

# Zhuhai Xiang Yi Aviation Technology Co., Ltd.



# Embraer EMB145FFS

**Technical information** 



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## **Ÿ** General Information

SIMULATOR:	EMB145FFS
Manufacture:	CAE Inc. Montreal, Canada
Computer:	IBM PC X235
Certification:	Level D, Semi-Annually qualified by CAAC
In Service Date:	2005.6
Location:	Zhuhai, Guangdong, P.R. of China
VISUAL:	
Manufacturer:	CAE Inc. Montreal, Canada
Computer:	Three 19-Inch Rackmount Industrial PCs
Type of Image Generator:	TROPOS 300
Type of Display:	BARCO 5064 Field of View: 40°×180°
Illumination Levels:	Day/Dusk/Dawn/Night
INSTRUCTOR STATION:	
Manufacturer:	CAE Inc. Montreal. Canada
Computer:	2 NCD Color HMX X-Terminal Computer
Type:	2x15" color touch-sensitive LCDs and additional
	pushbuttons
MOTION AND CONTROL LOADIN	G:
Manufacturer:	CAE Inc. Montreal, Canada
Туре:	CAE 600 Series with Digital Motion and Control
21	Loading, Motion 6 DOF
SPECIAL TRAINING AIDS:	
TCAS:	Available
ACARS:	Available
GPS:	Available
ATIS:	Available
EGPWS	Available
Windshear training:	Available
Number of Malfunctions:	More than 220
Automated Lessons for:	Transition training
	Base Check
	Line Oriented Flight Training (LOFT)
	Recurrent
	Customer specified lessons available on request



### **Ÿ** General Information

### cont'd

### DATA PACKAGES:

Aerodynamic Data Revision:	EMB Docment 145-AD-304 Vol 6 Aero Data Bank
	Version 3L
Engine Model and Data Revision:	Allison Engines AE 3007A1
	CAE Performance Model
	FADEC version 7.6
Flight Controls Data Revision:	EMB Docment 145-AD-304 Vol 4
	EMB Docment 145-AD-304 Vol 6 Hinge Moment
	Data Version 3E
Flight Management System:	Dual Universal 1K

### Single Honeywell Primus NZ-2000

#### SIMULATATED AIRPLANES:

Airplane Model:	EMB-145		
MTOW:	22,000KGS		
MLW:	193,00KGS		
MZFW:	17,900KGS		
Attitude Callouts:	500,100,50,40,30,20,10,Minimums		
	Different Callout types are available on request		
Cockpit Layout:	EMBRAER EMB-145 tail number 701		
AIRCRAFT TYPE / ENGINE:			
Engine Manufacturer:	Allison Engines		
Supplied Combinations:	EMB-145 with AE3007A1		



## **Ÿ** Visual Databases

Following airports are selected from the instructor station for training:

Real airports					
Chiang Kai Shek Intl	(RCTP)	Narita/Tokyo	(RJAA)		
Kansai Intl	(RJBB)	Fukuoka	(RJFF)		
Tokyo Intl	(RJTT)	Seoul/Incheon	(RKSI)		
Manila/Ninoy Aquino Intl	(RPLL)	Hong Kong Intl	(VHHH)		
Macau	(VMCC)	Bangkok Intl	(VTBD)		
Soekarno-Hatta Intl	(WIII)	Singapore/Changi (WSSS)	(WSSS)		
Beijing/Capital	(ZBAA)	Guangzhou/Baiyun	(ZGGG)		
Guilin	(ZGKL)	Zhuhai/Sanzao	(ZGSD)		
Shenzhen/Huangtian	(ZLSZ)	Xi'an/Xianyang	(ZLXY)		
Kunming/Wujiaba	(ZPPP)	Gaoqi/Xiamen	(ZSAM)		
Hangzhou/jianqiao	(ZSPD)	Shanghai/Hongqiao	(ZSSS)		
Chongqing	(ZUCK)	Guanghan	(ZULS)		
Chengdu	(ZUUU)	Urumqi/Diwopu	(ZWWW)		

#### Generic airports

Generic airport is reconfigurable, allowing the instructor to create a variety of training environments through the simple manipulation of database elements, such as mountains, cities, terminals, PAPI/VASI...

#### Note:

Most of the real airports are aligned properly for training. However, Xiang Yi does not automatically update those airport databases to reflect changes to the airport and its environment that may affect the certifiability of a particular database.

Most airports, which are not listed above, can be made available as a generic airport.

If the customer requests "Real Airports" not yet available, Xiang Yi Flight Training is willing to implement each other database for which the customer will be charged additionally. However, this implementation will take a certain time.

For more details please contact Xiang Yi Flight Training's responsible Engineering Department.



## **Ÿ** Navigation Database

The present used navigation database is base on the training for China Southern Airlines pilots.

On request it might be possible to use different databases, if they are compatible to our system.

However, the use of different navigation databases has to be agreed with Xiang Yi Flight Training's engineering department in advance.



## Ϋ́ Instructor Station Layout





## **Ÿ** Cockpit Layout

### Captain's Panel





## Ÿ Cockpit Layout cont'd

First Officer's Panel





## Ϋ́ Cockpit Layout cont'd

**Pilot's Lightshield and Center Panel** 







## Ÿ Cockpit Layout cont'd

## **Overhead Panel**





## Ÿ Cockpit Layout cont'd

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Alternate configuration

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#### Pedestal Panel





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### **Ÿ** Aircraft Avionic

	ACARS
Original Aircraft Box	DU
	RMU
	AWU
	IC-600
Original Arctait Box	FMC/CDU NZ2000 (Alternate Config)
	CDU (Alternate Config)
	NAV Computer
	NAV CDU
	EGPWS
	HSCU
	AHRS(900 and 800)
	ADC
Simulated Aircraft Box	CMC
	SPC
	DAU
	FEDAC

#### **Avionic Options**

Some of the above listed LRU's offer options which can be activated according to customer's individual requirements. The present avionic standard is based on China Southern's aircraft and hence might deviate from customer's avionic standard (eg. Automatic call-outs, indication of imperial or metric-units etc, ...). Xiang Yi Flight Training is able to activate several of these options to fulfill customer's individual requirements.



## **Ÿ** Technical Responsibility

For additional information on all technical simulator aspects and for discussion of your specific customer setup please contact the responsible engineering department.

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