



TRAINING ANYWHERE, ANY TIME.

One pilot is training in a flight trainer. Next to him, five more pilots are sitting in their trainers and all six are training together. This is a realistic mission rehearsal.

All this is made possible in Sjöland & Thyselius' Flight Trainer.

Flight trainers have traditionally been limited by cost to a single pilot training on his own, possibly in the company of virtual friends and enemies.

OFF-THE-SHELF EXPERTISE

Sjöland&Thyselius flight trainer systems are custom made, based on commercial off-the-shelf products (COTS). Our experience in integrating X-Plane with real-world terrain data, accurate aerodynamic models and flight systems functionality results in a cost-efficient, flexible training system, easy to maintain and up-grade. Our real-time image warping and blending software adapts the system to any projection setup desired – from a flat screen to a multi-projector dome, without the use of expensive custom-made display systems.

ANY TIME, ANY PLACE

More training results in better pilots. When they are not in the air, pilots can train and perfect their skills in the trainer. Not only can they train more extensively this way, they can do it wherever they are stationed at the moment. Sjöland&Thyselius trainers can easily be transported to locations all over the world. With custom terrain added, the pilots can train and perform mission rehearsal in their area of deployment. Several systems can be connected together, allowing section training or force-on-force exercises.

The functionality of our trainers is for many purposes equal to or even better than custom-made trainers, but with the benefit that it has a price tag that allows our customers to buy a number of trainers within their budget. The attractive price is made possible by the use of commercial simulator software, X-Plane, as the foundation of our training platform.

SCALABLE SYSTEM

The system can be set up in a wide variety of combinations and be made to fit specific training situations, such as collective training. The choice of visual channels ranges from one computer screen to several simulated cockpits with virtual surroundings. You can easily start with one hardware setup and upgrade to a more advanced version.

ADAPTEBLE SYSTEM

As the software is adaptable, almost all levels of simulation are achievable. The setups can range from highly realistic training sites to a less costly, low-level desktop trainer. The chosen level of simulation fidelity will correspond to the training need identified.

CONTACT INFORMATION

For more information of what we can offer you, please contact:

HIGH QUALITY GRAPHICS

X-Plane is being developed continuously, ensuring that we always offer a product with high quality graphics and first class performance.

The flight trainer can be configured with different display setups - ranging from a single laptop screen to professional dome systems or curved displays. Our revolutionary real-time warping software adjusts and blends images from any number of projectors to a display surface of any shape. There is no need for expensive projection systems - standard gaming projectors will give an outstanding visual experience.

CUSTOM TERRAIN MAY BE ADDED

Included in X-Plane is a high quality 30 metre mesh terrain database covering the entire planet. Custom terrain may be added, using vector data and orthophotos.

CUSTOM-MADE COTS

The fact that our trainer is built on a standard software platform does not make it a standard product. We build each trainer to fit each customer's specific needs, but based on our COTS concept.

SOFTWARE UPGRADES

Existing trainers can easily be updated with a new version of X-Plane - or panel changes according to avionics and equipment upgrades in the real aircraft.

CUSTOMER REFERENCES – THE SWEDISH AIR FORCE TRAINER SK60 – FLIGHTBOOK

FlightBook is the first flight trainer based on commercial software in use by the Swedish Air Force. The trainer is used during the first two years of flight training for the Swedish Air Force Pilots. This version of the Sjöland&Thyselius trainer uses modified actual aircraft cabins. Outside the cabin, surroundings are projected onto the walls of the dome, giving a high degree of realism. The trainer was designed for the Swedish Defence Materiel Administration's (FMV) specifications. Extensive modelling work has been done to simulate the aircraft instruments and gauges. To reduce the cost, the majority of the instruments are not accessed via mock-up hardware, but displayed and manipulated using capacitive touch screens. This solution also allows switching between the aircraft SK60's standard avionics setup and the upgraded avionics currently installed in a small number of aircraft. All it takes to switch versions is a few mouse clicks.

Along with the touch screens, some of the original controls from the cockpit are used, such as the control stick, flaps, rudders and some switches. Simulated weapon systems include Sidewinder 9L, rockets, flares and automatic cannons.

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TRAINING SOLUTIONS

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