### 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:** 1425

Qualification Basis: 14 CFR Part 60 Change 1, Appendix B

**Qualification Level:** 5

Issued by the National Simulator Program on March 25, 2016.

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Lawrence E. 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 May 31, 2017.

Sponsor: Western Michigan University,

College of Aviation

FSTD ID: 1425

Aircraft Type: Cirrus SR20 Level 5 FTD

Sponsor Submission	on Date: 03/25/2016 Su	hmissions to: 9-450	)-AFS205-NSP-SIMULATOR-SCHEDULING @faa.gov			
Openior Cubinion	Section 1. FSTD Sp	<u></u>				
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 Progra	am Approva <mark>l Authority: (TPAA)</mark>		4			
Name:	Marc Webber					
Address:	3196 Kraft Avenue SE	Office Phone	616-974-2517			
City:	Gra <mark>nd</mark> Rapids	Cell:	269-352-4002			
State/Prov/Terr:	MI	Fax:	616-940-3140			
Zip:	49 <mark>51</mark> 2	Email:	marc.webber@faa.gov			
FAA Aircrew Progra	ım <mark>Man</mark> ager (APM) or Fleet <mark>Training Program Ma</mark>	nager (FTPM)				
Name:						
Address :		Office Phone				
City:	V V V V	Cell:	W //			
State/Prov/Terr:		Fax:				
ZIP:		Email:				
FSTD Managemer	nt Repres <mark>entative::</mark>	1	.0//			
Name:	Russ Kalvalhuna, J.D.		1			
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			

### Federal Aviation Administration National Simulator Program

Statement of Qualification

Sponsor: Western Michigan University,

College of Aviation

FSTD ID: 1425

Aircraft Type: Cirrus SR20 Level 5 FTD

Section 2. FSTD Information						
Aircraft	Cirrus SR	20	A/C Common	Cirrus	s SR20	
make/model/series:	D + 00 01		Name:			
Qualification Basis: Qualification Level:	Part 60 Ch Level 5	nange1	Manufacture Serial No.:	7567-001		
Base Month: MARCH		ight Simulator (FFS)	Sponsor's	7567-001		
		-	FSTD ID:			
National Aviation Authority		Training Device (FTD)	-0			
National Aviation Authority Qualification (For BASA-SIP Ex			luations only):			
NAA Name:	N/A					
NAA FSTD ID No:	N/A		NAA Qualification N/A Basis:			
NAA Qualification Level:	N/A					
Technical Information:		NL	AL			
FAA FSTD ID No: 1426 (If Applicable)	Convertib	le FSTD: ☐Yes	FSTD Manufacturer:		Frasca I	nternational, Inc.
⊠eMQTG	Conv. FA	A FSTD ID No.	Date of Manufacture:		03/01/20	15
FSTD Configurations:	Cirrus SR	20		1	0	
Pri. Engine Type/Thrust:	Teledyne	Continental IO-360-ES	FADEC Version	A	N/A	
Alt. Engine Type/Thrust:	/ 200hp @	2700 rpm				
Flight Instrumentation/Sys	tems:	⊠EFIS □HUD/HG	S 🗆 EVS 🗆	WX Ra	ndar	□ NVG
		⊠GPS ⊠ GPWS	⊠ FMS □	TCAS	Ver:	□ CPDLC
		□EFB Class:	☐ Other:			
FSTD seats available:3	2 (nilot /		<del>-</del>		on: Fras	ca International
FSTD seats available:3 2 (pilot / copilot) and IOS cab seat for			Document CERT149284/Cirrus SR20 Flight Test			
	or / inspector	Report/Rev A			//	
FSTD host computer: Intel			Aero model/data: : Frasca International Docume			rnational Document
-	TO DE LA CONTRACTOR DE	CERT149284/Cirrus SR20 Flight Test Report/Rev A			t Test Report/Rev A	
Visual image generator: F	rasca TruVi	sion 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 Mode		N/A				
Available In-Use Runways	/Taxiway:					
Airport Qualification Model 2 / N/A						
Available In-Use Runways /Taxiway:						
Airport Qualification Mode		N/A				
Available In-Use Runways / Taxiway:						
Visual Ground Segment:		N/A	N/A	N/A		
		Airport Designator	Landing Runv	vay		

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### 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): WEBBER			
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)	04 1,		
CAT III: (lowest minimum evaluated) RVR, DH ft.			
Circling Approach : Arpt/Appr/Ldg RW			To missed approach
Windshear Training:			
Auto-coupled Approach		$\boxtimes$	To missed approach
Auto Go Around			
Auto-land / Roll Out Guidance			
TCAS/ACAS I / II			
WX-Radar			+
HUD / HGS			
EFVS			
TAWS (GPWS / EGPWS)	$\boxtimes$	$\boxtimes$	
SMGCS: Arpt <u>/</u> Taxi Route, Visibility, mono/bidirectional			
Enhanced Taxi Markings: Arpt/Taxi Route			
□ LPV    □ GPS    □ WAAS			
RNP/AR			
ADS-B			

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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	П				
1 0 7					
		7			
Cartina 2a Land 4 9 5 ECID Only 0 11 0 11	- 1) (				
Section 3c. Level 4 & 5 FSTD OnlyOptionally Quality in Table B1B and D1B.	ified Maneuvers,	Procedures, Ta	sks, and Functions as defined		
Area/Function/Maneuver	Requested (Sponsor Use)	Qualified (FAA Use Only)	Remarks (Including Partial Task Limitations)		
Preflight Procedures	E BA	10 11 17			
Preflight Inspection (flight deck only).					
Engine Start			4		
Pre-takeoff Checks.	$\boxtimes$				
In-flight Maneuvers		9//			
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	TRP	. //			
Standard Terminal Arrival/Flight Management System Arrival			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	$\boxtimes$	$\boxtimes$	Level 5		
Normal and Abnormal Procedures					
Powerplant	$\boxtimes$	$\boxtimes$			
Fuel System.	$\boxtimes$	$\boxtimes$			

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Area/Function/Maneuver	Requested (Sponsor Use)	Qualified (FAA Use Only)	Remarks (Including Partial Task Limitations)
Electrical System.		$\boxtimes$	
Environmental and Pressurization Systems	$\boxtimes$	$\boxtimes$	
Fire Detection and Extinguisher Systems	$\boxtimes$	$\boxtimes$	
Navigation and Avionics Systems	$\boxtimes$	$\boxtimes$	
Automatic Flight Control System, Electronic Flight Instrument System, and Related Subsystems.	$\boxtimes$		
Flight Control Systems	$\boxtimes$	$\boxtimes$	
Anti-ice and Deice Systems			
Aircraft and Personal Emergency Equipment			
Emergency Procedures	1	1	
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.		X	
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

Remarks