

## **Reiser Simulation and Training Chooses the NavX-NCS GPS Simulator for Aviation Applications**

Reiser Simulation and Training is a German-based manufacturer of training technology for avionic applications. Aside from dedicated external and in-house produced simulation products, Reiser also offers real avionic systems. Through the company's innovative solutions, pilots and aircraft technicians can increase professionalism and safety for real-world missions.

### **Challenges**

Recently, Reiser needed a solution to close its hardware-in-the-loop simulation with state-of-the-art GPS based navigation systems, which do not offer a dedicated GPS simulation interface. This solution would be used for special applications, especially for research and development.

Reiser's main requirements in a GPS simulator were cost-effectiveness, flexibility, and reliability. Furthermore, the GPS simulator would need to ensure the most realistic simulation environment possible. After conducting a thorough examination of potential suppliers for GPS simulators, Reiser chose the NavX-NCS Essential.

### **The Solution**

Reiser's ability to produce high-end simulation products generally requires a fast, in-depth analysis of real-world hardware. In most of the cases, this means interfacing such devices with other avionics and stimulating them with real sensor data.

IFEN/WORK sped up that process by providing Reiser with a demo unit of the NavX-NCS Essential, enabling the company to start work immediately. In addition, IFEN/WORK experts assisted with the setup of the GPS simulator, streamlining the installation process. As a result, Reiser engineers were able to pioneer fundamental steps of the challenging task even before receiving the GPS simulator.

One of the key reasons that Reiser chose the NavX-NCS for its GPS simulation needs was IFEN/WORK's long-term and in-depth expertise in this area. With more than 15 years of experience in producing exceptional GNSS satellite navigation products, IFEN/WORK has established a strong track record in the industry for reliability.

Reiser has been amazed by the nearly unlimited possibilities that simulating a full GPS L1 satellite constellation provides. With the NavX-NCS Reiser can integrate new navigation devices directly in its flight simulators with minimal effort.

“Since deploying the NavX-NCS for our GPS simulator needs, we have experienced its versatility first-hand, in particular, for real hardware-in-the-loop simulation applications. This motivated us to order a second NavX-NCS Essential for further research and development purposes,” said Falko Schuck, development engineer for hard- and software integration of simulation products at Reiser.

The NavX-NCS is completely future-proof. If Reiser wants to simulate additional satellite navigation system constellations, GPS simulation solution can easily be upgraded to support any other GNSS system, including GLONASS, Galileo, BeiDou, and QZSS, via software licenses. Being able to support all GNSS signals in one cost-effective chassis is a feature that is unique to the commercial market.

“Reiser has given us deep insight into its aviation work, including specific requests on GPS simulation, enabling us to optimize GNSS simulation for this market,” said Dr. Guenter Heinrichs, head of customer applications and business development at IFEN.

Thanks to the NavX-NCS Essential, Reiser can provide pilots and aircraft technicians with realistic aviation training, ensuring that they are equipped to handle any challenge encountered in the real world. By choosing a low-cost, reliable, and flexible GNSS simulator solution from IFEN/WORK, Reiser reduces operational costs for their customers while providing them with a future-proof investment.