 CFR part 60 FFS and qualified by the CAA as an FFS under Regulation (EU) 1178/2011.

(f) These Implementation Procedures repeal and replace the earlier Simulator Implementation Procedures, Revision 1, dated October 6, 2005.

CHAPTER VI – AUTHORITY

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

Federal Aviation Administration Department of Transportation United States of America Civil Aviation Authority United Kingdom of Great Britain and Northern Ireland

Robert Carty Executive Director (Acting) Flight Standards Service

Date

022 01

Robert Bishton Director Safety and Airspace Regulation Group

Date

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APPENDIX 1 – SPECIAL CONDITIONS

1.0 FAA Special Conditions Applicable to FFSs Located in the UK

To be approved in accordance with 14 CFR part 60, and pursuant to the terms of these Simulator Implementation Procedures, the FFS will comply with all of the following Special Conditions:

No.	Special Condition to Check	Guidance
1	Cockpit/Instructor Operating Station (IOS) settings and indications can conform to U.S. units of measure	 Areas to check include: (a) Converts relevant FFS displays to U.S. units of measurement; (b) Converts the FFS to different aircraft configuration; (c) Contains appropriate instructions for the use of U.S. airports; (d) Capability to control and monitor the aircraft systems as appropriate in "U.S. Standards"; (e) Capability to display weight in pounds (lbs.); (f) Capability to display fuel quantity in gallons or quarts (as appropriate); (g) Capability to display temperature in Fahrenheit; (h) Capability to display Runway Visual Range (RVR) in feet; and (i) IOS manual is available with adequate instructions for U.S. Standards.
2	At least one declared qualification U.S. airport/airfield model featuring proper modelling and navigation/communication facilities shall be evaluated	 U.S. FFS sponsors are required to have one to three declared Class 1 qualification airport visual scenes (the number depends on the qualification basis and FFS level). Sponsors will list their qualification models on the T001A configuration list. Check that the visual representation features proper modelling and navigation/communication facilities to include: (a) Surfaces on runways, taxiways, and ramps; (b) Signage; (c) Runway markings; (d) Lighting of appropriate color for all runways including runway edge, centerline, VASI/PAPI, and approach lighting for the runway in use; (e) Airport taxiway lighting; (f) Ramps and terminal buildings which correspond to an operator's Line-Oriented Flight Training and Line Oriented Simulator scenarios; (g) Correct Comm/Nav frequencies; and (h) ATIS in appropriate U.S. units (feet, knots, degree Celsius, etc.).
3	Confirm that FFS can reflect U.S. configuration of the simulated aircraft	FAA qualification requires the FFS demonstrate that it matches the configuration of the Make, Model, and Series of the aircraft being simulated. Check that the FFS's configuration conforms to U.S. Standards by ensuring it matches the Make, Model and Series of the aircraft. This may be accomplished through MQTG review or via direct inspection of the FFS.

4	Validate that the FFS can adequately perform a circling approach at the maximum demonstrated landing weight	 This check is to determine if the FFS approved for circling approaches on the FSTD Information and Configuration (T001A) is task capable (visual, lighting, runways, approach, etc.) to perform a circling approach. Perform by: (a) Flying a selected non-precision approach to the appropriate MDA (check aircraft category A, B, C, D). (b) Set weather minimums (actual lowest weather) for approved category. (c) Circling runway must be at least 90 degrees from the approach runway (Ex. JFK approach 04R Circle to RW31). (d) Select maximum aircraft landing weight before the approach. (e) Winds are at the evaluator's discretion.
5	When multiple engine and/or avionics configurations exist, subjectively spot-check variants that exist relative to the primary as identified on the T001A	A spot-check of U.S. differences is satisfactory for recurrent qualification. This check should alternate to different configurations at each Continuing Qualification evaluation. Conformity evaluation will include center of gravity limits and aural warnings/callouts and the instrument indications to ensure conformity to U.S. units of measurement. In addition to the static checks of the instruments for conformity, a dynamic check (e.g., vary the altimeter settings at more than one airport) should be accomplished. Communications and navigation equipment corresponding to that installed in the FFS Sponsor's declared U.S. configuration and airplane operation in the tolerances prescribed for the applicable airborne equipment including but not limited to: (a) Systems – Configurable options for program pin selectable items. (b) All relevant instrument indications show numerical values in the appropriate units for U.S. operations. (c) FMS database configuration, content, units, and revision currency. (d) EGPWS – Ensure database supports training in a U.S. environment. (e) Items that may be part of a sampling approach are for example:
		(f) RNAV/GPS/LPV.(g) RVSM capabilities (Altimeter, TCAS).
6	Review objective tests required for FAA qualification that differ from the CAA when/if applicable	 Some differences in objective tests exist between FAA standards and European standards. This is particularly true when the FAA qualification basis is 14 CFR part 60 change 2 or an FFS is modified under FSTD Directive 2. The following objective tests may fall into this area: (a) Table A2A, Objective-Testing Requirements, Test 2.a.10 (Stick Pusher Force Calibration). (b) Table A2A, Objective-Testing Requirements, Test 2.c.8.a (Stall Characteristics). (c) Table A2A, Objective-Testing Requirements, Test 3.f.5 (Characteristic Motion Vibrations – Stall Buffet). (d) Table A2A, Objective Tests, test 2.i. Engine and Airframe Icing Effects Demonstration (High Angle of Attack). (e) Table A1A, General Requirements, Section 2.d.2. (Ground Reaction Characteristics). (f) Table A3A, Functions and Subjective Testing Requirements, test 9.e. (Missed Approach – Bounced Landing).
		It will be the Sponsor's responsibility to identify and present test requirement differences for evaluation by the Authority. Many Sponsors will configure their MQTGs such that dual-qualified devices contain all of the tests required for both qualifications.

To be approved in accordance with (UK) CS-FSTD(A) Issue 2, and pursuant to the terms of these Simulator Implementation Procedures, the FFSs will comply with all of the following Special Conditions:

No.	Special Condition to Check	Guidance
1	following information from the FFS sponsor/operator: 1. Recurrent evaluation dossier 2. Annual fly-out records	 Under GM3 ORA.FSTD.100 General (d), a dossier is required to be presented for a recurrent evaluation. Provision of annual fly-out records. The sponsor/operator is required to have completed the functions and subjective tests progressively throughout the year. These are typically checked as part of a program of fly-outs, with appropriate records held. It is essential that the pilots tasked with carrying out these fly-outs are adequately experienced. They would
		be expected to be Type-Rated Instructor/Examiner (TRI/TRE) qualified on the type and should have experience with FFS evaluations carried out by the competent Authority. <u>Task of the FAA Inspector</u> : To check that the fly-out records are available in the dossier.
2	Cockpit/Instructor Operating Station (IOS) settings and indications conform to the International System of Units (SI)	 The IOS manual should include sufficient instructions for the operation of the FFS with European metric standards. Sample areas to check include: a) How to convert relevant FFS displays to metric units of measurement. b) Appropriate instructions for the use of European airports. c) How to convert the FFS to European/Joint Aviation Authorities (JAA) aircraft configuration.
		 2. The IOS is capable of controlling and monitoring: a) The aircraft systems as appropriate in "metric", e.g.: (i) Weight in kilograms, (ii) Fuel Quantity in kilograms or litres (as appropriate), and (iii) Temperature in Centigrade. b) Environment indications use appropriate units of measurement (e.g. RVR in Metres, QFE/QNH [i.e. air pressure] in millibars/hPa).
3	Check at least one European qualification airport/airfield model to ensure proper modelling and navigation/communication facilities	 At least one declared qualification European airport/airfield model evaluated featuring proper modelling and navigation/communication facilities appropriate to the European airport model: a) Surfaces on runways, taxiways, and ramps; b) Lighting of appropriate colour for all runways including runway edge, centreline, Visual Approach Slope Indicator (VASI)/Precision Approach Path Indicator (PAPI), and approach lighting for the runway in use; c) Airport taxiway lighting: stop bars, runway guard lighting (wigwags), signage, Surface Movement Guidance and Control System (SMGCS);

		 d) Ramps and terminal buildings which correspond to an operator's Line-Oriented Flight Training and Line Oriented Simulator scenarios; e) Correct Comm/Nav frequencies; and f) ATIS in appropriate European units.
4	Aircraft All Weather Operations (AWOPS), Low visibility take-off operations (LVTO) and Low visibility (as applicable) Instrument Approaches shall be demonstrated at a European airport and corresponding settings selectable from the IOS	 LVTO – using minimum RVR appropriate to the aircraft (detailed in the data sheet part of the CAA FFS qualification certificate). A Visual Ground Segment (VGS) check for a European airfield should be available in the QTG and checked. The VGS check is to be accomplished by flying an auto-coupled ILS approach and freezing the aircraft at the declared Decision Height for the stated RVR and confirming that the observed visual segment matches that presented in the MQTG. An approach to the lowest RVR and decision height applicable to the aircraft being simulated (detailed in the data sheet part of the CAA FFS qualification certificate) should be evaluated.
5	Confirm that FFS can reflect European/United Kingdom configuration of the simulated aircraft	The FFS's aircraft configuration must conform to European/United Kingdom Standards. The FFS sponsor/operator should provide a document that lists the differences between the United Kingdom and the FAA certified aircraft configurations. A conformity evaluation will include a check of stall warning and stick shaker indications, centre of gravity limits, aural warnings/callouts, and the instrument indications to ensure conformity to European/United Kingdom units of measurement. In addition to the static checks of the instruments for conformity, a dynamic check (e.g., vary the altimeter settings at more than one airport) should be accomplished. A spot-check of United Kingdom differences is satisfactory for recurrent qualification. Task of the FAA Inspector:
		 Communications and navigation equipment corresponding to that installed in the FFS sponsor/operators declared European/United Kingdom configuration and aeroplane operation in the tolerances prescribed for the applicable airborne equipment including but not limited to: To be systematically checked: Systems – Configurable options for program pin selectable items; All relevant instrument indications show numerical values in the appropriate units for European/United Kingdom Operations; Flight Management System database configuration, content, and units; No European Proximity Warning System (EGPWS) – ensure database supports training in a European environment. Items that can be part of a sampling approach are: Required Navigation Precision (RNP) Approach; Reduced Vertical Separation Minimum (RVSM) capabilities (Altimeter, Terrain Collision Avoidance System (TCAS);

		 (iii) Extended Range Twin Engine Operational Performance Standards (ETOPS) capability with regard to additional equipment required; and (iv) Items listed under 'Other' on the data sheet part of the CAA FFS qualification certificate.
6	A continuous, uninterrupted flight phase shall be conducted during the evaluation	Part of the subjective tests routine for an FFS should involve an uninterrupted fly-out comparable with the duration of typical training sessions in addition to assessment of flight freeze and repositioning. Ref: AMC1 ARA.FSTD.100(a)(3). Part of the Subjective Tests routine for an FFS should involve an uninterrupted fly-out comparable with the duration of typical training sessions; any flight freezes and/or repositioning assessments must occur outside of this uninterrupted flight phase.
		The typical test profile should be flown over approximately 2 hours. Ambient conditions should be varied from Standard Atmosphere to test the validity of the limits of Temperature and Pressure likely to be required in the practical use of the FFS. Part of the flight may be conducted with Automatic Flight Control System (AFCS).
7	When multiple engine and/or avionics configurations exist, all variants that exist relative to the primary configuration should be sampled, when feasible	The MQTG should contain engine-specific flight test data sufficient objective test results for cases which are affected by engine type to validate that aeroplane-engine configuration. These should be sampled.
		A subjective spot-check should also be accomplished during an abbreviated fly-out to validate engine and avionic configurations (detailed in the data sheet part of the CAA FFS qualification certificate).
		Where an FFS has a separate CAA FFS qualification certificate for another configuration (e.g., Major Avionics change), this requires a separate recurrent evaluation.
8	FFS-specific objective, functional, and subjective tests as per applicable United Kingdom European requirements that are not covered by the applicable FAA FFS standard level of qualification shall be performed	Continued CAA and FAA qualification is based on the FFS sponsor/operator ability to demonstrate continued compliance with both agencies' initial qualification standards in order to receive and maintain an SOQ and QC (each based on the applicable standard).
		The MQTG will contain a table indicating those objective and functional and subjective CAA tests that are different from, or are in addition to, the tests required by the FAA. The FAA inspector shall evaluate the differences.