I. Background and Purpose

The U.S. Army invites interested entities to participate in the xTechSoldier Fire Control competition, a competition for eligible small and large businesses across the globe to showcase their innovative concepts for a Next Generation Squad Weapon Fire Control Module-X (NGSW-FC M-X), engage with the U.S. Department of Defense (DoD), earn prize money and potentially receive a contract award or agreement of up to \$5 million.

The U.S. Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA(ALT)) is partnering with the Program Executive Office (PEO) Soldier to deliver the xTechSoldier Fire Control competition. The U.S. Army recognizes that the U.S. DoD must enhance engagements with industry by (1) understanding the spectrum of 'world-class' technologies being developed commercially that may benefit U.S. DoD; (2) integrating the sector of non-traditional innovators into the U.S. DoD Science and Technology (S&T) ecosystem; and (3) providing expertise and feedback to accelerate, mature, and transition technologies of interest to U.S. DoD in support of the Solider.

The xTechSoldier Fire Control competition will consist of three rounds:

- (1) Call for concept white papers;
- (2) Technology pitch event; and
- (3) Final proof-of-concept demonstration.

The competition will award up to \$300,000 in cash prizes to selected participants throughout the competition. Up to three (3) finalists will receive a cash prize of \$50,000 each and an invitation to conduct an in-person proof-of-concept demonstration with a panel of U.S. Army and DoD subject matter experts (SMEs) in January 2026. One (1) final winner will be selected and awarded a cash prize of \$100,000 and will have the opportunity to submit a follow-on contract proposal worth up to \$5 million. Details on the prize structure are listed in the announcement below.

In addition to non-dilutive cash prizes, participants will have an opportunity to engage with experts within PEO Soldier and across the U.S. DoD during each phase of the competition.

The efforts described in this notice are being pursued under the authorities of 10 U.S.C. § 4025 to award cash prizes and 10 U.S. Code § 4023 for potential follow-on contracts or agreements to only those eligible and selected entities as described in this announcement.

While the authority of this program is 10 U.S.C. § 4025, the xTechSoldier Fire Control competition may generate interest by another U.S. Army, DoD or USG organization for a funding opportunity outside of this event. Interested organizations may contact the participant to provide additional information which may or may not result in partnership opportunities. Finalists of the prize competition may be invited to submit a separate proposal for further development of their proposed technology solution based on the needs of the Army. The Army may use a contract mechanism of their choice and will notify participants accordingly.

All xTechSoldier Fire Control competition submissions are treated as privileged information and contents are disclosed to government employees or designated support contractors strictly for the purpose of evaluation and program support.

The xTech Program will provide feedback from evaluators to participants during each part of the

competition. The purpose of providing this feedback is to help accelerate the transition of the technology to a U.S. Army end-user by providing insight into the best applications for the technology, suggestions for product improvement for U.S. Army use and recommended next steps for development. However, the Government will not respond to inquiries regarding this feedback.

II. Eligibility Requirements

Eligible entities include nonprofit organizations, for-profit organizations (i.e., large and small businesses) both domestic and foreign.

Each eligible entity:

- Must be able to obtain a CAGE code (U.S. businesses) or NCAGE code (international businesses) to process payments;
- Shall be incorporated in, and maintain, a primary place of business in the U.S. or a foreign country;
- Shall not be a U.S. Federal Government entity, foreign government entity or employ a U.S. Federal Employee acting within the scope of their employment;
- Shall not be currently under contract, agreement or other providing similar capabilities to the Government for work described in the problem statement;
- Shall be at the sole discretion of the Government.

III. Topic and Problem Statement

Imagine a Soldier in a real-world battlefield scenario with limited visibility and bad weather while experiencing extremely high physical and mental stress. Soldiers in this scenario require capabilities that enable them to quickly aim, fire, and engage their targets with a weapon system solution that provides overmatch. We're looking for a small, lightweight system solution that can plug into our existing fire control system, called the XM157, which is used on our NGSW.

Think of it like a high-tech scope that can help our Soldiers defeat their targets more easily and effectively, similar to how the advanced targeting systems on our Abrams tanks work. However, instead of being a large and heavy system, we need something that weighs about as much as a small apple, is cost effective, improves upon current capabilities, scalable, and can be easily mounted and paired to our XM157 fire control system.

The NGSW-FC M-X shall pair and mount to the XM157 NGSW-FC and/or be a separate software solution package. The NGSW-FC M-X shall provide scalable capabilities that increase first round probability of hit and enhance lethality to the warfighter during favorable and unfavorable weather conditions such as adverse weather, obscured visibility, and dirty battlefield conditions. Desirable capabilities include but are not limited to one or more of the following: Reduced weight, multi-spectral imagery, passive (range finding; targeting; pointing), live atmospherics (including wind), weapon orientation, spectral conversion and/or hyperspectral imagery, aim augmentation, aided target detection, aided (target tracking; threat recognition). The NGSW-FC M-X concept is anticipated to integrate with emerging Army weapon requirements.

We're looking for innovative solutions that can provide features like:

- Improved targeting in adverse weather conditions and obscured visibility
- Enhanced accuracy and probability of hit

- Ability to detect, identify, range, and track targets
- Integration with our existing XM157 fire control system

If you have an idea for a system solution that can help us achieve these goals, we want to hear from you. Your solution should be small, lightweight, and easy to use, with the potential to make a big impact on our Soldiers' ability to engage targets effectively in operational environments.

Key Requirements:

- Must be able to mount and pair into the XM157 fire control system
- Must provide improved targeting capabilities in various environments
- Must be easy to use while under physical and mental duress

IV. Program Submission

The xTechSoldier Fire Control competition is voluntary and open to all entities that meet the eligibility requirements listed in Section II (Eligibility Requirements). **Only one submission per eligible entity is permitted. All submissions must be in English.** The registration information and submission upload must be received by **5:00 PM ET on April 24, 2025.** Submissions received after the deadline will not be considered.

Register now by selecting the xTechSoldier Fire Control competition image at: https://www.xtech.army.mil/

V. xTechSoldier Fire Control Competition Structure

Part 1: Concept White Paper

All eligible entities shall submit a five-page concept white paper and optional accompanying three to five minutes video outlining their concept of operations, benefits to the U.S. Army, technical approach and company viability. The white paper should demonstrate how their solution will increase the lethality of the Next Generation Squad Weapons system. Specifically, the U.S. Army seeks improvements in first round probability of hit and accuracy at extended ranges, day or night.

Examples of some design features that might help are reduced weight, multi-spectral imagery, passive (range finding; targeting; pointing), live atmospherics (including wind), weapon orientation, spectral conversion and/or hyperspectral imagery, aim augmentation, aided target detection, aided (target tracking; threat recognition).

Each concept white paper and accompanying video, if included, will be reviewed by a panel of U.S. Army and DoD experts across the S&T ecosystem including Warfighter, acquisition, and research and development subject matter experts.

All concept white papers and videos must adhere to the following requirements:

- Concept white papers must be submitted using the template found on the Valdi Eval registration page, "Template_xTechSoldier Fire Control_White_Paper.docx". Any proposals submitted in a format other than that provided by the template will not be reviewed.
- Please list your company name, country name and proposal title EXACTLY how you
 would like them to appear on any contest marketing materials. Use a clear and concise
 proposal title to give readers and potential stakeholders an understanding of how your

- technology would benefit the U.S. Army.
- For the optional video, provide a URL on the contest registration page to a video supporting your application. The xTech Program prefers videos submitted using Vimeo. Video production value is not weighted in the evaluation scores. Rather, the video can explain the concept white paper or otherwise demonstrate the technology concept proposed. Videos must not exceed the five minutes maximum.

Evaluators will review and score concept white papers using the following scoring criteria (further details on each scoring dimension can be found on the xTechSoldier Fire Control competition registration page):

- Concept of Operations 10%
- Army Benefits 35%
- Technical Approach 35%
- Company Viability 15%
- Submission Quality 5%

Upon conclusion of the concept white paper evaluation period, the xTech Program will select **up to five (5) applicants to receive a cash prize of \$10,000 each** and an invitation to Part 2: Technology Pitches.

Part 2: Technology Pitches

The xTech Program will invite selected participants from Part 1 to conduct an in-person pitch showcasing their technology concept, design, models and data to a panel of U.S. Army and DoD experts, tentatively scheduled for June 23-25, 2025. The xTech Program will provide additional instructions, exact location and the detailed evaluation criteria at a later date. **Dates and times are subject to change.**

Upon conclusion of the technology pitch round, the xTech Program will select **up to three (3) teams as finalists to receive a cash prize of \$50,000 each** and an invitation to Part 3: Final Demonstrations.

Part 3: Final Demonstrations

The xTech Program will invite selected participants from Part 2 to conduct a final proof-of-concept demonstration, with the opportunity to test out their system live with a panel of U.S. Army and DoD experts, tentatively scheduled for January 15-18, 2026. The xTech Program will provide additional instructions and the detailed evaluation criteria at a later date.

The finalists are responsible for identifying a location to conduct their demonstration. The dates of the final demonstrations will be dependent on the selected participants and the current readiness of their technology. *Dates and times are subject to change.*

Upon conclusion of the finals, the xTech Program will select **one (1) team as the final winner of the competition to receive a cash prize of \$100,000** and may receive a follow-on contract or agreement of up to \$5 million to deliver their prototype system(s).

VI. Proposed Schedule

The proposed schedule is outlined below and subject to change without notice.

Date	Activity		
February 27, 2025 – April 24, 2025	Concept white paper submission period		
June 2, 2025	Semifinalists announced		
June 23-25, 2025	Part 2: Technology Pitches		
July 14, 2025	Finalists announced		
January 15-18, 2026	Part 3: Final Demonstrations		
February 2026	Final winner announced		

VII. Prizes and Incentives

Prizes will be offered under 10 U.S.C. § 4025 (Prize competitions). The total prize pool is \$300,000. The follow-on contract award/agreement will be offered under 10 U.S. Code § 4023 and is separate from the prize competition. Other non-monetary incentives are provided through the xTechSoldier Fire Control competition to help industry engage with the U.S. Army.

Phase	Winners	Prize	Contract Award
Part 1: Concept White Paper	Up to 5	\$10,000 each	N/A
Part 2: Technology Pitches	Up to 3	\$50,000 each	N/A
Part 3: Final Demonstrations	Up to 1	\$100,000	Up to \$5,000,000
	Total	\$300,000	\$5,000,000

VIII. Disclaimers

Registered participants shall be required to assume any and all risks and waive claims against the Federal Government and its related entities, except in the case of willful misconduct, for any injury, death, damage, or loss of property, revenue, or profits, whether direct, indirect, or consequential, arising from their participation in this prize competition, whether injury, death, damage, or loss arises through negligence or otherwise.

IX. Intellectual Property

The Army is a strong proponent of deliberate intellectual property (IP) rights and management by the private sector and DoD.

For the xTechSoldier Fire Control competition:

- The Federal Government may not gain an interest in IP developed by a participant without the written consent of the participant;
- Nothing in this xTechSoldier Fire Control prize competition shall diminish the
 Government's rights in patents, technical data, technical information, computer software,
 computer databases, and computer software documentation that the Government had
 prior to this xTechSoldier Fire Control prize competition, or is entitled to, under any other
 Government agreement or contract, or is otherwise entitled to under law; and
- The Federal Government may negotiate a license for the use of IP developed by a registered participant in the prize competition.

Register now by selecting the xTechSoldier Fire Control competition tile at: https://www.xtech.army.mil/

X. Point of Contact

The Army xTech Program Office

Office of the Deputy Assistant Secretary of the Army, Research and Technology

Email: <u>usarmy.xtech@army.mil</u>
Website: <u>https://www.xtech.army.mil/</u>