

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: 1397

Qualification Basis: 14 CFR Part 60 Change 1, 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.

Federal Aviation Administration National Simulator Program FSTD Information Form	Sponsor:	Liberty University, School of Aeronautics
	FSTD ID:	1397
	Aircraft Type:	Cessna 172S

Email Form to: 9-ASO-AFS205-NSP-SIMULATOR-SCHEDULING@faa.gov

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

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Section 2. FSTD Information

Aircraft make/model/series:	Cessna 172S	A/C Common Name:	Cessna 172
Qualification Basis:	Part 60 Change1	Manufacture Serial No.:	10319-001
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:	10319-001

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: 1397 (If Applicable)	Convertible FSTD: <input type="checkbox"/> Yes	FSTD Manufacturer:	Frasca International
<input type="checkbox"/> eMQTG	Conv. FAA FSTD ID No.	Date of Manufacture:	07/16/2012

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: TIS
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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/180x40	Avionics Std/Rev: HSDB ICD Revision: Rev Y
Visual projector:	Three Panasonic PT-VX400NTU	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)
CAT I: (RVR 2400/1800 ft. DH200 ft)	<input type="checkbox"/>	<input type="checkbox"/>	
CAT II: (RVR 1200 ft. DH 100 ft)	<input type="checkbox"/>	<input type="checkbox"/>	
CAT III: (lowest minimum evaluated) RVR, DH ft.	<input type="checkbox"/>	<input type="checkbox"/>	
Circling Approach : Arpt/Appr/Ldg RW	<input type="checkbox"/>	<input type="checkbox"/>	
Windshear Training:	<input type="checkbox"/>	<input type="checkbox"/>	
Auto-coupled Approach	<input type="checkbox"/>	<input type="checkbox"/>	
Auto Go Around	<input type="checkbox"/>	<input type="checkbox"/>	
Auto-land / Roll Out Guidance	<input type="checkbox"/>	<input type="checkbox"/>	
TCAS/ACAS I / II	<input type="checkbox"/>	<input type="checkbox"/>	
WX-Radar	<input type="checkbox"/>	<input type="checkbox"/>	
HUD / HGS	<input type="checkbox"/>	<input type="checkbox"/>	
EFVS	<input type="checkbox"/>	<input type="checkbox"/>	
TAWS (GPWS / EGPWS)	<input type="checkbox"/>	<input type="checkbox"/>	
SMGCS: Arpt/Taxi Route, Visibility, mono/bidirectional	<input type="checkbox"/>	<input type="checkbox"/>	
Enhanced Taxi Markings: Arpt/Taxi Route	<input type="checkbox"/>	<input type="checkbox"/>	
RWSL/LAHSO	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> LPV <input type="checkbox"/> GPS <input type="checkbox"/> WAAS	<input type="checkbox"/>	<input type="checkbox"/>	
RNP/AR	<input type="checkbox"/>	<input type="checkbox"/>	
ADS-B <input type="checkbox"/> In	<input type="checkbox"/>	<input type="checkbox"/>	
Full Stall (14 CFR Part 60 (2016)/FSTD Directive 2)	<input type="checkbox"/>	<input type="checkbox"/>	
UPRT (14 CFR Part 60 (2016)/FSTD Directive 2)	<input type="checkbox"/>	<input type="checkbox"/>	
Icing (14 CFR Part 60 (2016)/FSTD Directive 2)	<input type="checkbox"/>	<input type="checkbox"/>	
Realistic Gusting Crosswind (14 CFR Part 60 (2016)/FSTD Directive 2)	<input type="checkbox"/>	<input type="checkbox"/>	
Bounced Landing (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)
Preflight Procedures			
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"/>	
In-flight Maneuvers			
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"/>	
Instrument Procedures			
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
Landings and Approaches to Landings			
Visual Approaches (normal, steep, shallow) with visual system	<input type="checkbox"/>	<input type="checkbox"/>	Level 5 Helicopter
Normal and Abnormal Procedures			
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"/>	
Emergency Procedures			
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"/>	
Post flight Procedures.			
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.	