



# JOEL PLAICE & ASSOCIATES INC.

INTERNATIONAL SIMULATOR CONSULTING AND TECHNICAL SUPPORT SERVICES

## KLM 767-300ER Full Flight Simulator Technical Description

Simulator General Description	
Operator/Sponsor	KLM Royal Dutch Airlines
Location	Schipol International Airport/KLM Flight Training Center
Manufacturer	CAE, Montreal, Canada
Original In-Service Date	1995
Current Status	Currently Certified and Operating in Training

Simulated Aircraft	
Aircraft Manufacturer	Boeing 767-300ER Certified
Engine Manufacturer / Model	GE CF6-80C2-B6F Pratt & Whitney PW 4060
Tail # Still in Operator's Fleet	Yes # PH-BZX RT-RA

Qualification / Certification			
Authority:	Country:	Standard:	Classification:
RLD	Netherlands	JAR-STD 1A	Level D

Certification Event:	Certifying Authority:	Date:
Initial Qualification	RLD	June 1995
Last Recurrent Evaluation	RLD	December 2006
Next Recurrent Evaluation	RLD	December 2007

Aircraft Avionics	
Unit / System:	Manufacturer / Model:
Flight Management	GE FMC Honeywell 4052500-962 (Re-Hosted) Op Program 3416HNP02C06 Op Code 751FBGC7SMIC
Flight Management	P&W FMC Honeywell 78787878 (Re-Hosted) Op Program 3416HNP02C06 Op Code 3477BCG00556
FMV Rehost Computer	IBM IntelliStation 6219 Utilizing Windows XP
MCDU	Honeywell 4058650-913/931
GPWS / EGPWS	EGPWS Honeywell 965-0976-003-222-212
EICAS / ECAM	Software Emulation for EICAS Computer EICAS Displays Collins 622-7999-003
EFIS Symbol Generator	Simulated EFIS Symbol Generator (Aircraft PFD'S)

Flight Compartment	
Primary Flight Instrument Type	Electronic

Engine Instrument Type	Electronic
Unit / System:	Manufacturer / Model:
ADI   EADI   PFD	EADI Collins 622-7998-003
HSI   EHSI   NFD	EHSI Collins 622-7999-003
CDU   MCDU	MCDU Honeywell 964-0443-003
INS   GPS   EGPWS	GPS Yes / EGPWS Yes 9650976-003-216
Autopilot	Collins MCP 622-8780-102
TCAS	TCAS II Version 7.0 ATC/TCAS Panel # G6990-48R
IVSI	LCD 4039893-902
RDDMI	96553-10-5-607
Weather Radar	Collins Control Panel 622-5130-123
ACARS	CPU 2231500-800A
ATIS	Yes
Auto Throttles Installed	Yes
Heads Up Display	None
Simulator Upgrades	Major 2004 <ul style="list-style-type: none"> <li>• EFIS/EICAS</li> <li>• Pegassus FMC</li> <li>• EGPWS</li> <li>• MMR (Multi Mode Receiver for GPS)</li> </ul>

Motion System	
Manufacturer / Model	CAE 800 series
Type (Hyd/Elec)	Hydraulic
Motion System Drive	Digital/DMC Based/CAE DN1
Number of Axis	6 Axis
Jack Stroke Length	80 inch Stroke
HPU Pump(s)	<ul style="list-style-type: none"> <li>• 2 Motion Pumps</li> <li>• 1 Control Loading Pump</li> <li>• 1 Cooling Pump</li> </ul>

Control Loading System	
Primary Controls:	
Manufacturer / Model	CAE / Digital
Type (Hyd/Elec)	Hydraulic
Control System Drive	Digital/DMC Based/CAE DN1
No. of Primary Channels	9
Loaded Primary Controls:	Installed:
Capt Aileron (Wheel)	Yes
Capt Elevator (Column)	Yes
Capt Rudder (Pedals)	Yes
FO Aileron (Wheel)	Yes

FO Elevator (Column)	Yes
FO Rudder (Pedals)	Yes
Nosewheel (Tiller)	Yes
Toe Brake (L&R)	Yes
<b>Secondary Controls</b>	
<b>Loaded Secondary Controls:</b>	<b>Installed:</b>
Stab Trim	Yes (Elec)
Speed Brake	Yes (Elec)
Auto Throttles	Yes (Hyd)

<b>Visual System - Image Generator</b>	
IG Manufacturer / Model	CAE Maxvue Enhanced B
Number of Channels	3 Channels
Y2K Compliant	Yes
<b>Visual System - Display System</b>	
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	5 Custom <ul style="list-style-type: none"> <li>• Amsterdam</li> <li>• Brussels</li> <li>• Dusseldorf</li> <li>• Heathrow</li> <li>• Rotterdam</li> </ul>

Host Computer / Linkage	
Manufacturer / Model	IBM 595 RISC
Operating System / Version	AIX 3.2
Y2K Compliant	Yes
Upgrades	Major Avionics update in 2004
Linkage (I/O) Interface	CAE Super C w DMC based Ethernet communications
Options	CAE Integrated Diagnostic System (IDS)

Instructor Station	
Manufacturer / Model	CAE X-Station
IOS Display	Dual TouchScreen/Color with 2 EL Control Panels
Computer	IBM 150 Workstation
Y2K Compliant	Yes
Remote Control Unit	Yes

Independent Crew Training	Not Applicable
Features	<ul style="list-style-type: none"> <li>500 Malfunctions</li> </ul>

Aural Cue System	
Manufacturer / Model	CAE (No system Model No.)
Type / Description	Digital

Simulated Special Effects		
Feature:	Installed:	
FAA / JAA Approved Windshear Profile(s)	Yes	
Microburst Model(s)	Yes	
Simulated Oxygen System	Yes	
Smoke Generation System	Yes	
CAT I, II, III	CAT 1, CAT 2, CAT III DH = 0 ft.	
ETOPS	Yes	
Data Package (Installed and Certified in the Simulator)		
Category:	Documentation:	Revision:
Aerodynamic Model	D613T305	C
Flight Controls Model	D613T125-1101	J

Mass Properties Model	D613T120-1101	G
Engine Model	D611T308 (GE)	E
Engine Model	D611T314 (P&W)	A

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				
<u>0%</u>	25%	50%	75%	100%
Simulator Manufacturer				
<u>0%</u>	25%	50%	75%	100%
Visual Manufacturer				



<u>0%</u>	25%	50%	75%	100%
Vendor				
<u>0%</u>	25%	50%	75%	100%