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 7, 2018.</u>

<u>_Lawrence McDonald_ (signature)_</u>
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 <u>March 31, 2021.</u>

Federal Aviation Administration **National Simulator Program** **FSTD Information Form**	**Sponsor:**	**Liberty University, School of Aeronautics**
	FSTD ID:	**1492**
	Aircraft Type:	**Piper Seminole**

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, FTPM, 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:**	krmartin5@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:**	krmartin5@liberty.edu

Federal Aviation Administration **National Simulator Program** **FSTD Information Form**	**Sponsor:**	**Liberty University, School of Aeronautics**
	FSTD ID:	**1492**
	Aircraft Type:	**Piper Seminole**

Section 2. FSTD Information			
Aircraft make/model/series:	**Piper Seminole PA 44**	**A/C Common Name:**	**Piper Seminole**
Qualification Basis: **Qualification Level:**	**Part 60 Change1** **Level 5**	**Manufacture Serial No.:**	**11780-001**
Base Month: December	☐ **Full Flight Simulator (FFS)** ☒ **Flight Training Device (FTD)**	**Sponsor's FSTD ID:**	**11780-001**
National Aviation Authority Qualification (For BASA-SIP Evaluations only):			
NAA Name:			
NAA FSTD ID No:		**NAA Qualification Basis:**	
NAA Qualification Level:			
Technical Information:			
FAA FSTD ID No: 1492 (If Applicable)	**Convertible FSTD:** ☐Yes	**FSTD Manufacturer:**	**Frasca International**
☐**eMQTG**	**Conv. FAA FSTD ID No.**	**Date of Manufacture**:	**02/15/2016**
FSTD Configurations:	**PA 44 - 180**		
Pri. Engine Type/Thrust: **Alt. Engine Type/Thrust:** **Alt. Engine Type/Thrust:** **Alt. Engine Type/Thrust:**	**Lycoming O-360-A1H6** **180BHP at 2700RPM** **/** **/** **/**	**FADEC Version**	
Flight Instrumentation/Systems:	☒EFIS ☐HUD/HGS ☐ EVS ☐ WX Radar ☐ NVG ☒GPS ☒ GPWS ☐ FMS ☐ TCAS Ver: ☐ CPDLC ☐EFB Class: ☒ Other: G1000		
FSTD seats available: # 4		**Flt. 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 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 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	

Federal Aviation Administration National Simulator Program FSTD Information Form	Sponsor:	**Liberty University, School of Aeronautics**
	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 <u>Non-Qualified</u> 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. <u>Specific use of this device in conjunction with any training program must be approved by the FAA Training Program Approval Authority (TPAA).</u>

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)	☐	☐	
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	☐	☐	
RWSL/LAHSO	☐	☐	
☐ **LPV** ☐ **GPS** ☐ **WAAS**	☐	☐	
RNP/AR	☐	☐	
ADS-B ☐ In	☐	☐	
Full Stall *(14 CFR Part 60 (2016)/FSTD Directive 2)*	☐	☐	
UPRT *(14 CFR Part 60 (2016)/FSTD Directive 2)*	☐	☐	
Icing *(14 CFR Part 60 (2016)/FSTD Directive 2)*	☐	☐	
Realistic Gusting Crosswind*(14 CFR Part 60 (2016)/FSTD Directive 2)*	☐	☐	
Bounced Landing *(14 CFR Part 60 (2016)/FSTD Directive 2)*	☐	☐	

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	☐	☐	
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	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	

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).	☒	☒	
Engine Start	☒	☒	
Pre-takeoff Checks.	☒	☒	
In-flight Maneuvers			
Approach to Stalls	☒	☒	Level 5 Only
Engine Failure (procedures only)	☒	☒	Level 5 Only
Specific Flight Characteristics incorporated into the user's approved flight training program	☐	☐	
Instrument Procedures			
Standard Terminal Arrival/Flight Management System Arrival	☒	☒	Level 5 Only
Holding	☒	☒	Level 5 Only
Precision Instrument, all engines operating	☒	☒	Level 5 Only
Non-Precision Instrument, all engines operating	☒	☒	Level 5 Only
Missed Approach	☒	☒	Level 5 Only
Landings and Approaches to Landings			
Visual Approaches (normal, steep, shallow) with visual system	☐	☐	Level 5 Helicopter
Normal and Abnormal Procedures			
Powerplant	☒	☒	
Fuel System.	☒	☒	

Area/Function/Maneuver	Requested (Sponsor Use)	Qualified (FAA Use Only)	Remarks (Including Partial Task Limitations)
Electrical System.	☒	☒	
Environmental and Pressurization Systems	☐	☐	
Fire Detection and Extinguisher Systems	☐	☐	
Navigation and Avionics Systems	☒	☒	
Automatic Flight Control System, Electronic Flight Instrument System, and Related Subsystems.	☒	☒	
Flight Control Systems	☒	☒	
Anti-ice and Deice Systems	☒	☒	
Aircraft and Personal Emergency Equipment	☒	☒	
Emergency Procedures			
Emergency Descent (Max Rate)	☒	☒	Level 5 Only
Inflight fire and smoke removal	☒	☒	Level 5 Only
Rapid Decompression	☐	☐	Level 5 Only
Emergency Evacuation	☐	☐	
Post flight Procedures.			
After-Landing Procedures	☒	☒	
Rotor brake operation.	☐	☐	Helicopter only
Abnormal/emergency procedures	☒	☒	
	☐	☐	
	☐	☐	
	☐	☐	

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.	