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 July 21, 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>August 31, 2017</u>.

Sponsor: Liberty University

FSTD ID: 1492

Aircraft Type: Piper Seminole

	Section 1. FSTD	Spansor Inform	nation		
Sponsor Name:	Liberty University,	FSTD Locatio			
Sponsor Name.	School of Aeronautics	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 Trainin <mark>g Program Approval Authorit</mark> y	y: (TPAA)			
Name:	Michael Dows - FSDO 21	AL T			
Address:	5707 Huntsman Road, Suite 100	Office Phone	804-222-7494 ext. 255		
City:	Richmond	Cell:			
State:	Vir <mark>gin</mark> ia	Fax:	804-222-4843		
ZIP:	23250	Email:	Michael.L.Dows@faa.gov		
FAA Alternate POC	(APM, FTPM, if required)				
Name:	-				
Address :		Office Phone	X-		
City/State:		Cell:	0/		
State:		Fax:			
ZIP:	7	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 Seminole PA 44	A/C Common	Piper	Seminole		
make/model/series:		Name:				
Qualification Basis:	Part 60 Change 2	Manufacture	11780	0-001		
Qualification Level:	Level 5	Serial No.:				
Base Month: July	☐ Full Flight Simulator (FFS)	Sponsor's FSTD ID:				
		131010.				
National Aviation Authority	y Qualification (For BASA-SIP Evalu	ations only):				
NAA Name:	N/A					
NAA FSTD ID No:	N/A	NAA Qualification	on	N/A		
NAA O JISTA SAA I AA I	21/2	Basis:				
NAA Qualification Level:	N/A					
Technical Information:		1				
FAA FSTD ID No: 1492 (If Applicable)	Convertible FSTD: ☐Yes	FSTD Manufacti	urer:	Frasca International, Inc.		
⊠eMQTG	Conv. FAA FSTD ID No.	Date of Manufac	cture:	02/15/2016		
FSTD Configurations:	Piper Seminole PA-44					
//	The Reserve					
	XII					
Pri. Engine Type/Thrust:	Lycoming 0-360-A1H6 / 180HP	FADEC Version	B 1	N/A		
J 71		FADEC VEISION		N/A		
Alt. Engine Type/Thrust:	at 2700RPM	-				
Alt. Engine Type/Thrust:		-				
Alt. Engine Type/Thr <mark>ust</mark> :				3 3		
Flight Instrumentation/Sys	stems:					
	AEFIS LINUDING	1 2	WX Ra			
	⊠GPS □ GPWS	☐ FMS ☐	TCAS	Ver: CPDLC		
			Other:	G1000		
	☐EFB Class:			Fit. control data revision: Part 60 Alternative Data, Table		
FSTD seats available: #	□EFB Class:	Flt. control data	revisi	on: Part 60 Alternative Data, Table		
FSTD seats available: # FSTD host computer: Intel	2	Flt. control data B2B	AC.	on: Part 60 Alternative Data, Table 60 Alternative Data, Table B2B		
,	Core i7	Flt. control data B2B	a: Part	60 Alternative Data, Table B2B		
FSTD host computer: Intel Visual image generator: F	Core i7	Flt. control data B2B Aero model/data Avionics Type/S	a: Part Suite: (60 Alternative Data, Table B2B		
FSTD host computer: Intel Visual image generator: F Visual system display: Cro	Core i7 Trasca TrueVision Global II DSSCkpt / 220 x 57	Flt. control data B2B Aero model/data Avionics Type/S Avionics Std/Re GDU Version 13	a: Part Suite: 0	60 Alternative Data, Table B2B		
FSTD host computer: Intel Visual image generator: F	Core i7 Trasca TrueVision Global II DSSCkpt / 220 x 57	Flt. control data B2B Aero model/data Avionics Type/S Avionics Std/Re	a: Part Suite: 0	60 Alternative Data, Table B2B		
FSTD host computer: Intel Visual image generator: F Visual system display: Cro	Core i7 Trasca TrueVision Global II DSSCkpt / 220 x 57	Flt. control data B2B Aero model/data Avionics Type/S Avionics Std/Re GDU Version 13	a: Part Suite: (ev: : Sy 3.08	60 Alternative Data, Table B2B		
FSTD host computer: Intel Visual image generator: F Visual system display: Cro Visual projector: 3x Sony	Core i7 Frasca TrueVision Global II DSSCkpt / 220 x 57 186248-4 Els If illustrations	Flt. control data B2B Aero model/data Avionics Type/S Avionics Std/Re GDU Version 13 FMS: Motion system:	a: Part Suite: (ev: : Sy 3.08	60 Alternative Data, Table B2B		
FSTD host computer: Intel Visual image generator: F Visual system display: Cro Visual projector: 3x Sony Airport Qualification Mode Airport Qualification Mode	Core i7 Frasca TrueVision Global II DessCkpt / 220 x 57 186248-4 Els If illustrations	Flt. control data B2B Aero model/data Avionics Type/S Avionics Std/Re GDU Version 13 FMS: Motion system:	a: Part Suite: (ev: : Sy 3.08	60 Alternative Data, Table B2B 31000 vstem Software Version 1983.00,		
FSTD host computer: Intel Visual image generator: F Visual system display: Cro Visual projector: 3x Sony	Core i7 Frasca TrueVision Global II DessCkpt / 220 x 57 186248-4 Els If illustrations	Flt. control data B2B Aero model/data Avionics Type/S Avionics Std/Re GDU Version 13 FMS: Motion system:	a: Part Suite: (ev: : Sy 3.08	60 Alternative Data, Table B2B 31000 vstem Software Version 1983.00,		
FSTD host computer: Intel Visual image generator: F Visual system display: Cro Visual projector: 3x Sony Airport Qualification Mode Airport Qualification Mode Available In-Use Runways	Core i7 Frasca TrueVision Global II DessCkpt / 220 x 57 186248-4 Els If illustrations El 1 / / /Taxiway:	Flt. control data B2B Aero model/data Avionics Type/S Avionics Std/Re GDU Version 13 FMS: Motion system:	a: Part Suite: (ev: : Sy 3.08	60 Alternative Data, Table B2B 31000 vstem Software Version 1983.00,		
FSTD host computer: Intel Visual image generator: F Visual system display: Cro Visual projector: 3x Sony Airport Qualification Mode Airport Qualification Mode Available In-Use Runways Airport Qualification Mode	Core i7 Frasca TrueVision Global II DessCkpt / 220 x 57 186248-4 Els If illustrations El 1 / / /Taxiway:	Flt. control data B2B Aero model/data Avionics Type/S Avionics Std/Re GDU Version 13 FMS: Motion system:	a: Part Suite: (ev: : Sy 3.08	60 Alternative Data, Table B2B 31000 vstem Software Version 1983.00,		
FSTD host computer: Intel Visual image generator: F Visual system display: Cro Visual projector: 3x Sony Airport Qualification Mode Airport Qualification Mode Available In-Use Runways	Core i7 Frasca TrueVision Global II DessCkpt / 220 x 57 186248-4 Els If illustrations El 1 / / /Taxiway:	Flt. control data B2B Aero model/data Avionics Type/S Avionics Std/Re GDU Version 13 FMS: Motion system:	a: Part Suite: (ev: : Sy 3.08	60 Alternative Data, Table B2B 31000 vstem Software Version 1983.00,		
FSTD host computer: Intel Visual image generator: F Visual system display: Cro Visual projector: 3x Sony Airport Qualification Mode Airport Qualification Mode Available In-Use Runways Airport Qualification Mode Available In-Use Runways Airport Qualification Mode	Core i7 Frasca TrueVision Global II DessCkpt / 220 x 57 186248-4 Els If illustrations El 1 / / /Taxiway: El 2 / / /Taxiway:	Flt. control data B2B Aero model/data Avionics Type/S Avionics Std/Re GDU Version 13 FMS: Motion system:	a: Part Suite: (ev: : Sy 3.08	60 Alternative Data, Table B2B 31000 vstem Software Version 1983.00,		
FSTD host computer: Intel Visual image generator: F Visual system display: Cro Visual projector: 3x Sony Airport Qualification Mode Available In-Use Runways Airport Qualification Mode Available In-Use Runways Airport Qualification Mode Available In-Use Runways	Core i7 Frasca TrueVision Global II DessCkpt / 220 x 57 186248-4 Els If illustrations El 1 / / /Taxiway: El 2 / / /Taxiway:	Flt. control data B2B Aero model/data Avionics Type/S Avionics Std/Re GDU Version 13 FMS: Motion system:	a: Part Suite: (ev: : Sy 3.08	60 Alternative Data, Table B2B 31000 vstem Software Version 1983.00,		
FSTD host computer: Intel Visual image generator: F Visual system display: Cro Visual projector: 3x Sony Airport Qualification Mode Available In-Use Runways Airport Qualification Mode Available In-Use Runways Airport Qualification Mode Available In-Use Runways Taxiway:	Core i7 Frasca TrueVision Global II DessCkpt / 220 x 57 186248-4 Els If illustrations El 1 / / /Taxiway: El 2 / / /Taxiway:	Flt. control data B2B Aero model/data Avionics Type/S Avionics Std/Re GDU Version 13 FMS: Motion system:	a: Part Suite: (ev: : Sy 3.08	60 Alternative Data, Table B2B 31000 vstem Software Version 1983.00,		
FSTD host computer: Intel Visual image generator: F Visual system display: Cro Visual projector: 3x Sony Airport Qualification Mode Available In-Use Runways Airport Qualification Mode Available In-Use Runways Airport Qualification Mode Available In-Use Runways	Core i7 Frasca TrueVision Global II DessCkpt / 220 x 57 186248-4 Els If illustrations El 1 / / /Taxiway: El 2 / / /Taxiway:	Flt. control data B2B Aero model/data Avionics Type/S Avionics Std/Re GDU Version 13 FMS: Motion system:	a: Part Suite: (ev: : Sy 3.08	60 Alternative Data, Table B2B 31000 vstem Software Version 1983.00,		

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): MJC				
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)	11/			
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 WX-Radar			+	
HUD / HGS				
EFVS				
TAWS (GPWS / EGPWS)				
SMGCS: Arpt <u>/</u> Taxi Route, Visibility, mono/bidirectional				
Enhanced Taxi Markings: Arpt/Taxi Route				
☐ LPV ☐ GPS ☐ WAAS				
RNP/AR				
ADS-B In				
Full Stall				
UPRT				
Icing				
Realistic Gusting Crosswind				
Bounced Landing				

Sponsor: Liberty University

FSTD ID: 1492

Aircraft Type: Piper Seminole

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	(Sponsor ose)		(including Fartial Fask Elimitations)	
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				
The hoopies outegory A randoms				
Section 3c. Level 4 & 5 FSTD OnlyOptionally Qual in Table B1B and D1B.	ified Maneuvers,	Procedures, Ta	sks, and Functions as defined	
Area/Function/Maneuver	Requested	Qualified	Remarks	
Preflight Procedures	(Sponsor Use)	(FAA Use Only)	(Including Partial Task Limitations)	
Preflight Inspection (flight deck only).	\boxtimes			
Engine Start	\boxtimes			
Pre-takeoff Checks.			4	
In-flight Maneuvers		91		
Approach to Stalls	\boxtimes	\boxtimes	Level 5 Only	
Engine Failure (procedures only)			Level 5 Only	
Specific Flight Characteristics incorporated into the user's approved flight training program				
Instrument Procedures	TOP		/	
Standard Terminal Arrival/Flight Management System Arrival			Level 5 Only	
Holding		\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	\boxtimes		

Sponsor: Liberty University FSTD ID: 1492

Aircraft Type: 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	
Anti-ice and Deice Systems		B	
Aircraft and Personal Emergency Equipment			
Emergency Procedures	AL		
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 Procedu <mark>res</mark>		\boxtimes	
Rotor brake operation.			Helicopter only
Abnormal/emergency procedures	\boxtimes	\boxtimes	
T			

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.	