

NEWTON DESIGN

Simulation and Training
Equipment

Simulation Innovation.





▶ YOU NEED EXPERTS IN TRAINING EXPERTS.

EXPAND YOUR TRAINING CAPABILITIES WITH **NEWTON DESIGN**. FOUNDED IN 1996 BY VISIONARY DESIGNER JESSE NEWTON, OUR NATIVE AMERICAN-OWNED COMPANY IS A QUALITY SUPPLIER OF SIMULATION TRAINING EQUIPMENT FOR THE AVIATION INDUSTRY, LAW ENFORCEMENT, AND THE MILITARY. LOCATED JUST OUTSIDE OF TULSA, OKLAHOMA, NEWTON DESIGN IS FAMILY-OWNED AND STILL HOLDS TO THE HONOR, EXCELLENCE, AND INNOVATIVE SPIRIT OF OUR FOUNDER.

We're small in size, but big in ingenuity. Our streamlined approach keeps our overhead low and free of any heavy, bureaucratic structure. Factor in our adeptness in making the most of our engineering, design, and manufacturing talent, and you've got the highest quality design and production at the most competitive prices.



U.S. Department of Homeland Security
Small Business Achievement Award



▶ MISSION

To provide the customer with innovative, custom-designed and built simulation and training systems at competitive prices.

▶ VISION

To continue growing Newton Design while maintaining our industry-leading customer satisfaction and operating with honor and integrity.

▶ VALUES

In all our relationships, Newton Design is committed to the following core values:

- ▶ Strong leadership
- ▶ Integrity
- ▶ Quality
- ▶ Customer satisfaction
- ▶ People working together
- ▶ Employee engagement
- ▶ Community involvement



► Department of Defense



► Fuselage Trainers

Train for any scenario with our Fuselage Trainers (FuTs) – full-size, high-fidelity simulation of the actual aircraft fuselage/cargo area. Our Enhanced Fuselage Trainers (EFuT) include the flight deck, wings, and tail. Typical training functions include cargo loading, airdrop, pre-flight inspection, emergency scenarios, and emergency egress. FuTs can be operated as stand-alone devices or networked with other training devices for full mission simulation. We go to great lengths to design structures that are easily maintainable and supportable for the life of the program, using mechanical simulation to replace complex mechanisms and costly aircraft components.



► Weapon Systems Trainers

Perfect performance under pressure with our Weapon System Trainers (WSTs). We provide structural/mechanical design and manufacturing for various WSTs, including the KC-135 Boom Operator Weapon System Trainer (BOWST) and KC-46 Boom Operator Trainer (BOT). We apply our expertise in providing high-fidelity aircraft cabin simulations for the commercial aviation industry to the design, development, and manufacturing of military WSTs. This ensures that the location and feel of control mechanisms is faithfully replicated, and the physical environment of the WST provides the highest fidelity simulation possible.



► Extraction Trainers

Prepare for the unexpected with a custom Extraction Trainer. Used to train military personnel on the procedures and techniques required to properly extract themselves or other crewmembers from a disabled air or ground vehicle, or, to properly load, unload, and treat combat casualties during the transport phase of patient care. Our capabilities include helicopter and fixed wing cockpits/cabins and various ground vehicles (Humvee).



► Ground Combat

Plan to overcome any obstacle. To ensure the readiness of ground forces, Newton Design has provided battlefield effects such as simulated firearms (AK47 - Badger MK II), and Mobile Military Operations on Urban Terrain (MMOUT) simulated village.

▶ Government/Non DoD



▶ Research Simulators

The FAA Civil Aerospace Medical Institute (CAMI) is constantly researching aircraft cabin safety in an effort to improve designs, procedures, and to increase occupant safety. To assist the CAMI team in their mission, Newton Design developed this unique cabin simulator. The FlexSim is capable of simulating multiple fuselage widths and cabin configurations, providing the FAA with remarkable mission flexibility in one simulator. The FlexSim is mounted on a custom-designed and manufactured positioning system, allowing the CAMI team to study the effect of abnormal landing conditions (collapsed landing gear, etc.) on passenger evacuations. The FlexSim features visual simulation, wing root sections with working flaps, and functional escape slides. Newton Design is proud to be a part of the FAA's ongoing mission to improve air transportation safety.



▶ Transportation Security

Newton Design has developed a variety of law enforcement training simulators used by the U.S. Federal Air Marshal Service (FAMS), Federal Bureau of Investigation (FBI), and Royal Canadian Mounted Police (RCMP). These simulators faithfully reproduce aircraft cabin and cockpit environments and are similar in exterior appearance to aircraft cabin service trainers used by commercial airlines. However, the training that takes place inside them is very different.

Force-on-force training and Close Quarters Tactics (CQT) within an aircraft cabin are critical skill sets for those who are tasked with keeping our skies and our nation safe. Our Aircraft Cabin Training Simulators (ACTS) provide law enforcement agencies with a realistic, safe, and durable training environment.

▶ Subcontracting

In addition to prime government/DoD contracting, Newton Design also serves as subcontractor to a multitude of large primes. Our small business classification, competitive pricing, impressive design portfolio, and past subcontracting success make us an attractive teammate for large or small government contracts requiring mechanical/structural expertise.

Newton Design has worked closely with a number of large primes, whose capabilities include hardware/software integration, software design, human factors, and training course development. Our mechanical/structural design and manufacturing capabilities compliment these skill sets, creating a strong, competitive team.

Newton Design is ITAR-registered with the DDTC.



▶ Capabilities

- ▶ Maintenance Trainers
- ▶ Part Task Trainers
- ▶ Explosive Breaching
- ▶ Design and Development
- ▶ Manufacturing
- ▶ Documentation & Support

We offer a full range of design, development, manufacturing, documentation and support services. Through our partner, **Quantified Design Solutions**, we also offer advanced support technology, professional support, training system development, and training system evaluation services.

- ▶ To discuss your training project needs, contact
Newton Design at 918-266-6205 or info@newton-design.com
26015 E Admiral Pl, Catoosa, OK 74015





KEY PRODUCTS

Cabin Crew Virtual Readiness (C2VR) Trainer

- Turnkey virtual reality aircraft cabin crew training platform
- Scalable to any size to support single student training to simultaneous full class training
- Self-guided training reduces instructor workload
- Student performance presentation and tracking allows for individual performance reviews or class-wide performance deficiency evaluations
- Capability to be set up offline or integrated with a learning management system

Custom Medical Training Suites

- Customized mobile, virtual, and augmented reality training platforms
- Medical training tasks customized to training program needs
- Student performance evaluation and root cause analysis reports
- Capability to integrate with external training platforms and learning management systems



CUSTOMERS

American Airlines



To discuss your training needs, contact:

Quantified Design Solutions at

● info@quantifieddesign.com

● 407-362-9484.



TRAINING SYSTEM DESIGN AND EVALUATION

With more than 15 years experience in conducting training research and developing training systems, **Quantified Design** merges live, computer-based, virtual, and augmented training modalities to meet our client's learning goals. We blend learning science with cutting edge training technology to create balanced systems that produce measurable learning improvements.



TURNKEY COMPUTER-BASED, MOBILE, AND EXTENDED REALITY TRAINING

Meet your targeted training goals with Quantified Design's turnkey training systems, developed for domains ranging from air cabin crew to military and medical training. Our team works with all users of the system, including learners, instructors, and maintainers, to create easy-to-use training suites that optimize the training process. From requirements definition to large-scale installations, our team manages the project to deliver a turnkey solution that works without disrupting current processes.

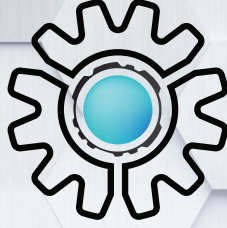


PROFESSIONAL SUPPORT SERVICES

Our team has the program management, logistics, and acquisition experience required to support federal acquisition and program management efforts. Quantified Design Solutions provides acquisition, kitting, logistics, product improvement, professional services and training support. Through a partnership with Newton Design, our team also provides medium and large-scale manufacturing planning. Whether you are acquiring systems or optimizing your own designs, Quantified Design can reduce costs while improving reliability.

CORE COMPETENCIES





QUANTIFIED

DESIGN SOLUTIONS

*Research.
Simulation.
Innovation.*

