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:** PA-44-180

FAA Identification Number: 1492

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

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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: 1492 Aircraft Type: Piper

aft Type: Piper Seminole

Sponsor Submissi		<u> </u>	205-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				
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		
	(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: 1492

Aircraft Type: Piper Seminole

Section 2. FSTD Information							
Aircraft	Piper Semi	nole PA 44	A/C Common	Piper	Semino	le	
make/model/series:			Name:				
Qualification Basis:	Part 60 Cha	ange 2	Manufacture	11780	-001		
Qualification Level:	Level 5		Serial No.:				
Base Month: December	│	ght Simulator (FFS)	Sponsor's FSTD ID:				
		raining Device (FTD)					
National Aviation Authority	/ Qualification	on (For BASA-SIP Evalua	ations only):				
NAA Name:	N/A						
NAA FSTD ID No:	N/A		NAA Qualification	on	N/A		
NAA Qualification Level:	N/A						
Technical Information:							
FAA FSTD ID No: 1492 (If Applicable)	Convertible	e FSTD: ☐ Yes	FSTD Manufact	urer:	Frasca	International, Inc.	
⊠eMQTG	Conv. FAA	FSTD ID No.	Date of Manufac	cture:	02/15/20	016	
FSTD Configurations:	Piper Semi	nole PA-44					
Pri. Engine Type/Thrust:	Lycoming (0-360-A1H6 / 180HP	FADEC Version		N/A		
Alt. Engine Type/Thrust:	at 2700RPM	Λ					
Alt. Engine Type/Thrust:	,						
	,						
Alt. Engine Type/Thrust:	,						
Flight Instrumentation/Systems:			s □ evs □	WX Ra	dar	\square NVG	
		⊠GPS □ GPWS	\square FMS \square	TCAS	Ver:		
		☐EFB Class:	\boxtimes	Other:	G1000		
FSTD seats available: #	2					60 Alternative Data, Table	
	Z Z			B2B			
FSTD host computer: Intel Core i7			Aero model/data: Part 60 Alternative Data, Table B2B				
Visual image generator: F	rasca TrueVi	ision Global II	Avionics Type/Suite: G1000				
Visual system display: CrossCkpt / 220 x 57			Avionics Std/Rev: : System Software Version 1983.00, GDU Version 13.08				
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		1 1					
Airport Qualification Mode Available In-Use Runways Taxiway:		1 1					
Visual Ground Segment:	ļ	Airport Designator	Landing Runway				

Sponsor: Liberty University FSTD ID: 1492

Aircraft Type: Piper Seminole

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			

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Aircraft Type: Piper Seminole

Section 3b. Additional Helicopter FSTD Qualified (not stated in 14CFR Part 60 Append			
Area/Function/Maneuver	Requested (Sponsor Use)	Qualified (FAA Use Only)	Remarks (Including Partial Task Limitations)
Helicopter Slope Landings			(morating ration ratio amination)
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	Ш		
Section 3c. Level 4 & 5 FSTD OnlyOptionally Qualin Table B1B and D1B.	fied Maneuvers.	, Procedures, Ta	asks, and Functions as defined
Area/Function/Maneuver	Requested (Sponsor Use)	Qualified (FAA Use Only)	Remarks (Including Partial Task Limitations)
Preflight Procedures	,		,
Preflight Inspection (flight deck only).	\boxtimes	\boxtimes	
Engine Start	\boxtimes	\boxtimes	
Pre-takeoff Checks.	\boxtimes	\boxtimes	
In-flight Maneuvers			
Approach to Stalls	\boxtimes	\boxtimes	Level 5 Only
Engine Failure (procedures only)	\boxtimes	\boxtimes	Level 5 Only
Specific Flight Characteristics incorporated into the user's approved flight training program			
Instrument Procedures			
Standard Terminal Arrival/Flight Management System Arrival	\boxtimes	\boxtimes	Level 5 Only
Holding	\boxtimes	\boxtimes	Level 5 Only
Precision Instrument, all engines operating	\boxtimes	\boxtimes	Level 5 Only
Non-Precision Instrument, all engines operating	\boxtimes	\boxtimes	Level 5 Only
Missed Approach	\boxtimes	\boxtimes	Level 5 Only
Landings and Approaches to Landings			
Visual Approaches (normal, steep, shallow) with visual system			Level 5 Helicopter
Normal and Abnormal Procedures			
Powerplant	\boxtimes	\boxtimes	
Fuel System.	\boxtimes		

Sponsor: Liberty University FSTD ID: 1492

Aircraft Type: P

Piper Seminole

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	\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	\boxtimes	
Rotor brake operation.			Helicopter only
Abnormal/emergency procedures	\boxtimes	\boxtimes	

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.	