



**EU-Latin America and Caribbean
Aviation Partnership Project (EU-LAC APP)**

*Enhancing the aviation partnership between the EU and
Latin America and the Caribbean*

OJT on FSTD certification processes

**Basic principles of FSTD Initial Qualification / Session1
Project EU-LAC APP**

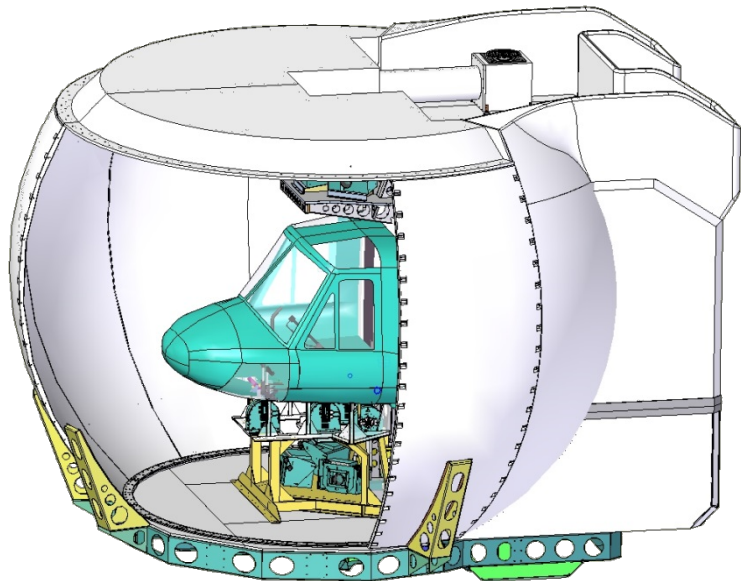
20/07/2020

Your safety is our mission.

BASIC PRINCIPLES OF FSTD INITIAL QUALIFICATION

- INTRODUCTION
- APPROACH TO EASA FSTD REGULATION
- APPROACH TO AESA FSTD PROCEDURES
- REVIEW OF THE INITIAL APPLICATION FORM & DOCS
- DOCUMENT EVALUATION - MASTER QUALIFICATION TEST GUIDE
- DOCUMENT EVALUATION - OPERATOR MANAGEMENT SYSTEM
- PREPARATION OF THE AUDIT - PROPOSED WORK PLAN

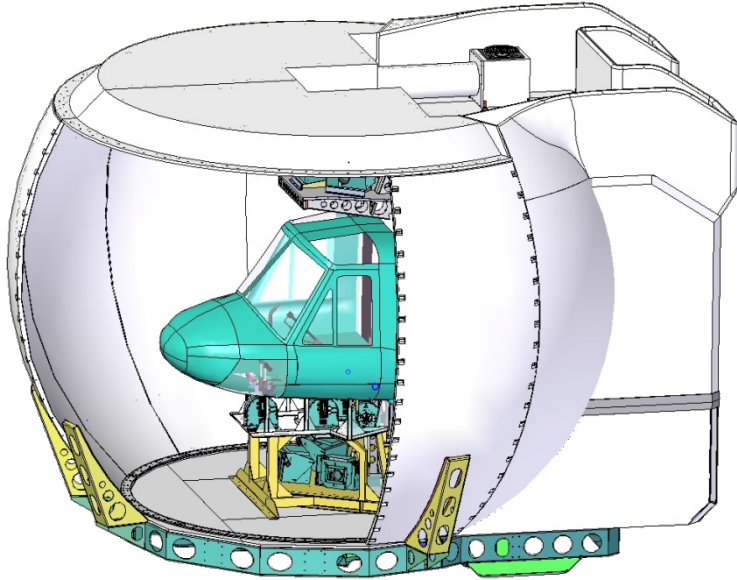
INTRODUCTION



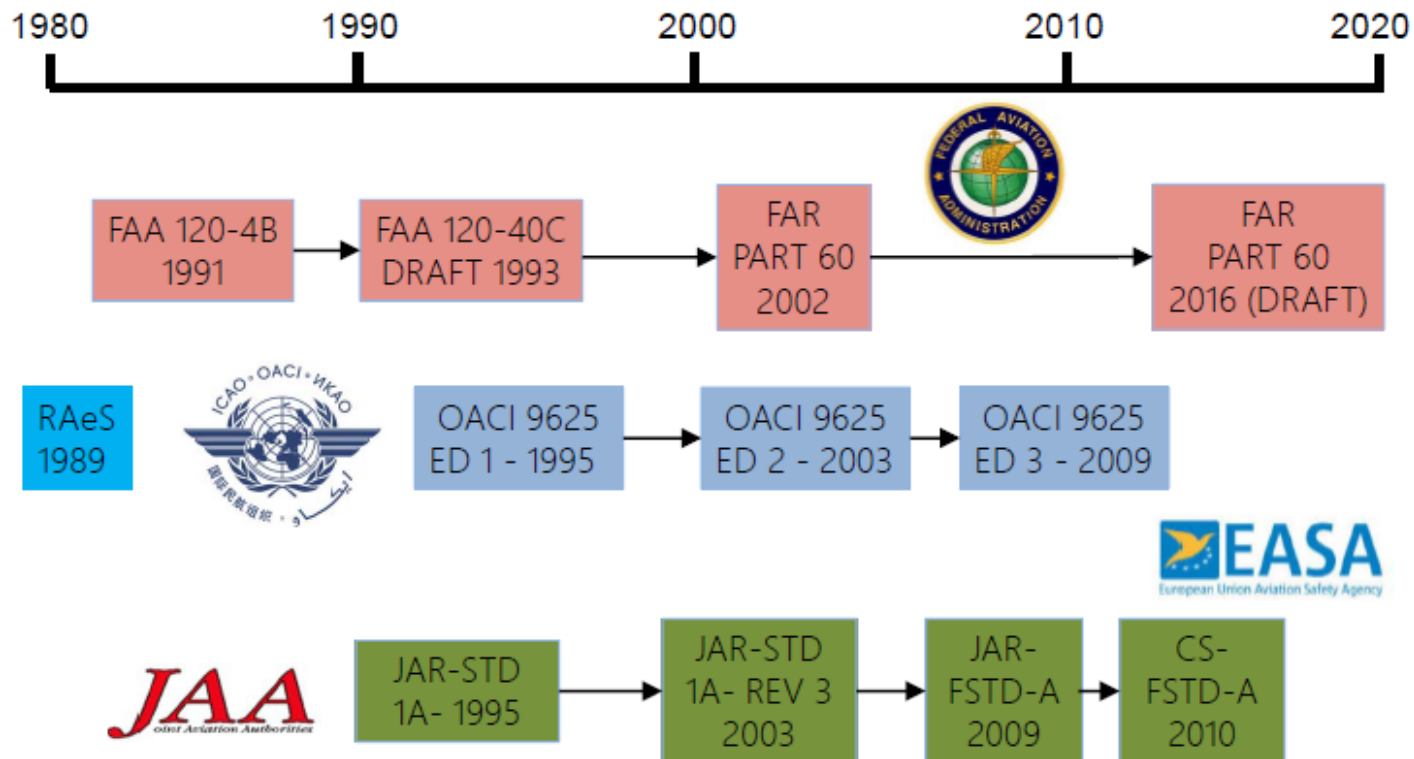
INTRODUCTION

- FSTD Background & Previous Knowledge
- FSTD Training Course expectations
- Additional Comments
- List Of Attendance



APPROACH TO EASA FSTD REGULATION



FSTD REGULATION EVOLUTION



FSTD REGULATION MAIN DIFFERENCES

Training Type, rating or licence	PPL, MPL1, CPL	IR	CR	MPL2	TR, ATPL IO, RO, RL	MPL3	TR, ATPL MPL4 RE, RO, RL IO, CQ
							
FAA	FTD L2/L3 + Visual			FTD L3/L5 + Visual	FTD L6 + Visual		Level D(+)
EASA	FNPT I,II			FNPT II MCC	FTD LII + Visual		Level D(+)
ICAO	Type I	Type II	Type III	Type IV	Type V	Type VI	Type VII
					Training (T)	Proficiency (TP)	

EASA REGULATION


Navigate through the regulation structure by area of implementation.

When available the corresponding AMC & GM are offered on this same view to facilitate your reading.



 [Basic Regulation](#)

 [Initial Airworthiness](#)

 [Additional airworthiness specifications](#)

 [Continuing Airworthiness](#)


 [Aircrew](#)


 [Air Operations](#)


 [Balloons](#)

 [Sailplanes](#)

 [TCO - Third Country Operators](#)

 [ATM/ANS provision of services - Air Traffic Management/Air Navigation Services](#)

 [ATM/ANS interoperability - Air Traffic Management/Air Navigation Services](#)

 [ATCO - Air Traffic Controllers](#)

 [AUR - Airspace Usage Requirements \(ACAS II\)](#)

 [AUR - Airspace Usage Requirements \(PBN\)](#)

 [SERA - Standardised European Rules of the Air](#)

 [ADR - Aerodromes](#)

 [UAS - Unmanned Aircraft Systems](#)

 [Board of Appeal](#)

 [Fees and charges](#)

 [Fines and penalties](#)

 [Standardisation inspections](#)

 [SKPI - Safety Key Performance Indicators](#)

 [Other](#)

EASA REGULATION

 **Aircrew**

Commission Regulation (EU) No 1178/2011 of 3 November 2011 - Aircrew

Easy Access Rules: Aircrew (Regulation (EU) No 1178/2011)

Consolidated version	Regulations	Acceptable Means of Compliance and Guidance Material	Certification Specification	Related FAQ
 Consolidated versions of Regulation (EU) No 1178/2011				
 Consolidated version & quick reference (provided by EASA)				
 Easy Access Rules for Aircrew (Regulation (EU) No 1178/2011) <small>This file was replaced on 17/06/2020.</small>				
 Easy Access Rules for Flight Crew Licencing (Part-FCL)				
 Easy Access Rules for Authority Requirements for Aircrew (Part-ARA)				
 Easy Access Rules for Organisation Requirements for Aircrew (Part-ORA)				
 Easy Access Rules for Medical Requirements				
 Easy Access Rules for Declared Training Organisations (Part-DTO)				

EASA REGULATION CE 290/2012

Consolidated version	Regulations	Acceptable Means of Compliance and Guidance Material	Certification Specification	Related FAQ
02/06/2020	Commission Delegated Regulation (EU) 2020/723			
05/03/2020	Commission Implementing Regulation (EU) 2020/359			
22/10/2019	Commission Implementing Regulation (EU) 2019/1747			
19/03/2019	Commission Implementing Regulation (EU) 2019/430			
10/01/2019	Commission Implementing Regulation (EU) 2019/27			
20/12/2018	Commission Implementing Regulation (EU) 2018/1974			
13/08/2018	Commission Regulation (EU) 2018/1119			
30/07/2018	Commission Regulation (EU) 2018/1065			
07/04/2016	Commission Regulation (EU) 2016/539			
17/03/2015	Commission Regulation (EU) 2015/445			
13/03/2014	Commission Regulation (EU) No 245/2014			
27/01/2014	Commission Regulation (EU) No 70/2014			
30/03/2012	Commission Regulation (EU) No 290/2012			
03/11/2011	Commission Regulation (EU) No 1178/2011			

PART FSTD

AMENDED

EASA REGULATION CE 290/2012

The screenshot shows the EASA website navigation menu. The 'Acceptable Means of Compliance and Guidance Material' section is highlighted in brown. It contains a list of sub-sections: 'AMC & GM to Regulation (EU) No 1178/2011', 'Part-ARA', 'Part-CC', 'Part-FCL', 'Part-MED', 'Part-ORA', and 'Part-DTO'. Red circles highlight 'Part-ARA' and 'Part-ORA'. Red arrows point from 'Part-ARA' to 'AUTHORITY' and from 'Part-ORA' to 'OPERATOR'. Below these are further sub-sections: 'ARA.GEN', 'ARA.FSTD' under 'AUTHORITY', and 'ORA.GEN', 'ORA.FSTD' under 'OPERATOR'. These sub-sections are also circled in red.

Consolidated version	Regulations	Acceptable Means of Compliance and Guidance Material	Certification Specification	Related FAQ
		AMC & GM to Regulation (EU) No 1178/2011		
		Part-ARA		
		Part-CC		
		Part-FCL		
		Part-MED		
		Part-ORA		
		Part-DTO		

AUTHORITY

ARA.GEN

ARA.FSTD

OPERATOR

ORA.GEN

ORA.FSTD

EASA REGULATION CE 0290/2012

AUTHORITY

ARA.GEN
SECTION I – GENERAL
SECTION II – MANAGEMENT
**SECTION III – OVERSIGHT,
CERTIFICATION AND ENFORCEMENT**

ARA.FSTD
SECTION I – GENERAL

OPERATOR

ORA.GEN
SECTION I – GENERAL
SECTION II – MANAGEMENT

ORA.FSTD
**SECTION I – REQUIREMENTS FOR
ORGANISATIONS OPERATING FSTDs**
**SECTION II – REQUIREMENTS FOR THE
QUALIFICATION OF FSTDs**

EASA REGULATION CS FSTD & CS SIMD

The image shows a navigation menu with the following items:

- Consolidated version (dropdown arrow)
- Regulations (dropdown arrow)
- Acceptable Means of Compliance and Guidance Material (dropdown arrow)
- Certification Specification (dropdown arrow, highlighted with a black box)
- Related FAQ (dropdown arrow)

Below the main menu, there are two sub-items:

- CS-FSTD(A) (dropdown arrow)
- CS-FSTD(H) (dropdown arrow)


















The text **CS SIMD???** is circled in red in the center of the green background area.

EASA REGULATION CS FSTD (A)

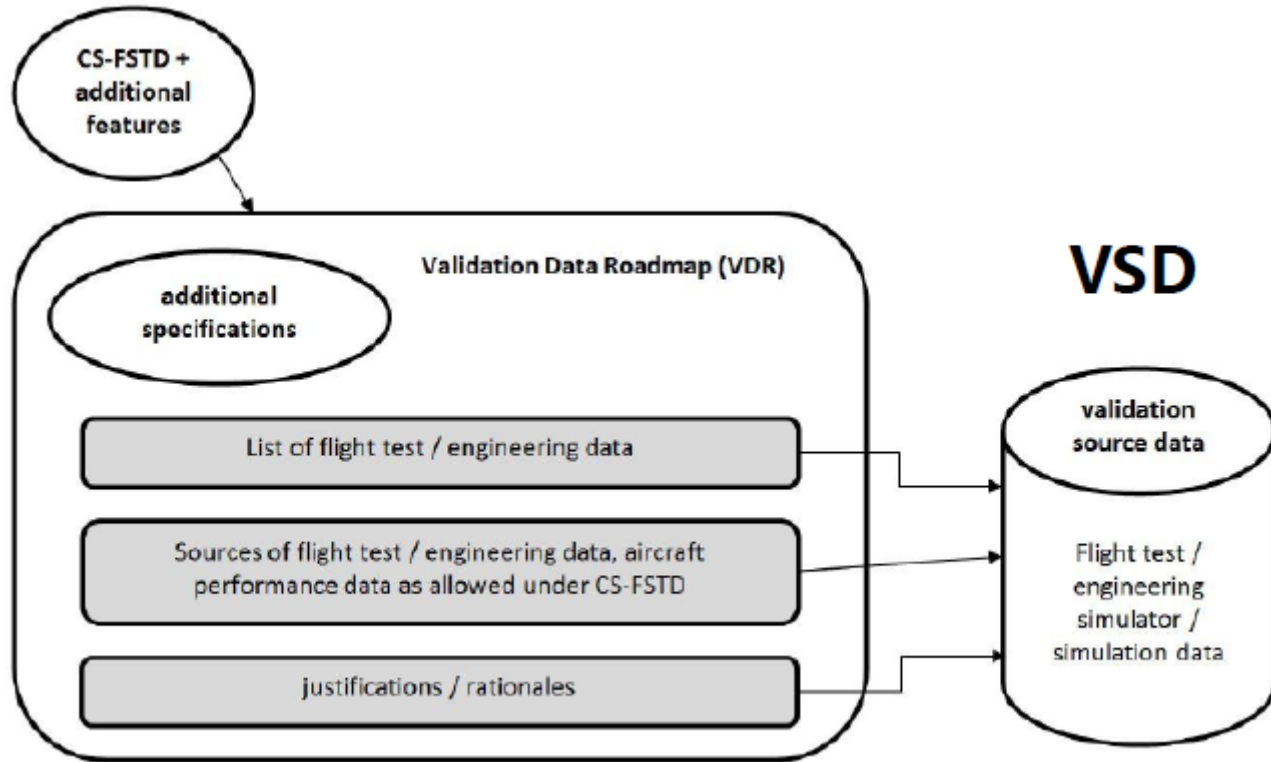
- 🔖 Certification Specifications for Aeroplane Flight Simulation Training Devices — CS-FSTD(A) Issue 2
- 🔖 Table of contents
- 🔖 PREAMBLE

- 🔖 Certification Specifications for Aeroplane Flight Simulation Training Devices — CS-FSTD(A) Book 1
- ✓ 🔖 SUBPART A — APPLICABILITY
 - 🔖 CS FSTD(A).001 Applicability
- ✓ 🔖 SUBPART B — TERMINOLOGY
 - 🔖 CS FSTD(A).200 Terminology
- ✓ 🔖 SUBPART C — AEROPLANE FLIGHT SIMULATION TRAINING DEVICES
 - 🔖 CS FSTD(A).300 Qualification basis
- ✓ 🔖 APPENDICES
 - 🔖 Appendix 1 to CS FSTD(A).300 Flight Simulation Training Device Standards

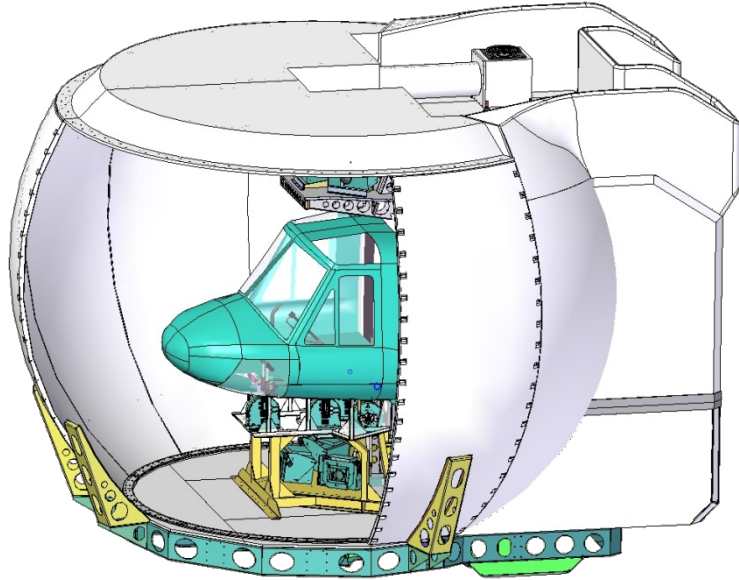
EASA REGULATION CS FSTD (A)

- ✓  Certification Specifications for Aeroplane Flight Simulation Training Devices — CS-FSTD(A) Book 2 — Acceptable Means of Compliance
- ✓  SUBPART B — TERMINOLOGY
 -  AMC1 FSTD(A).200 Terminology and abbreviations
- ✓  SUBPART C — AEROPLANE FLIGHT SIMULATION TRAINING DEVICES
 - >  AMC1 FSTD(A).300 Qualification basis
 -  AMC2 FSTD(A).300 Guidance on design and qualification of level 'A' aeroplane full flight simulators (FFSs)
 -  AMC3 FSTD(A).300 Guidance on design and qualification of flight and navigation procedures trainers (FNPTs)
 -  AMC4 FSTD(A).300 Guidance on design and qualification of basic instrument training devices (BITDs)
 -  AMC5 FSTD(A).300 Guidance on enhanced visual system (EVS) and qualification of full flight simulators (FFSs)
 -  AMC6 FSTD(A).300 Guidance on old visual systems and new visual scenes for full flight simulators (FFSs)
 -  AMC7 FSTD(A).300 Engineering simulator validation data
 -  AMC8 FSTD(A).300 Engineering simulator validation data – approval guidelines
 -  AMC9 FSTD(A).300 Guidance on upset, stall (including in icing conditions), and qualification of FSTDs
 -  AMC10 FSTD(A).300 Guidance on high angle of attack/stall model evaluation
 -  AMC11 FSTD(A).300 Guidance on high angle of attack/stall model evaluation, and approach to stall for previously qualified FSTDs
 - >  AMC12 FSTD(A).300 Guidance on upset prevention and recovery training (UPRT) for the FSTD Standards table
 -  AMC13 FSTD(A).300 Guidance material for engine and airframe icing evaluation provisions

EASA REGULATION CS SIMD



APPROACH TO AESA FSTD PROCEDURES



AESA FSTD PROCEDURE

→ MAIN FSTD PROCEDURE

- Comply with Spanish Administrative Regulation
- Define FSTD process (Initial evaluation, Recurrent evaluations, Extended Evaluation Period, Major changes...)
- Define inspectors requirements
- Define Enforced measures (Suspension, limitation...)

→ INSPECTORS GUIDANCE MATERIAL

→ FORMS

→ TECHNICAL INSTRUCTION

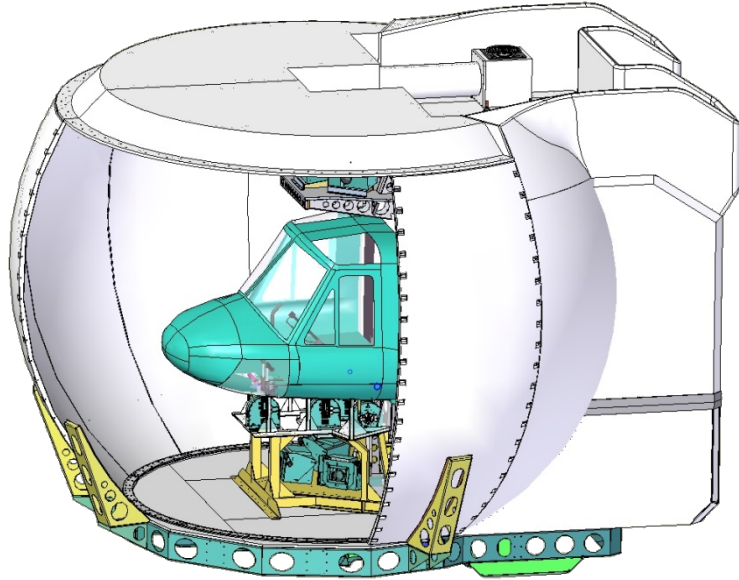
AESA FSTD PROCEDURE



REVIEW AESA DOCUMENTATION



REVIEW OF THE INITIAL APPLICATION FORM & DOCS



REVIEW OF THE INITIAL APPLICATION FORM & DOCS

→ OBJECTIVE OF THE FORMS

- Comprehensive Information
- Operator has taken into account all Regulations requirements
- Facilitate the evaluation to the inspectors

→ INITIAL APPLICATION FORM FSTD

- Focused on FSTD requirements
- All technical data needed for a better evaluation

→ INITIAL APPLICATION FORM CMS

- Focused in Operator Management System requirements

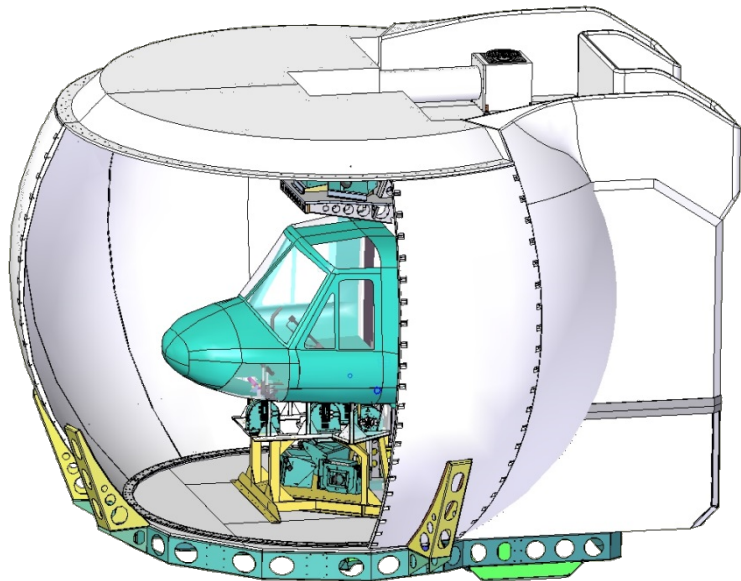
AESA FSTD PROCEDURE



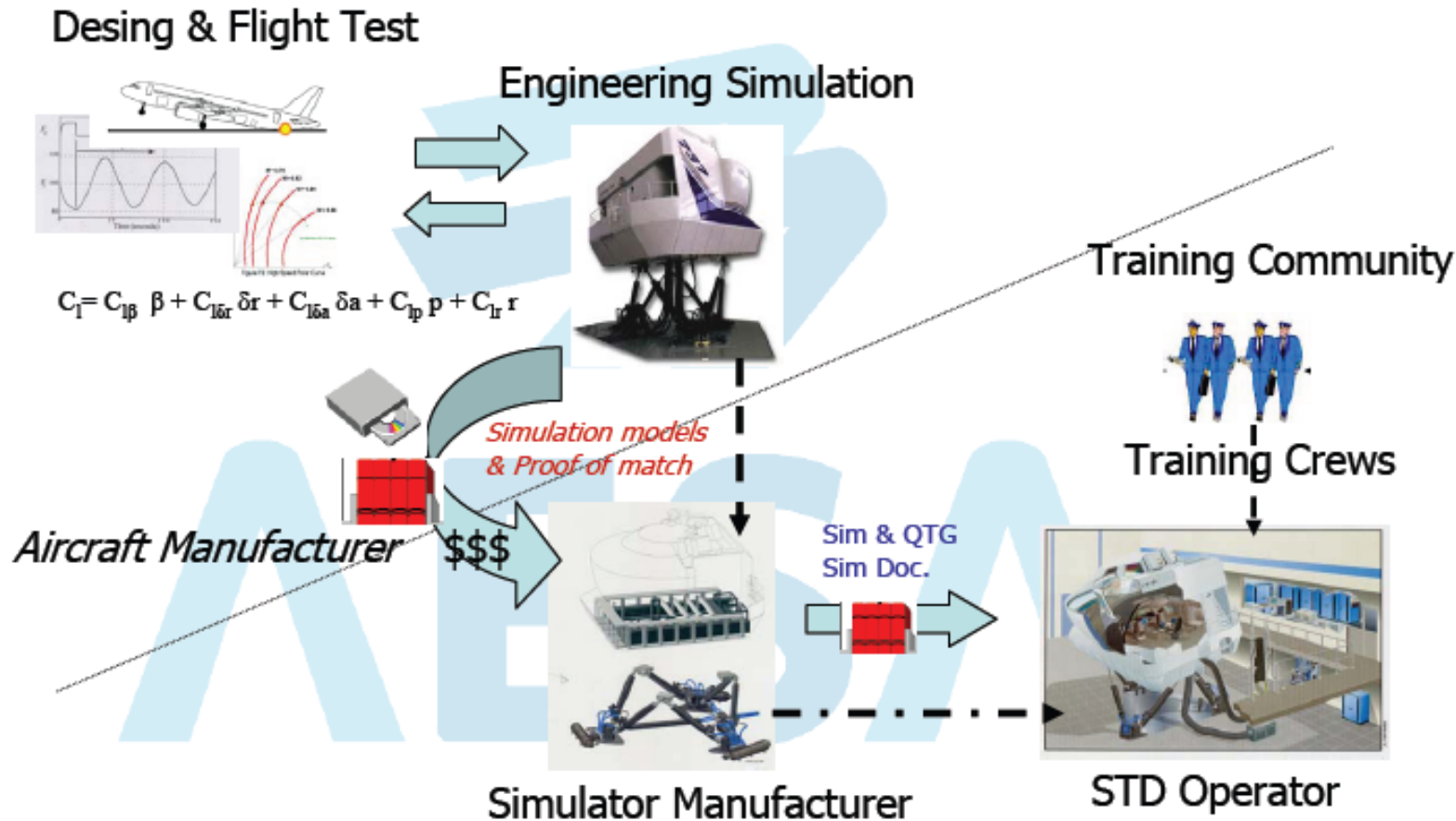
Review Initial Application Form & Docs



DOCUMENT EVALUATION - MASTER QUALIFICATION TEST GUIDE



DOCUMENT EVALUATION - MASTER QUALIFICATION TEST GUIDE



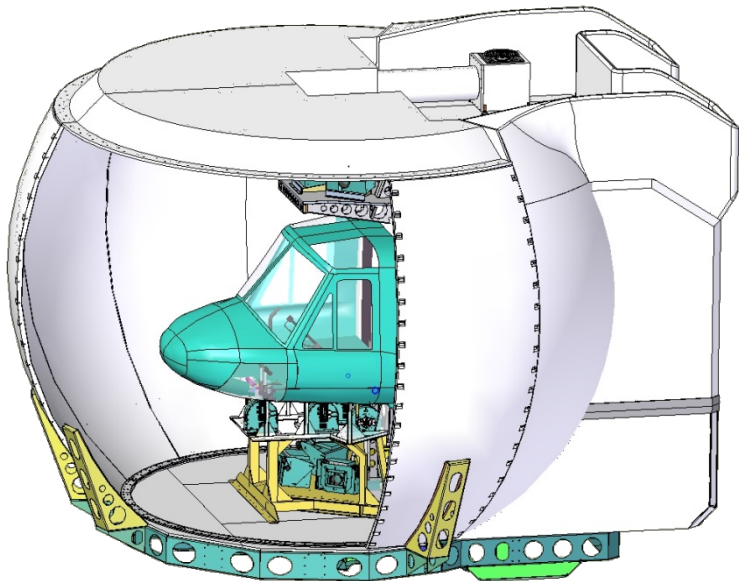
DOCUMENT EVALUATION - MASTER QUALIFICATION TEST GUIDE



Review AESA GUIDANCE QTG EVALUATION
Review CS FSTD (A)



DOCUMENT EVALUATION - OPERATOR MANAGEMENT SYSTEM



DOCUMENT EVALUATION - OPERATOR MANAGEMENT SYSTEM

→ MANAGEMENT SYSTEM

- Policies and comply with ORA.GEN & ORA.FSTD
- Reviews and evaluations of the CMS
- Material and human resources
- Staff training
- Subcontracting of responsibilities

DOCUMENT EVALUATION - OPERATOR MANAGEMENT SYSTEM

→ CONFORMITY CONTROL SYSTEM

- Basic elements of a compliance program focused on the FSTD operation

→ SPECIFIC OPERATING PROCEDURES OF THE FSTD

- Day to day operation
- FSTD maintenance system
- FSTD configuration control system
- FSTD operator compliance indicators

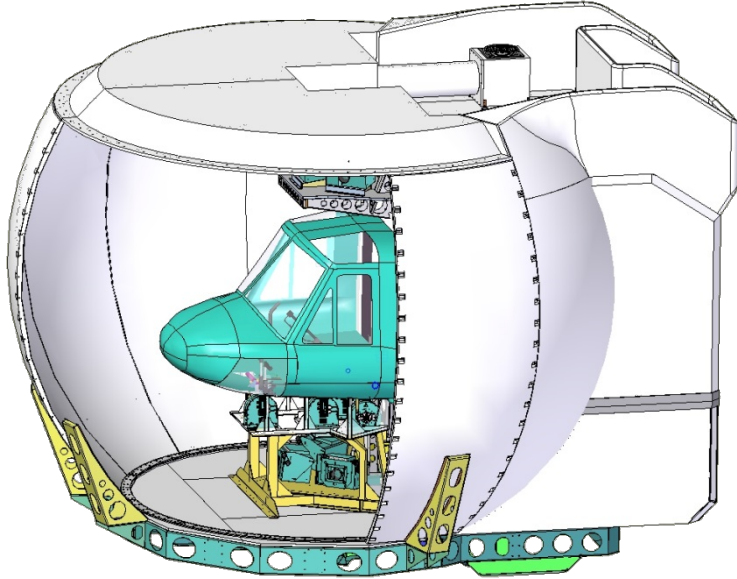
DOCUMENT EVALUATION - OPERATOR MANAGEMENT SYSTEM



Review CMS Initial Evaluation Guidance



PREPARATION OF THE AUDIT - PROPOSED WORK PLAN



PREPARATION OF THE AUDIT - PROPOSED WORK PLAN

- OBJECTIVE OF THE FORM
 - Cover all the Audit domains
 - Optimize process & Save time
- FOR THE OPERATOR IN ORDER TO
 - Coordinate with the manufacturer
 - Reserve the personnel for the audit

PREPARATION OF THE AUDIT - PROPOSED WORK PLAN



Review FORM





EU-Latin America and Caribbean Aviation Partnership Project (EU-LAC APP)

*Enhancing the aviation partnership between the EU and
Latin America and the Caribbean*

Muchas gracias

www.eu-lac-app.org

*This project is funded by the European Union and
implemented by the European Aviation Safety Agency*

easa.europa.eu/connect



Your safety is our mission.

An Agency of the European Union 