



Full-Flight Simulator

BOEING MD-11/MD-11F (FT37)

Location Lufthansa Aviation Training, Frankfurt (Simulator-ID: FT37)

SIMULATOR	
Simulator Manufacturer	CAE; Canada
In Service Date	1990 in Zurich, since April 2001 in Frankfurt
Aircraft Model	MD-11/MD-11F
Registration (Master Aircraft)	D-ALCF
Product No.	FN 640
Simulator Host Computer	IBM RISC System/6000 model F50
Motion System	Hydraulic, digital, synergistic 6 DOF
Control Loading	digital, hydraulic
AIRCRAFT SYSTEM	
Engine Version	
Primary Fit	General Electric CF6-80C2
Secondary Fit	Pratt & Whitney 4460 and 4462
Auto Flight System	
Flight Control Computer	Honeywell, FCCs -908 (Orig. A/C units)
MCDU	Honeywell (Orig. A/C units)
Flight Management System	Honeywell, FMCs - 921 (Orig. A/C units)
TCAS II	7.1, Honeywell TPA-100B (Software simulation)
ACARS	Allied Signal (Orig. A/C unit)
IRU	Honeywell (Software Simulation)
EGPWS	Honeywell MK V (Orig. A/C unit)

GNS	Honeywell (Software Simulation)
SFDS	Meggitt (Orig. A/C unit)
VISUAL	
Visual System Manufacturer	Evans & Sutherland
Type of Image Generator	EP-1000CT
Type of Display	CAE Wide Mirror 180x40 deg FOV, ESCP 2000 Projectors
Illumination Levels	Day/Dusk/Dawn/Night
Number of Airport Scenes	initially 75, later more than 100
INSTRUCTOR STATION	
Display	2x20" LCD touch screens
Printer/Plotter	Monochrome Laser Printer
Number of Malfunctions	more than 350
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	not available
Predictive Windshear Scenarios	various windshear profiles available
Non-Predictive Windshear Scenarios	various windshear profiles for T/O and Landing available
TCAS	various scenarios with individual definition of intruder trajectory available
ATIS	available
ACARS Scenarios	various datalink applications
FMS Flight Plan Copy / Load	copy of entered flight plans and restore to FMC possible
Debrief Station/Video/Recording	Video available
Display Options	metric and/or imperial
Smoke Simulation	available
OPTIONS	
Electronic Flight Bag	Lufthansa Class II EFB Provision of Customer Options available on request
QUALIFICATIONS	
German LBA	JAA Level D, annually, according to JAR-STD 1A, Amdt. 2
EASA-ID	DE-1A-038