



JOEL PLAICE & ASSOCIATES INC.

INTERNATIONAL SIMULATOR CONSULTING AND TECHNICAL SUPPORT SERVICES

CAE MD-90 Full Flight Simulator Technical Description

Simulator General Description	
Operator/Sponsor	Flight Training Systems
Location	Daytona Beach, Florida
Manufacturer	CAE, Montreal, Canada
Original In-Service Date	1993
Current Status	FAA Certified Level D

Simulated Aircraft	
Aircraft Manufacturer	McDonnell Douglas
Engine Manufacturer / Model	IAE V2500-D5
Tail # Still in Operator's Fleet	N/A – Independent Training Center

Qualification / Certification			
Authority:	Country:	Standard:	Designation & ID:
FAA	USA	FAA Level D	883
Certification Event:	Certifying Authority:	Date:	

Initial Qualification	FAA	1996
Last Recurrent Evaluation	FAA	May 2007
Next Recurrent Evaluation	FAA	May 2008

Aircraft Avionics

Unit / System:	Manufacturer / Model:
Flight Management	Yes
FMC Re-host Computer	No, A/C FMC Equip 4081560-901
MCDU	Yes
GPWS / EGPWS	EGPWS MARK VII - 965-0876-041-B10-B17
EICAS / ECAM	Yes
EFIS Symbol Generator	Yes

Flight Compartment

Primary Flight Instrument Type	Electronic
Engine Instrument Type	Electronic
Unit / System:	Manufacturer / Model:
ADI EADI PFD	407-3241-920

HSI EHSI NFD	EHSI
CDU MCDU	MCDU
INS GPS EGPWS	EGPWS
Autopilot	Yes
TCAS	Yes
IVSI	No Electronic Display
RDDMI	No Electronic Display
Weather Radar	Yes
ACARS	Yes
ATIS	Yes
Auto Throttles Installed	Yes
Heads Up Display	None
Simulator Upgrades	<ul style="list-style-type: none"> • CPU Media Storage • Complete Refurb 2007 • Re-Cert May 2007

Motion System	
Manufacturer / Model	CAE 600 Series
Type (Hyd/Elec)	Hydraulic
Motion System Drive	Digital

Number of Axis	6 Axis
Jack Stroke Length	60 inch Stroke
HPU Pump(s)	<ul style="list-style-type: none"> • 2 Motion Pumps • 1 Control Loading Pump • 1 Cooling Pump

Control Loading System	
Primary Controls:	
Manufacturer / Model	CAE
Type (Hyd/Elec)	Hydraulic
Control System Drive	Digital
No. of Primary Channels	6
Loaded Primary Controls:	Installed:
Capt Aileron (Wheel)	Yes
Capt Elevator (Column)	Yes
FO Aileron (Wheel)	Yes
FO Elevator (Column)	Yes
Common Rudder (Pedals)	Yes
Nosewheel (Tiller)	Yes
Toe Brake (L&R)	Yes
Secondary Controls	

Loaded Secondary Controls:	Installed:
Stab Trim	Yes (Elec)
Speed Brake	Yes (Elec)
Auto Throttles	Yes (Hyd)

Visual System - Image Generator	
IG Manufacturer / Model	CAE Maxvue Enhanced B
Number of Channels	3 Channels
Y2K Compliant	Yes
Visual System - Display System	
Display Type	WIDE Mirror
Field of View	180 Degrees x 40 Degrees FOV
Monitor Manufacturer / Model	EIS/Barco 5044
Window Display Configuration	Cross Cockpit
AutoCal	Yes
Visual Scenes	More than 30 Custom Visual Scenes •

Host Computer / Linkage	
Manufacturer / Model	IBM RISC 590

Operating System / Version	AIX
Y2K Compliant	Yes
Upgrades	Media Storage Upgrade
Linkage (I/O) Interface	CAE Super C
Options	

Instructor Station	
Manufacturer / Model	CAE
IOS Display	Dual TouchScreen/Color
Computer	NCD - Bases
Y2K Compliant	Yes
Remote Control Unit	No
Independent Crew Training	Not Applicable
Features	<ul style="list-style-type: none"> • Autograph QT6

Aural Cue System	
Manufacturer / Model	CAE
Type / Description	Digital

Simulated Special Effects

Feature:	Installed:
FAA / JAA Approved Windshear Profile(s)	Yes
Microburst Model(s)	FAA Windshear Profiles
Simulated Oxygen System	Yes
Smoke Generation System	No
CAT I, II, III	CAT 3
ETOPS	N/A

Data Package (Installed and Certified in the Simulator)

Category:	Documentation:	Revision:
Aerodynamic Model	MDC K5121	C
Flight Controls Model	MDC K5121	C
Engine Model	MDC K5121	

Documentation

Source:	Amounts Present (Selection is Bold and Underlined)				
Equipment Manufacturer (Boeing & CAE)					
0%	25%	50%	75%	<u>100%</u>	
Vendor (Computer, Visual, Peripherals, etc.)					

0%	25%	50%	75%	<u>100%</u>
Operator (Airline, etc)				
0%	<u>25%</u>	50%	75%	100%

Spare Parts				
Source:		Amounts Present (Selection is Bold and Underlined)		
Aircraft Parts				
0%	<u>25%</u>	50%	75%	100%
Simulator Manufacturer				
0%	25%	<u>50%</u>	75%	100%
Visual Manufacturer				
0%	25%	<u>50%</u>	75%	100%
Vendor				
0%	25%	<u>50%</u>	75%	100%