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: Western Michigan University
Location: Battle Creek
Aircraft Type: CIRRUS-SR20-SR20
FAA Identification Number: 1427
Qualification Basis: 14 CFR Part 60 Change 1, Appendix B
Qualification Level: 5

Issued by the National Simulator Program
on <u>May 9, 2017</u>.

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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>June 30, 2018</u>.

Federal Aviation Administration	Sponsor:	Western Michigan University, College of Aviation
National Simulator Program	FSTD ID:	1427
Statement of Qualification	Aircraft Type:	Cirrus SR20 Level 5 FTD

Sponsor Submission Date: 03/31/2016 · *Submissions to:* <u>9-ASO-AFS205-NSP-SIMULATOR-SCHEDULING@faa.gov</u>

Section 1. FSTD Sponsor Information

Sponsor Name:	Western Michigan University College of Aviation	FSTD Location:	
Address:	1903 West Michigan Avenue	Physical Address:	155 North Helmer Road
City:	Kalamazoo	City:	Battle Creek
State/Prov/Terr:	MI	State:	MI
Country:	USA	Country:	USA
ZIP:	49008-5314	ZIP:	49037
Sponsor ID No: (FAA Certificate Number)	JX8S258Q	Nearest Airport: (Apt Code)	KBTL

FAA Training Program Approval Authority: (TPAA)

Name:	Marc Webber		
Address:	3196 Kraft Avenue SE	Office Phone	616-974-2517
City:	Grand Rapids	Cell:	269-352-4002
State/Prov/Terr:	MI	Fax:	616-940-3140
Zip:	49512	Email:	marc.webber@faa.gov

FAA Aircrew Program Manager (APM) or Fleet Training Program Manager (FTPM)

Name:			
Address :		Office Phone	
City:		Cell:	
State/Prov/Terr:		Fax:	
ZIP:		Email:	

FSTD Management Representative:

Name:	Russ Kavalhuna, J.D.		
Address 1:	237 North Helmer Road	Office Phone	269-964-9336
City:	Battle Creek	Cell:	269-377-5031
State/Prov/Terr:	Michigan	Fax:	269-964-4676
ZIP:	49037	Email:	Russell.kavalhuna@wmich.edu

FSTD Contact:

Name:	William M. Feenstra		
Address 1:	237 North Helmer Road	Office Phone	269-964-8790
City:	Battle Creek	Cell:	269-209-3589
State/Prov/Terr:	MI	Fax:	269-964-4676
ZIP:	49037	Email:	William.feenstra@wmich.edu

Section 2. FSTD Information

Aircraft make/model/series:	Cirrus SR20	A/C Common Name:	Cirrus SR20
Qualification Basis: Qualification Level:	Part 60 Change1 **Level 5**	Manufacture Serial No.:	7568-001
Base Month: MARCH	☐ **Full Flight Simulator (FFS)** ☒ **Flight Training Device (FTD)**	Sponsor's FSTD ID:	7568-001

National Aviation Authority Qualification (For BASA-SIP Evaluations only):	
NAA Name:	N/A

NAA FSTD ID No:	N/A	NAA Qualification Basis:	N/A
NAA Qualification Level:	N/A		

Technical Information:			
FAA FSTD ID No: 1427 (If Applicable)	Convertible FSTD: ☐Yes	FSTD Manufacturer:	Frasca International, Inc.
☒eMQTG	Conv. FAA FSTD ID No.	Date of Manufacture:	03/01/2015
FSTD Configurations:	Cirrus SR20		
Pri. Engine Type/Thrust: Alt. Engine Type/Thrust:	Teledyne Continental IO-360-ES / 200hp @ 2700 rpm	FADEC Version	N/A

Flight Instrumentation/Systems:	☒EFIS ☐HUD/HGS ☐ EVS ☐ WX Radar ☐ NVG
	☒GPS ☒ GPWS ☒ FMS ☐ TCAS Ver: ☐ CPDLC
	☐EFB Class: ☐ Other:

FSTD seats available:3	2 (pilot / copilot) and 1 IOS cab seat for instructor / inspector	Flt. control data revision: Frasca International Document CERT149284/Cirrus SR20 Flight Test Report/Rev A
FSTD host computer: Intel Core i7-4930K, Win7 Pro 64 bit		Aero model/data: : Frasca International Document CERT149284/Cirrus SR20 Flight Test Report/Rev A
Visual image generator: Frasca TruVision Global		Avionics Type/Suite: Avidyne Entegra
Visual system display: 3-channel, 220-deg direct-projection		Avionics Std/Rev: R9.3
Visual projector: 3 x Sony VPL-FHZ555 LCD Laser		FMS: FMS900w
		Motion system: N/A

Airport Qualification Models	If illustrations or other presentations are attached please specify: ☐
Airport Qualification Model 1 / Available In-Use Runways /Taxiway:	N/A
Airport Qualification Model 2 / Available In-Use Runways /Taxiway:	N/A
Airport Qualification Model 3 / Available In-Use Runways / Taxiway:	N/A

Visual Ground Segment:	N/A Airport Designator	N/A Landing Runway	

Federal Aviation Administration	Sponsor:	Western Michigan University, College of Aviation
National Simulator Program	FSTD ID:	1427
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FAA Qualifying Official(s): TPAA

Area/Function/Maneuver	Requested (Sponsor Use)	Qualified (FAA Use Only)	Remarks (Including Partial Task Limitations)
CAT I: (RVR 2400/1800 ft. DH200 ft)	☒	☒	To missed approach
CAT II: (RVR 1200 ft. DH 100 ft)	☐	☐	
CAT III: (lowest minimum evaluated)　　RVR,　DH　　ft.	☐	☐	
Circling Approach : Arpt/Appr/Ldg RW	☒	☒	To missed approach
Windshear Training:	☐	☐	
Auto-coupled Approach	☒	☒	To missed 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　☐　In	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	

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
Normal and Abnormal Procedures			
Powerplant	☒	☒	
Fuel System.	☒	☒	

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National Simulator Program	FSTD ID:	1427
Statement of Qualification	Aircraft Type:	Cirrus SR20 Level 5 FTD

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 <u>NOT</u> Qualified

Area/Function/Maneuver	Remarks
1.	
2.	
3.	
4.	
5.	
6.	