

VERTICE wishes you a Happy New Year 2006



In order to start this new year in the best way, we are offering you this first **Customer Story** that, we are sure, will please you. Thanks a lot to Mr Dupuy of Operantis and to his team to have shared this wonderful project with us.



About Operantis

OPERANTIS is a company specialized in the design and development of interactive training products. The headquarter is based in Toulouse but they also have an office in Paris. Its clients are: AIRBUS INDUSTRIE, SNECMA MOTORS, EUROCOPTER, ATR TRAINING CENTER, TECHNICATOME, the French Army, and numerous airline companies as Air France, Finnair, Royal Air Maroc, Thai Airways, El Al, ...

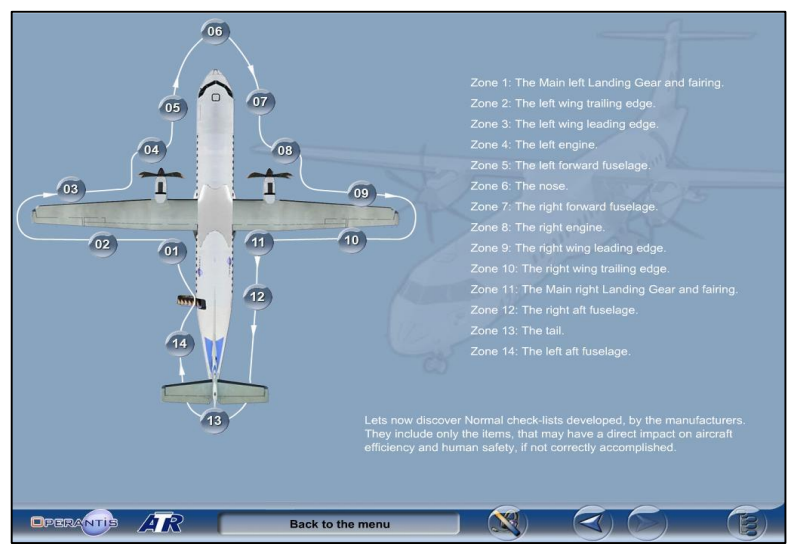
The ATR Project

ATR TRAINING CENTRE (ATC) is the training centre of the manufacturer ATR, one of the world leaders for turbo reactors. They offer to airline companies a set of very sophisticated training tools: Computer assisted teaching, Full Flight Simulator, ...

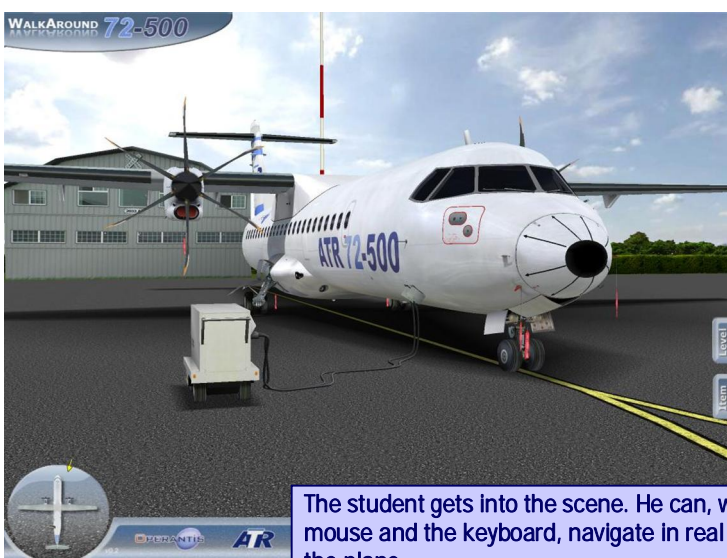
Recently, a technical and commercial partnership has been created: the WalkAround. The WalkAround is the visual technical visit that must be done by the technical flight staff, before the take off of the plane happens, in order to ensure the security of the flight.

Previously, this training was done through the visualization of a video tape showing, step by step, the different components to be checked on the plane. This training, obviously static for the students, was also becoming a problem when plane updates were needed.

ATR TRAINING CENTRE has then asked for a revolutionary tool to replace the video tape.



Description of the control zones



The student gets into the scene. He can, with the mouse and the keyboard, navigate in real time around the plane.

The creation tools

To create the Virtual WalkAround, the following tools have been used:

- 3ds Max from Autodesk Media & Entertainment for the plane and environment modeling
- The Nova engine from Vertice for real time 3D
- Visual Studio for the programming of the scenes and the management of the anomalies.

For the real time 3D, we needed a tool that would be fully integrated into 3ds Max (3ds Max has been used for quite a long time at Operantis) and a tool which could offer a high quality of rendering and a large panel of functionalities. After having tested many softwares, we have decided to choose the Nova engine from Vertice who was answering our needs and even more.

The advantages of the application created by Operantis

The advantages of this tool are:

Aspect:

- High realism
- Possibility to create and visualize the typical anomalies on these kinds of equipments (impossible to be done on a real plane)

Availability:

- Virtual visit available permanently
- No need to immobilize a real plane

Adapted training:

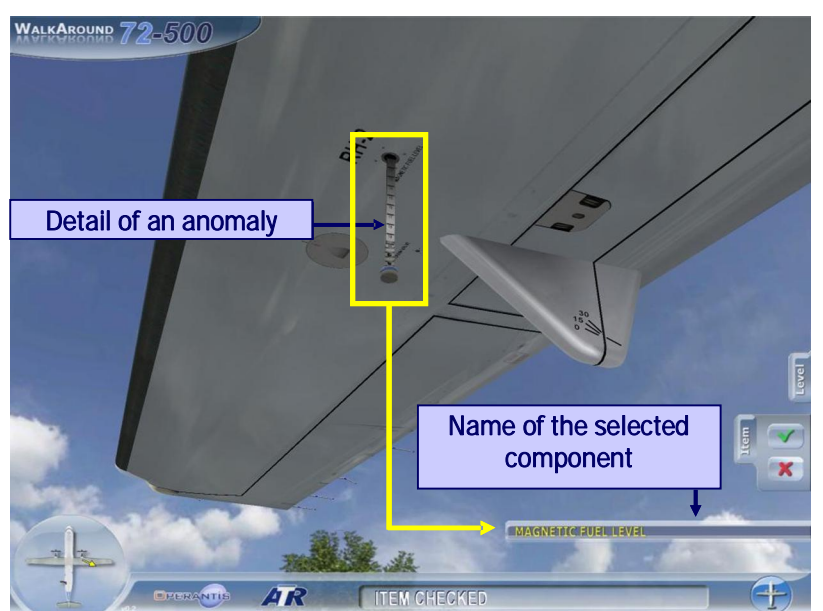
- Directed training
- Training as "in real"
- High interactivity
- Setting of anomalies appearance by the trainer
- Analysis of the results by the trainer

Updates:

- 3D models updated quickly and in conjunction with the real evolutions of the plane. Nova being fully integrated in 3ds Max, updates can be done nearly instantly

Technological innovation:

- Modern and innovative training tool



The student must select the 121 control zones of the WalkAround and decide if the component is in good condition or not.

The future projects of Operantis

Our tools is perfectly adapted to training on industrial systems which are either not easy to have access to (inside parts of a nuclear power-station), either not easily available (a plane immobilized for a training), or when the configuration of real anomalies is impossible or not allowed.

The actual project will obviously evolve: Firstly, ATR has asked the creation of 3 other planes but is also requesting the creation of an other tool, the 'Components Location' which allows to find a component on the plane in the minimum of time.

Following the success of the WalkAround for ATR, two companies, one in the military environment, the other in the nuclear environment, have asked us to make offers on training tools for which the Nova engine will be a key element to the success of the project.

Conclusion

Apart from the power and the quality of the Nova engine, we have also been seduced by the high reactivity and the competencies of Vertice. It was not only important for OPERANTIS to find the right product, but we also needed quality of support to help us to face the challenge. Vertice has answered these conditions at all levels.

