



MILITARY EXPORT

ZLIN 242 L
FLIGHT SIMULATOR



ZLIN 242L



ZLIN 242 L

FLIGHT SIMULATOR



Standard equipment

1x	massive construction FS Zlin 242 L (steel)
1x	laminated engine cowl
2x	anti-slip entry steps
2x	video projector for visualization flight instruments
1x	video projector for visualization landscape
1x	19" rack Alfasim PC systems
2x	Linux operating systems
1x	simulation software Alfasim FS 2010 – standard edition
1x	Alfasim central control unit
1x	19" rack including active cooling
1x	19" rack central voltage UPS systems
1x	19" rack sound blender
1x	19" rack sound amplifier
3x	high performance speakers
2x	Headset SENNHEISER HME 110
1x	full set of the flight instruments
1x	full set of Bendix/King instruments
1x	compass
1x	audio panel (Bendix/King)
1x	pilot intercom system
1x	full set of the Zlin 242 L controllers
1x	basic instructor station
6x	transport wheels
2x	simulator cockpit carpets
1x	frame and projection area (w 4,05 x h 2,50 m)
1x	user manual - Alfasim flight simulator Zlin 242 L
1x	user manual - Alfasim FS 2010
1x	fire extinguisher (2 kg CO2)



ZLIN 242 L

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Standard replaceable blocks

HC 01 L	Left hand control
HC 02 R	Right hand control
FC 01 L	Left foot control
FC 02 R	Right foot control
EM 01 H	Hand control
EM 02 F	Foot control
CP 01 A	Central control panel (flaps, fuel, trimming, switches)
IP 01 L	Left panel of the dashboard (flight instruments, compass)
IP02C	Central panel of the dashboard (flight instruments)
IP 02 R	Right panel of the dashboard (flight instruments)
RP01 A	Radio navigation panel (NAV/COMM, DME, transponder....)
DP 01 A	Bottom panel of the dashboard (gas, propeller, mixture ...)
VS01 A	Vibration pilot seat
HS 01 A	Set of Sennheiser HME110 headphones
OP 01 A	Set of Alfasim optical sensors
PS 01 A	Projection system (flight instruments, landscape)
CU 01 A	Alfasim central control unit
CC 01 A	Complete computer set (full 19 "rack)
SS 01 A	Alfasim service tool set



Simulation software

Flight simulation software

ALFASIM software FS 2011 is the fifth version of our flight simulation software package that runs under LINUX operating system. Development of current software version took several years taking advantage of experiences from real flights, pilot training and final testing. Even system administration is simple and user friendly, it offers comprehensive pilot training in procedures for emergency situations and situations needed for quality training useful not only for military pilots.

Our simulation software ALFASIM is continuously improved for usage of new technological standards.

Software offers simulation of flying in all weather and time conditions including night flights. Flight features are developed in a way to match the aerodynamic and ground characteristics of ZLIN 242L aircraft and to all control characteristics.



It is possible to change weather conditions, wind speed and direction, visibility, precipitation, seasons, air temperature and pressure in all time and during a simulation flight. It is also possible to simulate the wind shear, turbulence and other effects caused by weather conditions.

In flight training it is necessary to have sophisticated and transparent analysis of the flight and all intermediate values as well as the configuration of the aircraft during a flight.



Simulation software gives full control of all aircraft control elements, including the possibility to simulate fault's of elements and their combinations, which result in perfect training for emergency situations.





MILITARY EXPORT

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PROFESSIONAL FLIGHT SIMULATORS

Aircraft design



ALFASIM



CZECH AIR FORCE



SWEDEN



CROATIA



CANADA



MEXICO



PERU



INDIA



USA



AEROCLUB



ORANGE



TIGER



OK-STR



OK-ALF



OK-VNP



MILITARY EXPORT

ZLIN 242 L FLIGHT SIMULATOR



Alfasim real simulation



Real aircraft



Alfasim FS 2011

Flight instruments

All flight instruments in the Alf asim simulators are electronic. Two independent projectors are responsible for visualization of all flight instruments and navigation instruments. Flight instruments are projected from the back onto high quality ground-glass. Sharpness and quality of projected flight instruments is on a very high level. The advantage of our concept is the possibility of simulation of any malfunctioning of flight and navigation instruments. Another advantage is easy and affordable alteration to a glass cockpit type dashboard. Control of flight instruments is exactly the same as in real aircraft.



Instruments according to the aircraft type



MILITARY EXPORT

ZLIN 242 L FLIGHT SIMULATOR



Radionavigation and communication



Audio panel KMA - 28



NAV/COMM KX - 165 A



ADF KR - 87



DME KN - 62 A

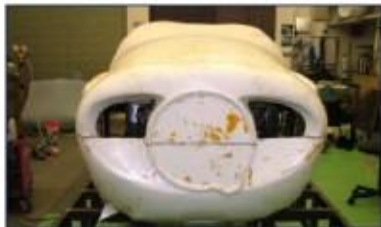


Transponder KT - 76 C



Autopilot KAP - 140

From Alfasim production Z-242 L



 <p>MILITARY EXPORT</p>	<h2>ZLIN 242 L</h2> <h3>FLIGHT SIMULATOR</h3>	 <p>ALFASIM PROFESSIONAL FLIGHT SIMULATORS</p>
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Enclosed aircraft cabin

For the real feeling of flight, we offer a variant with enclosed cabin with optional air-conditioning to ensure pleasant conditions in the interior.

In this embodiment, the pilot is pulled up to the reality. Especially thanks to enclosed cabin space, necessity to communicate with co-pilot and with instructor via intercom and thanks to actual view from the cabin, which is not disturbed by environmental influences.



Open cockpit



Enclosed cockpit

Audio system

All Alfasim flight simulators are equipped, as standard, with an extensive sound installation that does not require any further installation or additions at the customer. We only install high quality and performance sound speakers and flight headphones made by reputable sound equipment manufacturers in our simulators.

An integral part of Alfasim simulators is the professional sound mixer and amplifier. These products and the computer system are installed in a 19" rack case so it is possible to tune almost all sound parameters as required on the central panel control. Thanks to this the sound in the room where the simulator is installed can be well adjusted. We also install high-performance vibrating speakers in our simulators located in both pilot seats.

The intensity of the vibrations is regulated by many factors, especially according to the flight situations depending on the engine revs. Our sound system also enables simultaneous reception on external speakers and flight headphones. External sounds are connected to three high quality Yamaha speakers which are located in the simulator flexibly lodged under the laminated engine cover.

This sound installation allows partial external aircraft reception for better spatial perception of the pilot crew, but particularly for good sound adjustment in the entire room. Other external speakers are located at the instructor's station also equipped with flight headphones and a microphone. Thanks to this equipment and pilot intercom panel the operation of the instructor's station enables active communication with the pilots. Radiocommunication, i.e. air traffic control, is also possible from this station.



Simulator Multiconnect System

The MULTICONNECT system gives a possibility to connect two or more simulators for real flying in formation.

Alfasim Head Control

Our company developed sensor Head control in order to extend landscape visualization projected with side views. It was based on pilots' requirements for full-value visual spatial orientation which provides real aircraft. The sensor provides our flight simulator pilots with smooth horizontal and vertical views at a slight turn of their heads. Thanks to this the pilot crew has full views from the cabin during the flight and performed flights are more realistic. Total range of side views can be set up to 240 degrees. Animated aircraft wing, including ailerons, wing flaps and lights are included in the sight views. This product allows control of horizontal but also vertical views with the head which are used particularly in aerobatic or group flights.

Sensor vertical movement can be completely shut down leaving only the smooth side views. It is also possible to adjust sensitivity of the sensor, speed of movements, gearing range and stops of smooth views. All parameters setting can be implemented directly in our simulation software Alfasim FS 2010. Our product is built into David Clark and Sennheiser professional aviation headsets and thanks to its light weight and small size the sensor does not cause any inconvenience to the pilot crew. The Alfasim Head Control does not need any additional software, calibration device and signal converters. Due to our original concept the sensor is controllable in all light conditions and does not even need any operation transmitter so the pilots' views remain undisturbed.



Real satellite data visualization system

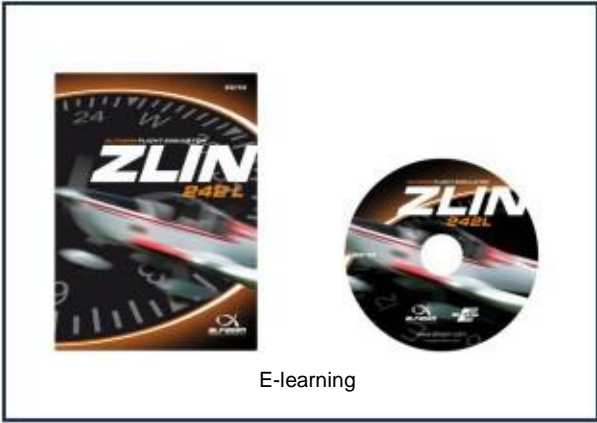
Real land base map for the desired geographic location provides necessary environment for emergency procedure training and simulation of VFR orientation.



Graphic environment, airport buildings and facilities can be modified on customer request.

Pilot training methodology

Sophisticated Alfasim training methodology is designed based on long-term experience of military and factory test pilots. This methodology provides a comprehensive summary for training all pilot skills needed for successful management of emergency situations.



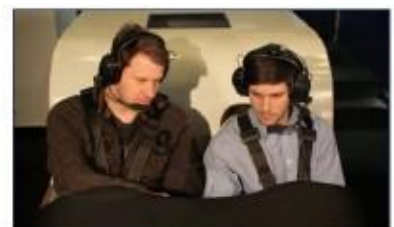
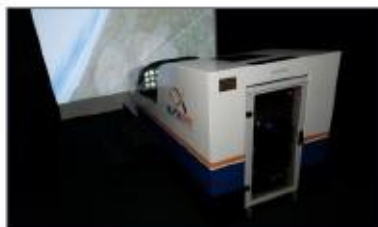


MILITARY EXPORT

ZLIN 242 L FLIGHT SIMULATOR



Alfasim photogallery



 <p>MILITARY EXPORT</p>	<h2>ZLIN 242 L</h2> <h3>FLIGHT SIMULATOR</h3>	 <p>ALFASIM PROFESSIONAL FLIGHT SIMULATORS</p>
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Product and price list

FLIGHT SIMULATOR - PROCEDURAL TRAINER		Price - USD
FOT 242	Identical aircraft cabin with all equipment	
TOTAL PRICE		Price on request

FLIGHT SIMULATOR - BASIC VERSION		Price - USD
STD 242	Standard equipment	
TOTAL PRICE		Price on request

FLIGHT SIMULATOR - ADVANCED VERSION		Price - USD
BAS 242	Flight Simulator - BASIC VERSION	
AFS 01 S	Alfasim FS 2010 simulation software - advanced edition	
EIS 01 A	Professional instructor station - extended HW and SW	
UFS 03 D	Upgrade simulation software for 3 years	
CSS 01 B	Customer colors of interior and exterior	
BST 01 A	Basic set of the spare parts	
PMI 01 S	Preventive maintenance inspections	
PAR 01 B	Alfasim parachute pack	
SHC 01 A	Sensor Alfasim Head Control	
TOTAL PRICE		Price on request

FLIGHT SIMULATOR - PROFESSIONAL VERSION		Price - USD
ADV 242	Flight Simulator - ADVANCED VERSION	
RBAR 01 V	2x Pilot vibration seat	
ACF 01 A	Active Control Forces - ailerons, elevator	
ACF 02 R	Active Control Forces - rudder	
TOTAL PRICE		Price on request

 <p>MILITARY EXPORT</p>	<h2>ZLIN 242 L</h2> <h3>FLIGHT SIMULATOR</h3>	 <p>ALFASIM PROFESSIONAL FLIGHT SIMULATORS</p>
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FLIGHT SIMULATOR – FULL MOTION VERSION 6 DOF		Price - USD
ADV 242	Flight Simulator - PROFESSIONAL VERSION	
HMP 01 A	Hydraulic motion platform - 6 DOF (with all equipment)	
VGS 01 C	Collimated Visual Generator	
CPC 01 A	Enclosed Pilot Cabin	
TOTAL PRICE		Price on request



Full Motion Flight Simulator – 6 DOF

ADDITIONAL SERVICES	Price - USD
Post-warranty service per 1 year	Price on request
Transport and installation	Price on request
Operator training	Price on request



Spare parts

Our company provides delivery of spare parts for all ALFASIM Professional Flight Simulators in warranty and post-warranty conditions and in the form of replaceable service blocks. They are usually fixed to the simulator frame by four screws, so that every trained staff can remove any technical defect within a few minutes. During the construction of Alfasim simulator the first requirement for our designers is the applicability of the replaceable blocks with easy and fast access, without removing the other blocks and parts of simulator. It is no coincidence that similar systems are also used for modern military fighter aircraft. This significantly reduces the number of the manufacturer's journey for the purpose of service inspections, because exchange blocks of spare parts can be sent via a shipping service. Then in factory conditions we repair service blocks and in a short time we dispatch them back to the customer. Ultimately use of this system saves the total cost of maintenance and inspections. Customer operates a flight simulator, which allows nearly continuous operation without the need for service downtime.

Warranty service

There is a 24-month guarantee after delivery, if extended warranty is not purchased. Our guarantee includes all the systems of the flight simulator. Warranty services are free of charge. In the case of basic maintenance training, the customer will be informed and authorized to change sets of spare parts that can be purchased separately.

Preventive inspections

This specification includes regular service or inspections of the flight simulator, which can relate to warranty and mainly post-warranty service.

Preventive inspections include simulator system check, maintenance and calibration of specific components, as well as cleaning, maintenance or change of moving and fixed mechanical parts and consumption material.

Furthermore, these inspections include motion primary units, computer systems, SW updates, testing of flight simulator system including the check of the simulator body.

Post-warranty service

Post-warranty service means measures taken on the simulator one day after the end of the warranty period due to intentional or unintentional damage caused to the flight simulator by the customer or a third person or due to using software not authorized by the producer on the Alfasim computer systems.

All costs for post-warranty service are covered by the customer. These costs include mainly service works, spare parts and technician journey Post-warranty service is ordered by the final customer or intermediary at the e-mail address of the producer: support@alfasim.com



Presentation of the completed Flight Simulator

Presentation of the flight simulator is carried out by manufacturer with regard to the customer's available time as soon as possible after the completion of the final production. This demonstration is preceded by a thorough test of all mechanical, electrical, electronic and visual systems. During the presentation of the completed flight simulator representatives of the customer are personally present. The representatives are acquainted with the simulator, but also with practical flight demonstrations and testing the flight simulator to a sufficient extent. Then the customer's representative confirms the errorless manufacture and demonstration of the simulator. If these conditions are mutually satisfied we are able to immediately package and prepare the product for transport. Demonstration of the completed simulator is carried out at the headquarters of the manufacturer in Prague, Czech Republic.

Packing simulator for transport

After completing the manufacturing of the flight simulator Alfasim provides full packing and preparation for transport to the customer. This begins after presentation and handover of the flight simulator to the customer at the Alfasim premises. Packaging of the flight simulator and all the related components usually takes place within 1 week after presentation of the finished product. Part of this packaging is the dismantling of all parts which would be in the danger of the slightest damage during transport. This service includes packing of the flight simulator and all related components into a specially made transport container. The very careful packaging and placement of the flight simulator in a protective frame essentially eliminates any damage to the product during standard air, water and road transport.

Transportation simulator to customer

Alfasim, in cooperation with our well-tried carriers, ensures quality, safe and efficient transport of the flight simulators to customers all around the world. We recommend direct road transport from the producer to the customer for European destinations. This kind of transport is very fast and inexpensive. For non-European customers we recommend air freight transport in combination with road transport from the destination airport to the customer's location. Alternatively, we can also provide railway or sea transport. Sea transport is not recommended particularly due to great time demands and risks related to this type of transport. Due to impending delays and complications during transport we start preparing for the packaging and transport of the flight simulator right at the start of production. The biggest concern is to find the most suitable type of transport. We also book the dates of shipping at the carriers, including alternative options. We try to deliver the flight simulators to our customers in the best delivery times and we take responsibility for all risks related to the transport.

 <p>MILITARY EXPORT</p>	<p>ZLIN 242 L FLIGHT SIMULATOR</p>	 <p>ALFASIM PROFESSIONAL FLIGHT SIMULATORS</p>
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Time of delivery

From 3 to 8 months after order.
Installation and operator training: 7 working days.

FOR THE COMMERCIAL OFFER CONTACT MILTEX OFFICE, authorized distributor of ALFASIM products.

www.miltex.cz
info@miltex.cz