#### I. Background and Purpose

The U.S. Army would like to invite interested entities to participate in the xTechLive competition, a live pitch competition designed for eligible small to medium businesses attending Special Operations Forces (SOF) Week in Tampa, FL from May 6-7, 2025 to engage with the U.S. Department of Defense (DoD), compete for prize money and potentially participate in a post-competition technology pitch event.

The U.S. Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA(ALT)) is partnering with the U.S. Army Intelligence, Surveillance and Reconnaissance (ISR) Task Force to deliver the xTechLive competition at SOF Week 2025. The U.S. Army recognizes that the U.S. DoD must enhance engagements with industry by reaching new audiences through innovative platforms such as live pitch competitions at conferences. This initiative aims to (1) understand the spectrum of 'world-class' technologies being developed commercially that may benefit the U.S. DoD; (2) integrate the sector of non-traditional innovators into the U.S. DoD Science and Technology (S&T) ecosystem; and (3) provide expertise and feedback to accelerate, mature, and transition technologies of interest to the U.S. DoD.

The competition will award up to \$100,000 in cash prizes to selected participants. **Up to 18** applicants will be selected over the course of two (2) days at SOF Week 2025 to present their technology concepts to a live panel of U.S. Army and DoD subject matter experts (SMEs). The U.S. Army intends to select up to six (6) winners to receive a cash prize of first and second place: \$25,000; third and fourth place: \$15,000; and fifth and sixth place: \$10,000.

Registration will take place onsite at the U.S. Army xTech Program booth, number 5024, in the JW Marriott H.B Plant Foyer at SOF Week 2025 **beginning May 6, 2025, at 10:30 a.m. ET**. To be considered for a pitch presentation, interested entities must first meet the requirements outlined in Section II. Additionally, eligible entities will be required to fill out a registration form and provide a 60-second elevator pitch of their technology concept, addressing all-terrain, all-weather long-range sensing (SWaP-C, hardware, software) capabilities. This is required to ensure alignment with the U.S. Army's objectives. For additional details, please refer to Section IV.

In addition to non-dilutive cash prizes, participants may have the opportunity to engage with U.S. Army and DoD experts attending SOF Week 2025, receiving valuable feedback on their innovations.

The efforts described in this notice are being pursued under the authorities of Title 10 U.S.C. § 4025 to award cash prizes as described in this announcement. While the authority of this program operates under Title 10 U.S.C. § 4025, the xTechLive competition may generate interest by another U.S. Army, DoD or United States Government (USG) organization for a funding opportunity outside of this program (e.g., submission of a proposal under a Broad Agency Announcement). The interested organization may contact the participant to provide additional information or ask for a request for proposal in a separate solicitation. Winners 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 U.S. Army. The Army may use a contract mechanism of their choice and will notify the participants accordingly.

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The U.S. Army xTech Program utilizes the online evaluation and feedback tool, Valid Eval, to accept applications and streamline the evaluation and feedback process. xTech will provide a feedback report to participants following the live pitch event that will be accessible through the tool. The purpose of providing this report is to assist in potentially accelerating transition of the technology to a U.S. Army end-user by providing insight on best applications for the technology, suggestions for product improvement for Army use and recommended next steps for development. However, the U.S. Government may not respond to questions or inquiries regarding this feedback.

#### II. Eligibility Requirements

To be eligible for this competition, entities must be a small to medium business attending SOF Week 2025 in Tampa, FL. A small to medium business is defined as those with <1,500 employees.

Each eligible entity:

- Must be able to obtain a CAGE code (U.S. businesses) and/or NCAGE code (international businesses) to process payments (CAGE codes are not required during registration);
- Shall be incorporated in, and maintain, a primary place of business in the U.S. or a foreign country;
- May not be a U.S. federal or foreign government entity or employ a U.S. federal employee acting within the scope of their employment;
- May not be a company or person controlled by, funded by, or under the jurisdiction or direction of foreign adversaries; and
- Must not be based in a foreign country of concern (FCOC), directly funded by an FCOCgovernment or FCOC-government-subsidized guidance fund or be under the influence of an FCOC-based government in any way. Failure to meet these requirements will result in ineligibility for award.

### Companies that have previously been awarded a U.S. Army SBIR award may not submit the same technology concept as contracted.

The xTech Program will not provide travel or registration funding for eligible entities to attend SOF Week 2025.

#### III. Topics and Problem Statements

The U.S. Army seeks capabilities to enable and/or integrate deep sensing capabilities across the U.S. Indo-Pacific Area of Operations (AOR). These capabilities must be capable of functioning across vast distances in support of disaggregated and dispersed land forces in support of the Joint Force, as well as capable of functioning in environments as unique and varied as Arctic tundra, deep jungle, and overbuilt megacities. These capabilities should include deep sensing technologies to enable tactical to strategic echelons (Division-MDTFs) the ability to conduct ISR-T and reconnaissance in all-weather conditions as well as extended range into deep areas. Capabilities can be aerial and/or terrestrial-based and should be highly survivable.

Deep-sensing, all-weather, all-terrain sensor:

- Terrain: Sensor that can operate anywhere from the Arctic to the jungle
- Weather: Sensor that can operate under all weather conditions
  - Heat, extreme cold, humidity, frost, fog, rain, etc.

- Range: Adaptable for long or short distance sensing
- Sensor needs to be flexible, adaptable, multi-INT, scalable and cost-effective
- Low Size, Weight, Power and Cost (SWaP-C)

Topic descriptions can be found in <u>Appendix A</u> of this solicitation.

#### IV. Program Submission and Competition Structure

The xTechLive competition is voluntary and open to all entities that meet the eligibility requirements, noted in Section II. **Only one pitch per eligible entity is permitted.** 

All eligible entities will register onsite at the xTech Program booth, number 5024 (subject to change), in the JW Marriott H.B Plant Foyer at SOF Week 2025 **beginning on May 6, 2025, at 10:30 a.m. ET**. Firms will be asked to pitch on the date upon which they have registered. There will be no pre-registration for this competition.

To register and be considered for a pitch presentation, eligible entities will be required to fill out a registration form and provide a 60-second elevator pitch of their technology concept, addressing sensing all-terrain, all-weather long-range (SWaP-C, hardware, software) capabilities to a technical topic expert at the xTech Program booth during the registration hours noted below.

Please note, the selection of companies for pitch presentations is at the sole discretion of the U.S. Army. Even if a company believes its technology aligns with the topic, the Army will make the final determination based on the 60-second pitch and its priorities as outlined in the RFI.

#### Onsite registration will be held on:

- Tuesday, May 6, 2025: 10:30 a.m. 3:00 p.m. ET
- Wednesday, May 7, 2025: 10:00 a.m. 2:30 p.m. ET

The xTech Program will select up to 18 applicants onsite during registration over two (2) days to present their technology concepts to a live panel of U.S. Army and DoD SMEs. Selected applicants will be required to provide additional information on the Valid Eval registration page to facilitate evaluations. Registration will include but not be limited to the following information: company address, primary contact's information, CAGE and/or NCAGE (optional) and previous U.S. Army SBIR awards.

#### All presentations will be conducted in front of a public audience.

Each participant will have **five (5) minutes to pitch, followed by five (5) minutes for questions and answers with the judging panel.** Participants may bring prototypes and printed materials to share information about their technology concept during their pitch. No presentation software/applications may be utilized.

## All xTechLive competition pitches will be evaluated solely by government employees or designated support contractors, exclusively for the purposes of evaluation and program support.

		DEFINITION	
SOLUTION	SOLUTION DESCRIPTION	Fully describe what you are offering in your solution. Give the audience a solid technical introduction on how your innovation works and what makes it different.	
weight 30%	PRODUCT MATURITY	Please give the audience a clear understanding of your innovation's technical maturity. Support that claim as best you can.	
COMPETITIVE ADVANTAGE	SOLUTION'S ADVANTAGES	Prove your prospective customers will choose you given limited resources and myriad choices. Have you accounted for indirect substitute products as well as direct competitors?	
weight 20%	DEGREE OF INNOVATION	Prove that your solution is truly innovative. How big a departure from existing technical and/or operational approaches is your solution?	
COMMERCIAL REWARD VS. RISKS	MARKET SHARE	Define the specific commercial market segment your product addresses. Argue that your innovation will capture significant share within this market segment.	
weight 15%	COMPANY'S EDGE	Why will you win? Describe your company's Competitive Edge in the marketplace: Something you do better than anyone else. This might be a intellectual property, unmatched relevant expertise, a novel business model, channel partners, network effects, etc.	
POTENTIAL FOR IMPACT	weight 30%	This Dimension is for the Army judges to figure out. It is their job not yours! to connect the dots and determine how your innovation can impact the Army. If you have direct knowledge of your potential within DoD, please briefly make your case. Otherwise, don't spend your valuable pitch time on this one.	
PRESENTATION QUALITY	weight 5%	This is a difficult task presenting with little to no notice. The Army gets it! Please do your best to effectively get your message across.	

Presentations will be evaluated and ranked using the following scoring criteria:

The xTech Program will select **up to six (6) participants** as the final winners of the competition. Winners will be announced live in the **JW Marriott**, **H.B Plant Salons B-D at SOF Week 2025 on May 7, 2025, at 4:45 p.m. ET** and will receive **a cash prize of first and second place**: **\$25,000; third and fourth place: \$15,000; and fifth and sixth place: \$10,000.** All competition participants should plan to be present during the winner announcement.

#### \*Dates, times and location are subject to change.

Competition winners may have an opportunity to demo their technology concept at an event hosted by the U.S. Army ISR Task Force, tentatively scheduled for July 2025.

### Additional details for a potential post-competition event will be provided by the U.S. Army ISR Task Force at a later date and is subject to change.

#### V. Proposed Schedule

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

Date	Activity	
May 6, 2025	Registration (10:30 a.m. – 3:00 p.m. ET)	

	Live Technology Pitches (11:30 a.m. – 3:00 p.m. ET)
May 7, 2025	Registration (10:00 a.m. – 2:30 p.m. ET) Live Technology Pitches (10:55 a.m. – 2:30 p.m. ET)
May 7, 2025	Live Winner Announcement (4:45 p.m. – 5:15 p.m. ÉT)

#### VI. Prizes and Incentives

Prizes will be offered under 10 U.S.C. §4025 (Prize Competitions). The total prize pool is \$100,000.

Phase	Winners	Prize
Live Technology Pitches	Up to 6	1st place: \$25,000
		2nd place: \$25,000
		3rd place: \$15,000
		4th place: \$15,000
		5th place: \$10,000
		6th place: \$10,000
	Total	\$100,000

#### VII. 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.

#### VIII. Intellectual Property

The U.S. Army is a strong proponent of deliberate intellectual property (IP) rights and management by the private sector and U.S. DoD. For the xTechLive competition:

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

#### IX. Point of Contact

The U.S. 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>

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#### Appendix A – Problem Statement Descriptions

### Technologies will enable low size weight and power – cost (SWaP-C) for ISR / Sensor data collection.

- Technologies could provide or enable methods for efficiently exploiting date, either through compression, prioritization, etc, requiring less processing power and decreasing power output.
- Technologies could provide methods of energy storage that increases the amount of available energy for expenditure while reducing total weight.
- Technologies could provide software, advanced algorithms, or artificial intelligence that will efficiently parse and analyze data in support of maximizing intelligence insights while decreasing necessary associated power output and weight from energy storage.
- Technologies could provide hardware and material solutions that reduces the weight while increasing the durability of gondolas/chassis which house sensor/sensing components.
- <u>Technologies:</u> Lightweight composite housings; Modular, ruggedized chassis; Next-Gen battery module; MEMS-based sensor array; Advanced data compression: software or firmware.

### Technologies, whether hardware or software, that enables sensor data collection at a lower cost compared to the current industry standard.

- Technologies could provide a hardware or software solution which decreases the total cost of sensor collection compared to current industry standard.
- Technologies could provide the ability to easily produce sensors en masse, decreasing the total cost per unit.
- Technologies could provide the ability to produce / build the materials utilizing efficient manufacturing processes such as 3D printing.
- Technologies would be required to be easily deployable and able to integrate into modular systems.
- Technologies could provide the ability to miniaturize current exquisite collection platforms to be able to fit on smaller UAS's of various sizes (Example: HSI, Elint, Comint, Cyber, EO/IR, ETC.)
- <u>Technologies:</u> Additive manufacturing for housings; Modular plug-and-play sensor platforms; Compact, multi-sensor pods.

# Technology solutions, whether hardware or software, that enhances persistent sensor data collection in adverse weather to include rain, snow, sleet, wind, fog, electrical storms, etc.

- Technologies would be required to either decrease or maintain current levels of power output necessary for persistent collection.
- Technologies could provide the ability to stabilize sensors for persistent collection normally impeded by high wind or other weather events.

- Technologies could provide ruggedization to the sensor, gondola, chassis, or housing to withstand adverse weather.
- Technologies could provide algorithm enhancement to collected data which provides improved analytical insights that are usually degraded by collection during weather events.
- <u>Technologies:</u> Gimbal-based sensor mounts, vibration dampening mechanisms; Thermal regulation components, Integrated environmental controls.