

CASUALTY CARE TRAINING

MIXED REALITY MANIKIN SOLUTION FOR FEMALE SOLDIER SURVIVABILITY

THE PROBLEM

Female Soldiers experience a significant survivability disparity compared to male Soldiers. This stems, in part, from a lack of casualty care training aids specific for women.

Additionally, current medical trauma training is conducted in either virtual or physical environments — both of which have limitations such as a lack of modifiable training scenarios (physical), and insufficient hands-on training (virtual).

THE OPPORTUNITY

This is a Phase I SPARTN SBIR opportunity using our cohort program. Phase I begins with a concept demonstration to Army stakeholders that establishes technical merit, feasibility, and commercial potential of proposed R&D efforts to determine the company's success potential. This cohort gives companies the option to develop complementary technologies that result in a best-in-breed solution.

As many as 10 businesses will be selected to receive up to \$200,000 each for a three-month period of performance.

The solution should be an anatomically correct, female manikin with mixed reality capabilities, and the ability to detect and configure across different operating systems. This will provide realistic, modifiable casualty care training scenarios and increase the survivability rate of female Soldiers. Relevant technology focuses could include AR/VR, training manikins, and mixed reality.

Examples of successful solution features could include:

- + Anatomically correct female training manikin
- + Manikin segments (head, chest, hips, torso, etc.)
- + Virtual reality training methods
- + High-fidelity simulations
- + Augmented reality solutions that digitally overlay training stimuli on the manikin
- + Automatic detection and configuration across different operating systems
- + Situation-specific training modules
- + Training monitoring and feedback
- + Physical task trainers

Casualty Care Training applications open
Apr 5 and close
May 4 at 11:00am CT.
Learn more at [aal.army](https://aal.army.mil)



FEMALE MANIKIN

The solution should include an anatomically correct, modular/modifiable female manikin.



OPEN ARCHITECTURE

Add-ons, upgrades, and automatic detection and configuration across different operating systems are key for the training solution to function across an array of scenarios.



AUGMENTED/ MIXED REALITY

The solution should include augmented/mixed reality for cost-effective, changeable training simulations.

THE SPARTN PROGRAM

Special Program Awards for Required Technology Needs (SPARTN) blends government and industry best practices to introduce a new whole-of-Army, collaborative approach to solution innovation. The result is a way to solve Army problems faster and to accelerate the process by which successful technology is purchased by the Army.

All topics released through SPARTN feature challenging and important problem statements from problem owners across the Army. These represent some of our biggest challenges and the ones we want to work closely with industry to solve.

WHAT MAKES SPARTN DIFFERENT?

- Problems released through SPARTN are tied to the Army's critical needs and other focused modernization efforts
- Faster contracting speed, with businesses typically notified of award 4x faster than the conventional SBIR process
- Potential for millions in total value of follow-on contracts to build a concept or prototype related to the specific problems
- Acquisition teams included early on, with the goal of easing transition and building new tech into recurring Army budgets
- Potential for future high-value contracts by combining SBIR or other government funds, and private investment you secure

To learn more about SPARTN or how to apply for SPARTN topic, visit aal.army/SPARTN.



SPARTN Phases Explained.

Phase I begins with a concept demonstration to Army stakeholders. Companies have direct access to Soldiers and problem owners for problem refinement and information gathering so they can sharpen their solutions.

In Phase II, companies are selected for a period of performance to advance their technology into a working prototype with higher federal funding and, on certain projects, matched funds from private investment. Companies receive technical and programmatic feedback from Soldiers, DoD scientists and engineers. Senior leadership provides guidance on how to move forward.

To make it to Phase III, companies must receive Program Executive Office (PEO) endorsement. Selected companies are then given more funding and the opportunity to continue developing their technology with the goal of transitioning it to an Army program of record.

AAL COHORT MODEL

Our cohort program brings together companies that may not typically work with the DoD and focuses them on solving a specific Army problem. They work side by side with Soldiers, a community of Army experts, and other stakeholders on a shared learning journey. While joining a cohort isn't required, it can provide a deeper level of insight to help refine your solution.

A Different Kind of Cohort

- + 12-week hybrid program with virtual and in-person activities
- + Each cohort focuses on solving a specific SPARTN problem
- + Increased contact with key Army stakeholders and end users including PEO STRI, DEVCOM SC, DIU, MED-CDID,
- + Visits to military installations where you can see the problem firsthand

Visit aal.army/cohortprogram to learn more about the AAL cohort program and the benefits of participating.

