

**European Union**

**Finnish Transport and Communications Agency (Traficom)**

**FLIGHT SIMULATION TRAINING DEVICE (FSTD)  
QUALIFICATION CERTIFICATE FI-1A-016**

Pursuant to Commission Regulation (EU) No 1178/2011 and subject to the conditions specified below, the Finnish Transport and Communications Agency (Traficom) hereby certifies that

<b>FSTD level</b>	<b>Full Flight Simulator, Level D</b>
<b>Simulated A/C type</b>	<b>Airbus A320-200</b>
FSTD manufacturer	TRU Simulation + Training Inc.
Serial number	SN-00002618

Located at	Finnair Plc Pyhtäänkorventie 11-13 01530 Vantaa FINLAND
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has satisfied the qualification requirements prescribed in Part-ORA, subject to the conditions of the attached FSTD specification.

This qualification certificate shall remain valid subject to the FSTD and other holder of the qualification certificate remaining in compliance with the applicable requirements of Part-ORA, unless it has been surrendered, superseded, suspended or revoked.

Date of issue	19 Dec 2019
Signature on behalf of Traficom	
Clarification of the signature	Olli Hänninen
Title	Senior Inspector, Flight Simulators



## FLIGHT SIMULATION TRAINING DEVICE (FSTD)

### QUALIFICATION CERTIFICATE FI-1A-016, FSTD SPECIFICATIONS, Page 1 of 2

A) Type or variant of aircraft	Airbus A320-214 (CFM) and Airbus A320-232 (IAE)
B) FSTD qualification level	Full Flight Simulator, Level D
C) Primary reference document	CS-FSTD(A) initial issue
D) Visual system	Rockwell Collins EP-8100 image generator, FoV 200°x40°, collimated, three channels, day/twilight/night, LCoS projectors
E) Motion system	6 degrees of freedom, electric, 60 inches, Moog Electric MB-E-6DOF/60/14000KG
F) Engine fit	<ul style="list-style-type: none"><li>• CFM International CFM 56-5B4, FADEC 5BS4F3</li><li>• International Aero Engines IAE V2527-A5, FADEC SCN21/AA</li></ul>
G) Instrument fit	<ul style="list-style-type: none"><li>• Instrument fit is Airbus STD 1.9.1</li><li>• EIS2 std S11</li><li>• FWC std H2-F7</li><li>• FMGC for CFM: Honeywell std H2BPC13, Rel. 1A</li><li>• FMGC for IAE: Honeywell std H2BPI12, Rel. 1A</li></ul>
H) ACAS fit	TCAS II ver. 7.1 with auto flight TCAS mode
I) Windshear	Windshear profiles are available, windshear warning, predictive windshear system (PWS)
J) Additional capabilities	<ul style="list-style-type: none"><li>• RNP APCH to LNAV and LNAV/VNAV minima (APV/Baro-VNAV)</li><li>• GLS (i.e. GBAS) approaches</li><li>• RNP AR approach with RNP 0.1 including RF legs</li><li>• ADS-B</li><li>• Back-up speed scale (BUSS)</li><li>• Runway Overrun Prevention Warning (ROW), Runway Overrun Protection (ROPS)</li><li>• Smoke generation system</li><li>• ATIS</li></ul>
K) Restrictions or limitations	No

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## FLIGHT SIMULATION TRAINING DEVICE (FSTD)

### QUALIFICATION CERTIFICATE FI-1A-016, FSTD SPECIFICATIONS, Page 2 of 2

#### L) Guidance information for training, testing and checking considerations

CAT I	RVR 550 m	DH 200 ft	Yes
CAT II	RVR 300 m	DH 100 ft	Yes
CAT III (lowest minimum)	RVR 75 m	no DH	Yes
LVTO	RVR 125 m		Yes
Recency			Yes
IFR-training / IFR-checks			Yes / Yes
Type rating			Yes
Proficiency checks			Yes
Autocoupled approach			Yes
Autoland / Roll out guidance			Yes (fail operational) / Yes
ACAS I / II			N/A / Yes (TCAS II ver. 7.1 with auto flight TCAS mode)
Windshear warning system / predictive windshear			Yes / Yes
WX-radar			Yes
HUD / HUGS			N/A / N/A
FANS			N/A
GPWS / EGPWS			Yes / Yes
ETOPS capability			Yes
GPS			Yes (2 installed)
Other			See item J above

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