

# Federal Aviation Administration National Simulator Program



## Statement of Qualification

The Federal Aviation Administration (FAA)  
National Simulator Program has evaluated the Flight Simulation Training  
Device (FSTD) listed below. This FSTD has been found to meet  
the standards set forth in the qualification document described below:

**Sponsor:** Liberty University, School of Aeronautics

**Location:** Lynchburg

**Aircraft Type:** CE-172-S

**FAA Identification Number:** 1491

**Qualification Basis:** 14 CFR Part 60 Change 2, Appendix B

**Qualification Level:** 5

Issued by the National Simulator Program  
on December 7, 2018.

A handwritten signature in black ink that reads "Lawrence McDonald".

Lawrence McDonald  
Manager, National Simulator Program  
Federal Aviation Administration

To maintain qualification, the FSTD must meet all of the standards and specifications of the qualification basis and is subject to the conditions and limitations listed in the last FAA FSTD Evaluation Report. This certificate is not transferable, and unless, revoked, suspended, or amended, shall remain in effect until March 31, 2021.

<b>Federal Aviation Administration National Simulator Program FSTD Information Form</b>	<b>Sponsor:</b>	<b>Liberty University, School of Aeronautics</b>
	<b>FSTD ID:</b>	<b>1491</b>
	<b>Aircraft Type:</b>	<b>Cessna 172S</b>

Email Form to: [9-ASO-AFS205-NSP-SIMULATOR-SCHEDULING@faa.gov](mailto:9-ASO-AFS205-NSP-SIMULATOR-SCHEDULING@faa.gov)

Sponsor Submission Date: 12/11/2017			
<b>Section 1. FSTD Sponsor Information</b>			
<b>Sponsor Name:</b>	Liberty University School of Aeronautics	<b>FSTD Location:</b>	
<b>Address:</b>	1971 University Boulevard	<b>Physical Address:</b>	939 Airport Road
<b>City:</b>	Lynchburg	<b>City:</b>	Lynchburg
<b>State/Prov/Terr:</b>	VA	<b>State:</b>	VA
<b>Country:</b>	United States	<b>Country:</b>	United States
<b>ZIP:</b>	24515	<b>ZIP:</b>	24502
<b>Sponsor ID No:</b> (FAA Certificate Number)	L48S	<b>Nearest Airport:</b> (Apt Code)	KLYH
<b>Local FAA Authority: FAA Training Program Approval Authority: (TPAA)</b>			
<b>Name:</b>	Michael Dows FSDO 21		
<b>Address:</b>	5707 Huntsman Rd. Suite 100	<b>Office Phone</b>	804-222-7494 x255
<b>City:</b>	Richmond	<b>Cell:</b>	N/A
<b>State:</b>	VA	<b>Fax:</b>	804-222-4843
<b>ZIP:</b>	23250	<b>Email:</b>	<a href="mailto:michael.l.dows@faa.gov">michael.l.dows@faa.gov</a>
<b>FAA Alternate POC (APM, FTSM, if required)</b>			
<b>Name:</b>			
<b>Address :</b>		<b>Office Phone</b>	
<b>City/State:</b>		<b>Cell:</b>	
<b>State:</b>		<b>Fax:</b>	
<b>ZIP:</b>		<b>Email:</b>	
<b>FSTD Management Representative::</b>			
<b>Name:</b>	Kevin Martin		
<b>Address 1:</b>	939 Airport Road	<b>Office Phone</b>	434-592-7739
<b>City/State:</b>	Lynchburg	<b>Cell:</b>	N/A
<b>State:</b>	VA	<b>Fax:</b>	N/A
<b>ZIP:</b>	24502	<b>Email:</b>	<a href="mailto:kmartin5@liberty.edu">kmartin5@liberty.edu</a>
<b>FSTD Contact:</b>			
<b>Name:</b>	Kevin Martin		
<b>Address 1:</b>	939 Airport Road	<b>Office Phone</b>	434-592-7739
<b>City/State:</b>	Lynchburg	<b>Cell:</b>	N/A
<b>State:</b>	VA	<b>Fax:</b>	N/A
<b>ZIP:</b>	24502	<b>Email:</b>	<a href="mailto:kmartin5@liberty.edu">kmartin5@liberty.edu</a>

<b>Federal Aviation Administration</b> <b>National Simulator Program</b> <b>FSTD Information Form</b>	Sponsor:	<b>Liberty University, School of Aeronautics</b>
	FSTD ID:	<b>1491</b>
	Aircraft Type:	<b>Cessna 172S</b>

**Section 2. FSTD Information**

Aircraft make/model/series:	Cessna 172S	A/C Common Name:	Cessna 172
Qualification Basis:	Part 60 Change1	Manufacture Serial No.:	12320-001
Qualification Level:	<u>Level 5</u>		
Base Month:	<input type="checkbox"/> Full Flight Simulator (FFS) <input checked="" type="checkbox"/> Flight Training Device (FTD)	Sponsor's FSTD ID:	12320-001

**National Aviation Authority Qualification (For BASA-SIP Evaluations only):**

NAA Name:	
NAA FSTD ID No:	
NAA Qualification Level:	
NAA Qualification Basis:	

**Technical Information:**

FAA FSTD ID No: 1491 (If Applicable)	Convertible FSTD: <input type="checkbox"/> Yes	FSTD Manufacturer:	Frasca International
<input type="checkbox"/> eMQTG	Conv. FAA FSTD ID No.	Date of Manufacture:	02/15/2016

FSTD Configurations:	Cessna 172S
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Pri. Engine Type/Thrust:	Textron Lycoming IO-360-L2A	FADEC Version
Alt. Engine Type/Thrust:	180BHP at 2700RPM	
Alt. Engine Type/Thrust:	/	
Alt. Engine Type/Thrust:	/	

Flight Instrumentation/Systems:	<input checked="" type="checkbox"/> EFIS <input type="checkbox"/> HUD/HGS <input type="checkbox"/> EVS <input type="checkbox"/> WX Radar <input type="checkbox"/> NVG <input checked="" type="checkbox"/> GPS <input checked="" type="checkbox"/> GPWS <input type="checkbox"/> FMS <input type="checkbox"/> TCAS Ver: <input type="checkbox"/> CPDLC <input type="checkbox"/> EFB Class: <input checked="" type="checkbox"/> Other: G1000
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FSTD seats available: #	4	Fit. control data revision: Part 60 Alternative Data, Table B2B
FSTD host computer:	Intel Core i7	Aero model/data: Part 60 Alternative Data, Table B2B
Visual image generator:	Frasca/TruVision Global II	Avionics Type/Suite: Garmin G1000 w/GFC700 AP
Visual system display:	CrossCkpt / 220 x 57	Avionics Std/Rev: System Software Version 0563.26, GDU Version 12.03
Visual projector:	3x Sony 186248-4	FMS: Type/Rev.
		Motion system: Mfgr./Type/Axis

**Airport Qualification Models**      If illustrations or other presentations are attached please specify:

Airport Qualification Model 1 / Available In-Use Runways /Taxiway:	/ /
Airport Qualification Model 2 / Available In-Use Runways /Taxiway:	/ /
Airport Qualification Model 3 / Available In-Use Runways / Taxiway:	/ /

Visual Ground Segment:	Airport Designator	Landing Runway
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**Section 3a. Level 6 and Above--Additional FSTD Qualified Maneuvers, Procedures, Tasks, and Functions (For Level 4 and 5 see Section 3c below)**  
(not stated in 14CFR Part 60 Appendix (A,B,C, or D) Attachment 1, Table 1B)

Except for Non-Qualified items stated in section 4 below, 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 below. Specific use of this device in conjunction with any training program must be approved by the FAA Training Program Approval Authority (TPAA).

**FAA Qualifying Official(s):** Marchelletta

Area/Function/Maneuver	Requested (Sponsor Use)	Qualified (FAA Use Only)	Remarks (Including Partial Task Limitations)
<b>CAT I:</b> (RVR 2400/1800 ft. DH200 ft)	<input type="checkbox"/>	<input type="checkbox"/>	
<b>CAT II:</b> (RVR 1200 ft. DH 100 ft)	<input type="checkbox"/>	<input type="checkbox"/>	
<b>CAT III:</b> (lowest minimum evaluated) RVR, DH ft.	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Circling Approach : Arpt/Appr/Ldg RW</b>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Windshear Training:</b>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Auto-coupled Approach</b>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Auto Go Around</b>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Auto-land / Roll Out Guidance</b>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>TCAS/ACAS I / II</b>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>WX-Radar</b>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>HUD / HGS</b>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>EFVS</b>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>TAWS (GPWS / EGPWS)</b>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>SMGCS: Arpt/Taxi Route, Visibility, mono/bidirectional</b>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Enhanced Taxi Markings: Arpt/Taxi Route</b>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>RWSL/LAHSO</b>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> LPV <input type="checkbox"/> GPS <input type="checkbox"/> WAAS	<input type="checkbox"/>	<input type="checkbox"/>	
<b>RNP/AR</b>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>ADS-B</b> <input type="checkbox"/> In	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Full Stall</b> (14 CFR Part 60 (2016)/FSTD Directive 2)	<input type="checkbox"/>	<input type="checkbox"/>	
<b>UPRT</b> (14 CFR Part 60 (2016)/FSTD Directive 2)	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Icing</b> (14 CFR Part 60 (2016)/FSTD Directive 2)	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Realistic Gusting Crosswind</b> (14 CFR Part 60 (2016)/FSTD Directive 2)	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Bounced Landing</b> (14 CFR Part 60 (2016)/FSTD Directive 2)	<input type="checkbox"/>	<input type="checkbox"/>	



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**Section 3b. 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 (Including Partial Task Limitations)
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 Evaluated with Class A Lens <input type="checkbox"/> Class B Lens <input type="checkbox"/> NVG Confined Area Location:	<input type="checkbox"/>	<input type="checkbox"/>	
Helicopter Category A Takeoffs	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	

**Section 3c. Level 4 & 5 FSTD Only --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 (Including Partial Task Limitations)
<b>Preflight Procedures</b>			
Preflight Inspection (flight deck only).	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Engine Start	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Pre-takeoff Checks.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>In-flight Maneuvers</b>			
Approach to Stalls	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Level 5 Only
Engine Failure (procedures only)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Level 5 Only
Specific Flight Characteristics incorporated into the user's approved flight training program	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Instrument Procedures</b>			
Standard Terminal Arrival/Flight Management System Arrival	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Level 5 Only
Holding	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Level 5 Only
Precision Instrument, all engines operating	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Level 5 Only
Non-Precision Instrument, all engines operating	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Level 5 Only
Missed Approach	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Level 5 Only
<b>Landings and Approaches to Landings</b>			
Visual Approaches (normal, steep, shallow) with visual system	<input type="checkbox"/>	<input type="checkbox"/>	Level 5 Helicopter
<b>Normal and Abnormal Procedures</b>			
Powerplant	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Fuel System.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

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Area/Function/Maneuver	Requested (Sponsor Use)	Qualified (FAA Use Only)	Remarks (Including Partial Task Limitations)
Electrical System.	<input checked="" type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Automatic Flight Control System, Electronic Flight Instrument System, and Related Subsystems.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Flight Control Systems	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Anti-ice and Deice Systems	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Aircraft and Personal Emergency Equipment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Emergency Procedures</b>			
Emergency Descent (Max Rate)	<input checked="" type="checkbox"/>	<input checked="" 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"/>	
<b>Post flight Procedures.</b>			
After-Landing Procedures	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Rotor brake operation.	<input type="checkbox"/>	<input type="checkbox"/>	Helicopter only
Abnormal/emergency procedures	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	

#### Section 4. Non Qualified Tasks

**FSTD users should also observe any Non-Qualified Tasks or Missing, Malfunctioning, or Inoperative (MMI) Components noted on the most recent FAA evaluation report or in the Sponsor discrepancy log that may or may not result in a training, testing, or checking restriction.**

Maneuvers, Procedures, Tasks, and Functions for which this FSTD is  
NOT Qualified

Area/Function/Maneuver	Remarks
1.	
2.	
3.	
4.	
5.	
6.	