



Full-Flight Simulator

AIRBUS A321-100 (FT23)

Location Lufthansa Aviation Training, Frankfurt (Simulator-ID: FT23)

SIMULATOR	
Simulator Manufacturer	CAE, Canada
In Service Date	July 1997
Aircraft Model	A321-100
Registration (Master Aircraft)	D-AIRN
Product No.	MSN 560
Simulator Host Computer	IBM P640
Motion System	Series 500, 6 DOF, digital
Control Loading	digital

AIRCRAFT SYSTEM	
Engine Version	AE V2530-A5, 30000 lbs T/O Thrust
Aerodynamic Data Revision	Aerospatiale D00204703
Auto Flight System	
FMGC	Thales Avionics/Smiths(Full GPS, Orig. a/c boxes) Level/Std.: Rel. 1A S7A112
FCU	M11, Thales Avionics Sa (Orig. a/c box)
FAC	CR102, Thales Avionics Sa (Software simulation)
MCDU	Thales Avionics/Smiths(Orig. a/c box)
Electronic Flight Control System	
ELAC	L93, Thales Avionics Sa (Orig. a/c boxes)
SEC	L123, Thales Avionics Sa (Orig. a/c boxes)
FCDC	L53, LITEF GmbH (Software simulation)
Electronic Instrument System	
DMC	V70, DIEHL AEROSPACE GmbH (Orig. a/c boxes)
FWC	H2F7, Airbus France (Orig. a/c boxes)
TCAS II	7.1, Honeywell (software simulation)
ACARS	AMU MK I, Honeywell International Inc. (Orig. a/c box)
ADIRU	Honeywell (software simulation)
EGPWS	MK V, Honeywell International Inc. (Orig. a/c box)
BSCU	L4.9B Messier-Bugatti (Software simulation)
VISUAL	
Visual System Manufacturer	Rockwell Collins, England
Type of Image Generator	EP-100OCT
Type of Display	CAE 150x40 deg FOV mirror, "eyevis" LED Projectors ESP-LHD 1000 single chip DLP
Illumination Levels	Day/Dusk/Night
Number of Airport Scenes	more than 90

INSTRUCTOR STATION	
Display	X-Terminals, 2 CRTs with capacitive touch screen
Printer/Plotter	Monochrome Laser Printer
Number of Malfunctions	300
Automated Training Lessons	available on request for Base Check, Conversion, LOFT, Refresher
Landing Training	Individual definition of a generic airfield (RWY Characteristics: Length, Width, parallel RWY; RWY Lights: VLA, Appr. Lights)
Multiple Weather Simulation	Provides setting of individual weather conditions at different Airports
Unusual Attitude Recovery Training	available
Windshear / Microburst Scenarios	various windshear profiles for T/O and Landing available
TCAS	various scenarios with individual definition of intruder trajectory available
ATIS	available
Datalink (AOC)	various AOC scenarios available customized AOC applications on request
FMS Flight Plan Copy / Load	copy of entered flight plans and manual load of predefined flight plans on request
Debrief Station	Video and audio recording, stored as media file on USB drive
Display Options	metric and/or imperial
OPTIONS	
	Provision of Customer Options on request
Electronic Flight Bag	Lufthansa Class II EFB
EGPWC	NO RAAS available
QUALIFICATIONS	
German LBA	JAA Level DG, annually, according to IQTG (ICAO Doc 9625 First Edition) Zero Flight Time (Approved for Lufthansa)
EASA-ID	DE-1A-018