DESIGN HUMAN PERFORMANCE TOOLS

HOLISTIC HEALTH & FITNESS MANAGEMENT SYSTEM (H2FMS)

THE PROBLEM

The Army currently measures Soldiers' health primarily using physical fitness data. This ignores the other four readiness domains targeted by the Army's Holistic Health and Fitness (H2F) initiative: sleep, nutritional, spiritual, and mental.

The Army wants a digital interface tool that incorporates all five H2F domains so we can better address Soldier readiness and well-being.

THE OPPORTUNITY

The **Holistic Health and Fitness Management System (H2FMS)** topic is the Army's effort to look at the whole Soldier — mind, body, and soul — for a more complete understanding of what it means to be combat-ready

This is a Direct to Phase II SPARTN SBIR opportunity, which means you can skip the proof-of-concept phase and go straight to the prototyping phase — where funding is much greater.

As many as three businesses will be selected to receive up to $500,000 each for a six-month period of performance. Businesses that develop Human Performance Optimization (HPO) or Athlete Management System (AMS) tools are encouraged to apply.

Examples of desired features:

- Downloadable to a mobile device with web-based capability for access on a computer; compatibility with iOS and Android
- Automatic emails/notifications based on defined data triggers
- Tracks Soldier performance throughout career — with aggregated, anonymized data provided to leaders
- Records performance using combination of manual input, customizable questionnaires, or wearable sensors for existing AMS systems, e.g., Whoop, Polar, Garmin, Oura, Fitbit, Apple
- Delivers coaching and automatic recommendations to individuals based on thresholds established by practitioners
- Access to data for manual analysis across all inputs from practitioners, e.g., export data in common spreadsheet formats
- Modifiable questions and measurements used across Army so data can be aggregated to larger performance metric database

The H2FMS application window opens December 1 and closes December 29 at 11:00am CT. Learn more at aal.army/SPARTN.

THE DIGITAL INTERFACE TOOL SHOULD HAVE THREE TYPES OF INTERFACES TO ENTER, MANIPULATE, AND MAKE DECISIONS BASED UPON DATA:

INTELLIGENT TUTORING

This interface should contain a personal profile, data entry locations, and statistics for the individual user. It should also contain instructional tools and videos that can be used as references, as well as the ability to auto-refer the Soldier to a health practitioner as needed.

ADAPTIVE TRAINING

This interface should provide Army leaders with a visual summary of their subordinates' health, e.g., red-amber-green statuses. It should also allow for individual tracking, generalized and aggregated data trends, and alerts for potential problems or recommended supervisor intervention.

VIRTUAL HUMAN INTEGRATION

This interface should contain Soldier performance summaries, as well as the ability to visualize both individual and aggregate data. Intervention protocols, e.g., alerts to Soldiers or referrals to health practitioners, should be enabled based on surveys, direct messaging, and appointment scheduling.

BACKGROUND ON OUR
SPARTN PROGRAM

Special Program Awards for Required Technology Needs (SPARTN) is a new program for the Army — and for the small businesses that want to work with us — led by the Army ASA(ALT) Small Business Innovation Research (SBIR) team and bolstered by AAL models and outreach.

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.

WHAT MAKES SPARTN DIFFERENT?

1 Problems released through SPARTN are tied to the Army's critical needs and other focused modernization efforts

2 Faster contracting speed, with businesses typically notified of award 4x faster than the conventional SBIR process

3 Potential for millions in total value follow-on contract to build a concept or prototype related to the specific problem

4 Acquisition teams included early with the goal of easing transition and building new tech into recurring Army budgets

5 Potential for future high-value contracts via SBIR, other government funds, and private investment you secure

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.

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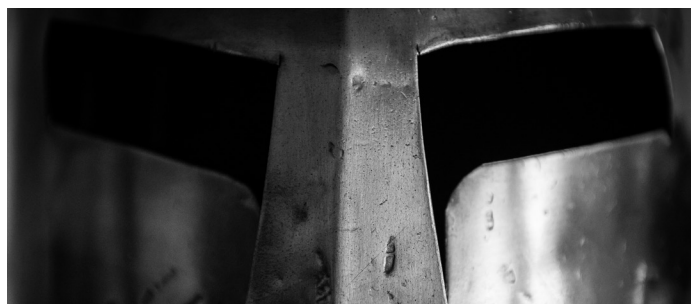
POINT CHALLENGE

"WE KNOW WHAT WE WANT."
We need a specific solution, tailored to meet a detailed problem statement.

TIMEFRAME	1–2 years
PARTICIPANTS	Potential for multiple businesses
FORMAT	Businesses are separately tasked to develop technology tailored to a distinct problem
EXAMPLE PROBLEM STATEMENT	"How can we create a specific radio to transmit and receive on the same frequency?"
FUNDING DETAILS	Funding and periods of performance are determined by topic requirements
SBIR PHASE DETAILS	Can invest across different tech development stages Depending on the topic, both Phase I and Direct to Phase II awards may be possible

ABOUT THE ARMY APPLICATIONS LABORATORY

We don't make things — we make things possible. The Army Applications Laboratory (AAL) is the Army's innovation unit and a partner for industry, the Army, and government organizations. We discover practices and processes to speed capability development and turn cutting-edge ideas into real, relevant solutions for Soldiers. Learn how we do it at aal.army.