

Federal Aviation Administration National Simulator Program



Statement of Qualification

The Federal Aviation Administration (FAA) National Simulator Program (NSP) has evaluated this Flight Simulation Training Device (FSTD) and found it to meet the standards set forth in the qualification document.

Sponsor	Avenger Flight Training LLC.
FAA ID	1498
Aircraft Designation	B-737-800
Qualification Document	14 CFR Part 60 (2008), Appendix A
Qualification Level	D
Expiration Date	11/30/2025

With the exception of noted exclusions for which this FSTD has not been subjectively tested, the qualification of this FSTD includes the tasks set out in the applicable qualification document. To maintain qualification, this FSTD must continue to meet all the standards and specifications of the qualification document and is subject to the conditions and limitations in the FSTD Information and Configuration List as well as the last FAA FSTD Evaluation Report. This certificate is not transferable, and unless revoked, suspended, or amended is valid until the expiration date.

Federal Aviation Administration
National Simulator Program

FSTD INFORMATION & CONFIGURATION

Sponsor Name:	Avenger Flight Training LLC.
Designator:	O37X
FAA ID:	1498
Make/Model/Series:	B-737-800
Evaluation Interval:	12

Section 1. Sponsor FSTD Location Contact Information			
FSTD Location			
Training Facility Name:	AFG DFW		
Address:	4649 DIPLOMACY RD		
City:	Fort Worth		
State/Prov/Terr:	TX		
Country:	USA		
ZIP:	76155		
Local FAA Authority / FAA Training Program Approval Authority (TPAA)			
Name:	Power, Willis		
Address:	8700 Freeport Parkway Suite 200B		
City:	Irving		
State/Prov/Terr:	TX	Office:	214 277 8469
Country:	USA	Cell:	817 657 4788
ZIP:	75063	Email:	willis.h.power@faa.gov
FAA Alternate POC (APM, FTPM, if applicable)			
Name:			
Address:			
City:			
State/Prov/Terr:		Office:	
Country:		Cell:	
ZIP:		Email:	
Sponsor FSTD Management Representative			
Name:	De Leon, Pablo		
Address:	1450 Lee Wagener Blvd.		
City:	Fort Lauderdale		
State/Prov/Terr:	FL	Office:	
Country:	USA	Cell:	(954) 483-7614
ZIP:	33315	Email:	pablodeleon@afgsim.com
Sponsor FSTD Local Contact			
Name:	Sin Quee, Yannique		
Address:	1450 Lee Wagener Blvd		
City:	Fort Lauderdale		
State/Prov/Terr:	FL	Office:	

Country:	USA	Cell:	(954) 270-6862
ZIP:	33315	Email:	yanniquesinquee@afgsim.com

Section 2. FSTD Information

A/C Common Name:	BOEING B-737	Manufacturer Name:	CAE
A/C Alternative Name:	B-737-800	Manufactured Year:	2016
Qualification Basis:	14 CFR Part 60 (2008), Appendix A	Manufacture Serial No:	109820-1392
Qualification Level:	D	Sponsor's FSTD ID:	B737#1
FSTD Class:	Airplane FFS	Evaluation Base Month:	Aug
FSTD Seats Available:	5	FSTD Convertible to:	

FSTD Configuration Information

FSTD Configuration (1):	B-737-800
FSTD Configuration (2):	800W
FSTD Configuration (3):	
FSTD Configuration (4):	
FSTD Configuration (5):	

FSTD Engine Information

Pri. Engine Type / Thrust:	CFM56-7B / 27K	FADEC Version:	
Alt. Engine Type / Thrust:		FADEC Version:	
Alt. Engine Type / Thrust:		FADEC Version:	
Alt. Engine Type / Thrust:		FADEC Version:	

Flight Instrumentation & Systems

<input type="checkbox"/> NVG	<input type="checkbox"/> Other:
<input type="checkbox"/> CPDLC	<input type="checkbox"/> Other:
<input type="checkbox"/> EFB Class:	<input type="checkbox"/> Other:

Data Sources & Models

Flight Control Data: Model/Revision:	D611A001 Vol 1 Rev M - Aerodynamic Data and Flight
Aero Model: Source/Model/Revision:	D611A001 Vol 1 Rev M, Vol 6 Rev A, D611A019 Rev H, D611A024 F

Visual System

Image Generator Make/Model:	CAE/Tropos XR		
Display Type:	Cross Ckpt, Collimated	Visual Projector Type:	LCoS/LED/DLP
Horizontal Field of View (degs):	200	Vertical Field of View (degs):	43

Avionics			
Manufacturer	Rockwell Collins		
Model			
Standard/Revision	Collins		

Flight Management System			
Manufacturer:	Smiths		
Model:			
Type/Revision:	U10.8A		

Motion System	
Manufacturer:	CAE
Type:	Electric
Axis:	6

Airport Qualification Models	
1: Airport / Runways / Taxiway:	KJFK / ALL / ALL
2: Airport / Runways / Taxiway	KLAX / ALL / ALL
3: Airport / Runways / Taxiway	KSEA / ALL / ALL

Visual Ground Segment	
Airport / Landing RW	KJFK 04R

Helicopter Non-Airport Landing Areas	
Elevated Surface:	
Confined Landing Area:	
Sloped Surface	

Other National Aviation Authority Qualifications (US-NAA BASA-SIPs Agreements Only)			
NAA Name:			
NAA FSTD ID No:			
NAA Qualification Level:			
NAA Qualification Basis:			

**Federal Aviation Administration
National Simulator Program**

FSTD INFORMATION & CONFIGURATION

Sponsor Name:	Avenger Flight Training LLC.
Designator:	O37X
FAA ID:	1498
Make/Model/Series:	B-737-800
Evaluation Interval:	12

Except for Non-Qualified items, this FSTD is qualified to perform all maneuvers, procedures, tasks, and functions listed in the applicable QPS Appendix, Tables 1B and 1C of 14 CFR Part 60 as amended. Additionally, this FSTD is qualified to perform maneuvers, procedures, tasks, and functions annotated in sections 3a, 3b, or 3c. Specific use in conjunction with any training program must be approved by the FAA Training Program Approval Authority (TPAA).

Section 3a. Level 6 and Above FSTD Additional FSTD Qualified Maneuvers, Procedures, Tasks, and Functions (not stated in 14CFR Part 60 Appendix (A,B,C, or D) Attachment 1, Table 1B)			
Area/Function/Maneuver	Requested (Sponsor Use)	Qualified (FAA Use Only)	Remarks (Include Partial Task Limitations if Applicable)
CAT I (Minimums IAW sponsor/operator authorization)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CAT II (Minimums IAW sponsor/operator authorization)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
CAT III (Minimums IAW sponsor/operator authorization)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Circling Approach	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	demo KMEM Rwy 27 to 18R
Windshear Training	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Auto-Coupled Approach	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Auto Go Around	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Auto-Land / Roll-Out Guidance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No Roll Out Guidance
TCAS/ACAS I / II 7.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
WX-Radar	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
HUD / HGS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
EFVS / SVS	<input type="checkbox"/>	<input type="checkbox"/>	
TAWS (GPWS / EGPWS)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
SMGCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	demo KSEA: Gate N 16, Spot 55, B, C, RWY16L; RWY16C, Q or P, B, Spot 55, < RVR 500, mono-directional)
Enhanced Taxi Markings	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
RWSL / LAHSO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	demo RWSL-KSEA/LAHSO-KDFW
LPV GPS WAAS <input type="checkbox"/> LPV <input type="checkbox"/> GPS <input checked="" type="checkbox"/> WAAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GPS. No WAAS
RNP/AR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
ADS-B <input type="checkbox"/> In	<input type="checkbox"/>	<input type="checkbox"/>	
Full Stall (14CFR Part 60 (2016)/FSTD Directive 2)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
UPRT (14CFR Part 60 (2016)/FSTD Directive 2)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Icing (14CFR Part 60 (2016)/FSTD Directive 2)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Realistic Gusting Crosswind (14CFR Part 60 (2016)/FSTD Directive 2)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Bounced Landing (14CFR Part 60 (2016)/FSTD Directive 2)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Other	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	

Section 3b. Level 6 and Above FSTD Additional Helicopter FSTD Qualified Maneuvers, Procedures, Tasks, and Functions (not stated in 14CFR Part 60 Appendix (C or D) Attachment 1, Table 1B)			
Area/Function/Maneuver	Requested (Sponsor Use)	Qualified (FAA Use Only)	Remarks (Include Partial Task Limitations if Applicable)
Helicopter Slope Landings	<input type="checkbox"/>	<input type="checkbox"/>	
Helicopter External Load Operations	<input type="checkbox"/>	<input type="checkbox"/>	
Helicopter Pinnacle Approach to Landings	<input type="checkbox"/>	<input type="checkbox"/>	
Helicopter Night Vision Maneuvers Class A <input type="checkbox"/> , Class B Lens <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Helicopter Category A Takeoffs	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	

Section 3c. Level 4 & 5 FSTD Optionally Qualified Maneuvers, Procedures, Tasks, and Functions (as defined in Table B1B and D1B)			
Area/Function/Maneuver	Requested (Sponsor Use)	Qualified (FAA Use Only)	Remarks (Include Partial Task Limitations if Applicable)
Preflight Procedures			
Preflight Inspection (flight deck only).	<input type="checkbox"/>	<input type="checkbox"/>	
Engine Start	<input type="checkbox"/>	<input type="checkbox"/>	
Pre-takeoff Checks.	<input type="checkbox"/>	<input type="checkbox"/>	
In-Flight Maneuvers			
Approach to Stalls	<input type="checkbox"/>	<input type="checkbox"/>	(Level 5 Only)
Engine Failure (procedures only)	<input type="checkbox"/>	<input type="checkbox"/>	(Level 5 Only)
Specific Flight Characteristics incorporated into user's approved flight training program	<input type="checkbox"/>	<input type="checkbox"/>	
Instrument Procedures			
Standard Terminal Arrival / Flight Management System Arrival	<input type="checkbox"/>	<input type="checkbox"/>	(Level 5 Only)
Holding	<input type="checkbox"/>	<input type="checkbox"/>	(Level 5 Only)
Precision Instrument, all engines operating	<input type="checkbox"/>	<input type="checkbox"/>	(Level 5 Only)
Non-Precision Instrument, all engines operating	<input type="checkbox"/>	<input type="checkbox"/>	(Level 5 Only)
Missed Approach	<input type="checkbox"/>	<input type="checkbox"/>	(Level 5 Only)
Landings and Approaches to Landings			
Visual Approaches (normal, steep, shallow) with visual system	<input type="checkbox"/>	<input type="checkbox"/>	(Helicopter Only)

Normal and Abnormal Procedures			
Powerplant	<input type="checkbox"/>	<input type="checkbox"/>	
Fuel System.	<input type="checkbox"/>	<input type="checkbox"/>	
Electrical System	<input type="checkbox"/>	<input type="checkbox"/>	
Environmental and Pressurization Systems	<input type="checkbox"/>	<input type="checkbox"/>	
Fire Detection and Extinguisher Systems	<input type="checkbox"/>	<input type="checkbox"/>	
Navigation and Avionics Systems	<input type="checkbox"/>	<input type="checkbox"/>	
Automatic Flight Control System, Electronic Flight Instrument System, and Related Subsystems.	<input type="checkbox"/>	<input type="checkbox"/>	
Flight Control Systems	<input type="checkbox"/>	<input type="checkbox"/>	
Anti-ice and Deice Systems	<input type="checkbox"/>	<input type="checkbox"/>	
Aircraft and Personal Emergency Equipment	<input type="checkbox"/>	<input type="checkbox"/>	
Emergency Procedures			
Emergency Descent (Max Rate)	<input type="checkbox"/>	<input type="checkbox"/>	(Level 5 Only)
Inflight fire and smoke removal	<input type="checkbox"/>	<input type="checkbox"/>	(Level 5 Only)
Rapid Decompression	<input type="checkbox"/>	<input type="checkbox"/>	(Level 5 Only)
Emergency Evacuation	<input type="checkbox"/>	<input type="checkbox"/>	
Post flight Procedures			
After-Landing Procedures	<input type="checkbox"/>	<input type="checkbox"/>	
Rotor brake operation.	<input type="checkbox"/>	<input type="checkbox"/>	(Helicopter Only)
Abnormal/emergency procedures	<input type="checkbox"/>	<input type="checkbox"/>	
Other			
Other	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	

Narrative



Federal Aviation Administration

FSTD Evaluation Report

Evaluation End Date:	10/8/2024
FAA ID:	1498
Make/Model/Series:	B-737-800
Sponsor:	Avenger Flight Training LLC.
Location:	4649 DIPLOMACY RD Fort Worth TX 76155
Evaluating Inspector:	Chiabotti, Mike
Evaluation Type:	Continuing
Qualification Level Authorized:	D

EVALUATION INFORMATION

FSTD Configuration(s) Evaluated: B-737-800 Was This A BASA-SIP Evaluation? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO For Which Authority:	Outcome Status: Qualified
--	----------------------------------

EVALUATION TEAM MEMBERS

FAA Representatives (Other than Evaluating Inspector)	Sponsor Representatives	
	De Leon, Pablo	
	Sin Quee, Yannique	

EVALUATION REPORT COMMENTS

IOS P DeLeon SME B Swanson Dan Fortino
--

NON-QUALIFIED TASKS

Sponsor DR No.	NSP DR No.	Severity Level	Non-Qualified Task(s) / Discrepancy Description	Date Closed	Corrective Action Taken

DISCREPANCIES

Sponsor DR No.	NSP DR No.	Severity Level	Discrepancy Description	Date Closed	Corrective Action Taken (For closeouts or extensions)
0	D44	3	Motion Noise very apparent on the ground taxing and during flight maneuvers such as stalls and UPRT.		Close per SQMS.
	D45	2	UPRT maneuver nose high with a bank, 10000 feet; got a stab out of trim light when trimming was finished.		Close per SQMS.
	D46	2	Captain's seat vertical adjustment handle not releasing occasionally for		Close per SQMS.

DISCREPANCIES

Sponsor DR No.	NSP DR No.	Severity Level	Discrepancy Description	Date Closed	Corrective Action Taken (For closeouts or extensions)
			adjustment.		
	D47	2	KMEM 36R. Gusty crosswinds are not noticeable prior to takeoff.		Close per SQMS.
	D48	3	Take off windshear labeled non recoverable is recoverable		Close per SQMS.
	D49	2	Patchy ice is subjectively to slippery.		Close per SQMS.
	D50	2	KSEA Gate N 16: SMGCS pushback does not leave aircraft able to taxi to spot 55		Close per SQMS.

RECOMMENDATIONS FOR SPONSOR

Terms and Definitions:

Evaluation Types

TYPE	REFERENCE	COMMENTS
ACQP	60.19	An alternative continuing evaluation.
ACQP+MOD	60.19, 60.16	An alternative continuing evaluation that includes a modification(s) check.
AIQP	60.15	An alternative initial qualification. Typically performed via virtual means.
AIQP Relook	60.15 M-20-19	An evaluation following AIQP that allows an FAA Aviation Safety Inspector to conduct a hands-on qualitative assessment of the FSTD.
Continuing	60.19	Recurrent evaluation (CQ).
CQ+EASA	60.19, 60.37	Recurrent evaluation that includes EASA special conditions. This category used as indicator to ensure we line up dates during the implementation period of the EASA agreement.
CQ + MOD	60.19, 60.16	Combination of continuing evaluation and a modification evaluation.
Focus	QPS (10b,11q)	Evaluation at the discretion of the NSPM to cover safety related concerns.
Initial	60.15	Initial evaluation of FSTD.
Modification	60.16	Evaluation to check FSTD Modification(s).
Modification-Virtual	60.16	Evaluation to check FSTD Modification(s). Performed via virtual means.
Restore	60.27	Includes Move, Non-Use, Loss of Continuing Qualification, Missing QTG.
Surveillance	QPS (11q)	Observation of the FSTD training session(s), FSTD records, or sponsor processes.
Upgrade	QPS (11)	Changing simulator qualification from lower to higher level (ILC to Level D for example).
Update	60.16	Used for Modifications mainly. Mostly replaced by "Modification" type listed above.
Special		Other – not mentioned above
Other		Other – not mentioned above

FSTD Configuration

Indicate the FSTD configuration evaluated where variable FSTD configurations exist under one FAA ID number (i.e. engine types, propeller types, avionics suites or FMS, etc).

BASA-SIP

Bilateral Aviation Safety Agreement – Simulator Implementation Procedures. Click “Yes” if the evaluation you are performing will be sent to another National Aviation Authority. Selecting BASA-SIP and identifying the appropriate NAA indicates that all special conditions have been evaluated in accordance with the applicable agreement.

Sponsor Feedback

Sponsors are encouraged to submit feedback to the NSPM concerning this evaluation or other matters. Select the Feedback link at the [NSP Public Website](#).

NSP Evaluation Discrepancy Instructions:

- Sponsors should update the NSP with the sponsor’s designated DR number for each discrepancy as soon as practical using NSP Form T069. Also use this form to report discrepancy or NQT closures when required or for extension requests.
- Where the sponsor is operating under an NSPM-Authorized DPS, an update reflecting status must be submitted if a self-authorized extension is being exercised.
- The NSP requires an update when any of the following conditions exist:
 - All discrepancies with required closure period in the action-required column have been corrected.
 - A discrepancy with a “Non-qualified Task” is corrected.
 - It is determined that a discrepancy with a required closure period will not be corrected in the prescribed time and an extension is being requested.
 - **DPS Sponsors Only:** If a self-authorized extension is being exercised.
- Extension requests must include: An explanation of accomplishments to date, work remaining, and proposed further action; in the “Extension Request” field, enter the additional time requested.
- Sponsors are urged to submit the request at least two days prior to the discrepancy due date. If the discrepancy due date is on a Saturday, Sunday, or a holiday, the FAA will extend the deadline until the next business day. The NSP should respond to the sponsor’s request for extension within five business days. During this time, the sponsor retains implied authorization from the NSP to continue operating the FSTD.

Severity Levels:

Severity Level	Description	Example(s)
0	No severity.	Research and correct DRs still open, i.e. sponsor has not made determination of the issue. FSTD evaluation findings or observations that require no corrective action.
1	Low severity. Very minor issue with no FSTD fidelity impact.	Dirty windscreens, worn seats, worn seatbelts, one (of two) bulbs burned out, scratched smoke goggles, etc.
2	Minor Visual issue or lights burned out (both bulbs), missing emergency equipment, etc.	Blend zones, color balance, aliasing, missing large/major geographical items.
3	Single minor sub-system inoperative (most normal DRs).	Electrical, Air Systems, Hydraulic, Auto-flight, navigation (FMS), systems inoperative or malfunctions not working correctly (possibly affecting training requiring restriction or work-around). Single QTG failure not resolved during evaluation.
4	Single major FSTD system failure during evaluation (with reset).	Motion, Visual or Control Loading failure during eval with a reset. Any cockpit freeze-ups requiring a system reset, reposition, or reload. Multiple QTG failures not resolved during evaluations.
5	Most severe. Multiple major FSTD system failures during evaluation.	Multiple (two or more) major system failures with resets or any one failure unable to be reset. Also, FSTD AOG before or during the evaluation.

Discrepancy closures not requiring NSP notification:

Notification of a discrepancy closure is not required if the “Action Required” block states, “Close per Sponsor’s SQMS” with no closure period indicated. The sponsor should document the discrepancy in the sponsor’s discrepancy log, prioritize, and take corrective actions in accordance with their Simulator Quality Management System (SQMS). The NSP may periodically conduct inspections to review the status of these discrepancies. The determination to assign a specific closure date will be at the discretion of the evaluating NSP Inspector or Engineer taking the following criteria into consideration:

- Severity and number of discrepancies identified during an NSP evaluation
- Severity and number of open discrepancies in the sponsor’s discrepancy log
- Demonstrated effectiveness of the sponsor’s Quality Management System

Sponsor Reportable MMI Instructions:

Sponsors should use NSP Form T068 to report MMI status in accordance with §60.25 when an MMI condition has exceeded 30 days and the sponsor is seeking authorization to operate the FSTD. If you are unsure whether a reportable MMI situation exists, see FSTD Guidance Bulletin 08-01.

- Sponsors shall forward a copy of the report to the local Training Program Approval Authority (TPAA)
- MMI conditions corrected within the 30-day window do not require NSP notification.
- The NSP will respond within five business days. Authorization is implied during this period.

Additional References:

NSP Guidance Bulletin 07-01, Discrepancy Closure and Request for Due Date Extension
NSP Guidance Bulletin 08-01, Missing, Malfunctioning, or Inoperative (MMI) Component Reporting