



CUSTOMER

A leader in the design and delivery of advanced XR-integrated training solutions for military applications

U.S. company serving the Department of Defense

Supporting large-scale, military training programs across the U.S.

OBJECTIVES

Provide purpose-built computing and integration services

Support time-sensitive, large-scale military simulation contracts

Offer lifecycle support & component sourcing under constrained supply chains

RESULTS

Delivered tailored short-depth and ultra-small form factor computers

Reduced lead times and deployment risks with fully integrated, tested rack solutions

Achieved <2% failure rate over hundreds of deployed units

Sustained program continuity despite EOL hardware through proactive testing and part validation

Maintained ITAR compliance and quality control via secure, certified U.S.-based manufacturing



Foxguard



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FOXGUARD: A VALUABLE PARTNER IN UNPREDICTABLE TIMES

For several years, Foxguard has teamed with Vertex Solutions to provide purpose-built computing and integration services to the Military Training and Simulation Industry. In a time of uncertainty and a constrained supply chain, Foxguard provides engineering and integration services to support Vertex with large projects to save time, money, and effort.

The customer challenges

The program came to fruition as COVID-19 began to peak, creating an enormous strain on the supply chain and the ability to source and configure the necessary computer components. There was no commercial off the shelf solution (COTS) to meet the specific requirements. A solution was needed that met form factor requirements, could adapt to changes in specifications, be maintained throughout the life of the program, and meet the requisite lead times to stay on schedule.



Supply Chain Strain

COVID-19 created an enormous strain on sourcing and configuring necessary computer components, impacting project timelines.



Customized Hardware Requirements

No commercial off-the-shelf solution met the program's specific form factor and performance specifications.



Lifecycle Management

Ensuring product designs were maintained throughout the life of a multiyear program despite component end-of-life issues.



Schedule Adherence

Meeting strict program lead times was essential to keep the overall training and simulation project on track.



The solution

Foxguard provides Vertex Solutions with several configurations, including short-depth rackmount and Bantam III, ultra-small form factor computers. The Bantam III supports mobile trainers with a degree of flexibility and reliability not available via a COTS chassis.

In addition to standalone computers, Foxguard provides Vertex Solutions with fully-integrated rack solutions that include multiple Image Generator computers, host computer, networking, and power management. Vertex Solutions leverages Foxguard's extensive experience in rack integration, enabling products to safely arrive on-site, on-time, and ready to deploy.

This significantly reduces risk and lead times, allowing Vertex Solutions to focus on developing and delivering its cutting edge training solutions. Unlike COTS manufacturers, Foxguard maintains designs for the life of a program and does not terminate products with little to no warning.

“Vertex Solutions has delivered over 250 Extended Reality (XR) integrated training devices to the US Air Force, Army and Navy. In each case, Vertex has consistently relied on Foxguard to ensure we are providing the Department of Defense with the highest quality, most reliable and innovative technology solutions available on the market.

The team at Foxguard back up each product with responsive and proactive customer service. There is little margin for error when you are delivering training solutions that the DoD counts on and Foxguard delivers.

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This is extremely important when a product is specified into a multiyear training program. As deadlines approach and components are at risk, Foxguard pivots to find suitable alternatives to meet performance requirements and timelines.

All Products are sourced and configured in our secure, ITAR registered manufacturing facility in Christiansburg, VA following strict ISO guidelines, CMMC, and DFARS flow down requirements.

The results

Foxguard went above and beyond by purchasing and stocking constrained materials prior to receiving purchase orders from Vertex to ensure timely delivery on projects in the pipeline for Vertex but which hadn't reached the point of a purchase order from the Government.

As a teaming partner, Foxguard shares in the commitment to project schedules to ensure our Warfighters and allies are the best trained forces in the world. As computer hardware goes EOL, new generations are continually being released. There is a risk that new hardware is not compatible with older generations of hardware.



In this project, a new generation motherboard did not work correctly with a PCI card used in the design. Foxguard invested the necessary hours of extensive testing to isolate the problem and validate new parts to prevent future issues, at no cost to Vertex Solutions. Foxguard sourced the replacement parts and shipped out quickly to decrease downtime in the field.

As part of our Program Management commitment, Foxguard acts as a trusted advisor to Vertex Solutions via regular team meetings to keep Vertex Solutions up to date with the newest, most reliable, and most cost-effective components on the market.