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 <u>December 12</u>, 2016.

Lawrence McDonald

Manager, National Simulator Program
Federal Aviation Administration

Federal Aviation Administration

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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 <u>January 31, 2018</u>.

Sponsor: **Liberty University** FSTD ID: 1491 Aircraft Type:

Cessna 172

Sponsor Submissi	on Date: 07/20/2016		SO-AFS205-NSP-SIMULATOR-SCHEDULING @faa.gov				
	Section 1. FSTD	•					
Sponsor Name:	Liberty University, School of Aeronautics	FSTD Location	FSTD Location:				
Address:	939 Airport Rd.	Physical Address:	939 Airport Rd.				
City:	Lynchburg	City:	Lynchburg				
State/Prov/Terr:	VA	State:	VA				
Country:	United States	Country:	United States				
ZIP:	24502	ZIP:	24502				
Sponsor ID No: (FAA Certificate Number)	L48S	Nearest Airport: (Apt Code)	KLYH				
Local FAA Authorit	y: FAA Training Program Approval Authority	y: (TPAA)					
Name:	Michael Dows - FSDO 21	Michael Dows - FSDO 21					
Address:	5707 Huntsman Road, Suite 100	Office Phone	804-222-7494 ext. 255				
City:	Richmond	Cell:					
State:	Virginia	Fax:	804-222-4843				
ZIP:	23250	Email:	Michael.L.Dows@faa.gov				
FAA Alternate POC	(APM, FTPM, if required)						
Name:							
Address :		Office Phone					
City/State:		Cell:					
State:		Fax:					
ZIP:		Email:					
FSTD Manageme	nt Representative:						
Name:	Kevin Martin						
Address 1:	939 Airport rd	Office Phone	434-592-7739				
City/State:	Lynchburg	Cell:	703-309-6630				
State:	VA	Fax:					
ZIP:	24502	Email:	Krmartin5@liberty.edu				
FSTD Contact:							
Name:	Kevin Martin						
Address 1:	939 Airport rd	Office Phone	434-592-7739				
City/State:	Lynchburg	Cell:	703-309-6630				
State:	VA	Fax:					
ZIP:	24502	Email:	Krmartin5@liberty.edu				

Sponsor: **Liberty University** FSTD ID: 1491 Aircraft Type:

Cessna 172

Section 2. FSTD Information							
Aircraft	Cessna 172	<u>2</u> S	A/C Common	Cess	na 172		
make/model/series:			Name:				
Qualification Basis:	Part 60 Cha	ange 2	Manufacture	12320	0-001		
Qualification Level: Base Month: December	Level 5		Serial No.: Sponsor's				
Base Worth, December	_	ght Simulator (FFS)	FSTD ID:				
		raining Device (FTD)					
National Aviation Authority Qualification (For BASA-SIP Evaluations only):							
NAA Name:	N/A						
NAA FSTD ID No:	N/A		NAA Qualification N/A Basis:				
NAA Qualification Level:	N/A						
Technical Information:							
FAA FSTD ID No: 1491 (If Applicable)	Convertible	e FSTD: □Yes	FSTD Manufact	urer:	Frasca I	nternational, Inc.	
⊠eMQTG	Conv. FAA	FSTD ID No.	Date of Manufac	cture:	02/15/20	016	
FSTD Configurations:	Cessna 172	28					
Pri. Engine Type/Thrust:	Piston / 180	OHP at 2700RPM	FADEC Version		N/A		
Alt. Engine Type/Thrust:	,						
Alt. Engine Type/Thrust:	,						
Alt. Engine Type/Thrust:	,						
	,						
Flight Instrumentation/Sys	tems:	⊠EFIS □HUD/HG	s □ EVS □	WX Ra	adar	\square NVG	
		⊠GPS □ GPWS	\square FMS \square	TCAS	Ver:		
		☐EFB Class:		Other:	G1000		
FSTD seats available: #	2	□ Li B Giass.				60 Alternative Data, Table	
TOTO Sould available.	2		B2B		011. 1 41. 0	oo Altornativo Bata, Tablo	
FSTD host computer: Combo Intel i7			Aero model/data: Part 60 Alternative Data, Table B2B				
Visual image generator: Mfgr./Model			Avionics Type/Suite: G1000				
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:				
			Motion system:				
Airport Qualification Models If illustrations or other presentations are attached please specify:							
Airport Qualification Mode Available In-Use Runways		1 1					
Airport Qualification Mode Available In-Use Runways		/ /					
Airport Qualification Mode Available In-Use Runways Taxiway:		1 1					
Visual Ground Segment:	ļ	Airport Designator	Landing Runw	vay			

Sponsor: Liberty University FSTD ID: 1491

Aircraft Type: Cessna 172

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

Normal and Abnormal Procedures

Powerplant

Fuel System.

Sponsor: **Liberty University FSTD ID:** 1491 Aircraft Type:

Cessna 172

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 Qualified Remarks (Sponsor Use) (FAA Use Only) (Including Partial Task Limitations) Helicopter Slope Landings **Helicopter External Load Operations Helicopter Pinnacle Approach to Landings Helicopter Night Vision Maneuvers** Evaluated with Class A Lens □ Class B Lens □ **NVG Confined Area Location: Helicopter Category A Takeoffs** П П 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 Qualified Remarks (Sponsor Use) (FAA Use Only) (Including Partial Task Limitations) **Preflight Procedures** Preflight Inspection (flight deck only). \boxtimes X**Engine Start** XXPre-takeoff Checks. \boxtimes \boxtimes **In-flight Maneuvers** Approach to Stalls Level 5 Only XXEngine Failure (procedures only) Level 5 Only \boxtimes \boxtimes Specific Flight Characteristics incorporated into the user's approved flight training program **Instrument Procedures** Standard Terminal Arrival/Flight Level 5 Only \boxtimes \boxtimes Management System Arrival Holding \boxtimes \boxtimes Level 5 Only Precision Instrument, all engines operating Level 5 Only \boxtimes \boxtimes Non-Precision Instrument, all engines operating \boxtimes \boxtimes Level 5 Only Missed Approach \boxtimes XLevel 5 Only Landings and Approaches to Landings Visual Approaches (normal, steep, shallow) with visual system Level 5 Helicopter

 \boxtimes

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 \boxtimes

Area/Function/Maneuver

3. 4. 5. 6.

Sponsor: **Liberty University** FSTD ID: 1491 Aircraft Type: Cessna 172

Area/Function/Maneuver	Requested (Sponsor Use)	Qualified (FAA Use Only)	Remarks (Including Partial Task Limitations)
Electrical System.	\boxtimes	\boxtimes	
Environmental and Pressurization Systems			
Fire Detection and Extinguisher Systems			
Navigation and Avionics Systems	\boxtimes	\boxtimes	
Automatic Flight Control System, Electronic Flight Instrument System, and Related Subsystems.	\boxtimes	\boxtimes	
Flight Control Systems		\boxtimes	
Anti-ice and Deice Systems			
Aircraft and Personal Emergency Equipment			
Emergency Procedures			
Emergency Descent (Max Rate)	\boxtimes	\boxtimes	Level 5 Only
Inflight fire and smoke removal			Level 5 Only
Rapid Decompression			Level 5 Only
Emergency Evacuation			
Post flight Procedures.			
After-Landing Procedures		\boxtimes	
Rotor brake operation.			Helicopter only
Abnormal/emergency procedures	\boxtimes	\boxtimes	
Section 4. Non	Qualified Tas	sks	
FSTD users should also observe any Non-Qualified T Components noted on the most recent FAA evaluation rep result in a training, testing	ort or in the Sp	onsor discrepa	
Maneuvers, Procedures, Tasks, an NOT Qu		ns for wh	nich this FSTD is
Area/Function/Maneuver	Remarks		
1.			
2.			