

Question	Answer
<p>Why is the process still so heavily centered around white paper proposals instead of competition-based technology demonstrations?</p> <p>Live demonstrations seem like a much faster way to get capability to the warfighter since performance becomes tangible rather than theoretical. It also creates a more level playing field for small businesses that may not have dedicated proposal-writing teams or outside proposal support, but do have strong engineering and manufacturing capabilities.</p> <p>Has there been discussion around expanding more demo-driven evaluation pathways?</p>	<p>Thanks for the input. With the large interest we receive in our special topics, AAL currently does not have the resources to support competitive technology demonstrations for the evaluation process.</p>
<p>We are developing a small RPS that will exceed these requirements. However, the program timeline is not feasible. What might be the right Army program we should be speaking with as we develop our nuclear battery?</p>	<p>I would need to research potential stakeholder and development pathway. Additionally, the scope of this technology might fall under a DoW, DIU effort.</p>
<p>We are developing a small RPS that will exceed these requirements. However, the program timeline is not feasible. What might be the right Army program we should be speaking with as we develop our nuclear battery?</p>	<p>For this effort we are working against the exercise timeline for 11 ABD.</p>
<p>Are any specific fuels for power generation prohibited? Are any fuels specifically preferred?</p>	<p>No, there are no preferred or prohibited fuel sources (existing supply fuels, solar) - we don't want to restrict any fuel sources (to include alternative fuels, fuel cells and hydrogen, propane or some form of liquid gas or compressed fuels).</p>
<p>How will the units be delivered to their site? Preference for airlift/drone delivery?</p>	<p>Will be to the unit (11th airborne) their second brigade. If there are specific requirements for transport, that's for unit coordination to move technology with the Soldiers to the training locations.</p>
<p>Specifically regarding fuel, is propane an acceptable fuel?</p>	<p>No, there are no preferred or prohibited fuel sources (existing supply fuels, solar) - we don't want to restrict, uh, any fuel sources (that would include alternative fuels, fuel cells and hydrogen, propane or some form of liquid gas or compressed fuels).</p>
<p>Could you elaborate on the Month 3 demo requirements? November 2026 Equip and Field. How is month 3 demo different from month 6 demo?</p>	<p>Month 3 (Nov 26) is to integrate the technologies with the unit -for Soldiers to learn how to use the equipment and start to employ tactics. Month 6 (Feb 27) is the actual training event with larger quantities of equipment.</p>
<p>It seems like RDTE funds will be used, but the Whitepaper doc seems to leave the door open for SBIR (SBIR Eligibility status). Therefore, what type of funds will be used? What is the anticipated total amount of funding available?</p>	<p>This is not a SBIR effort and the anticipated total amount of funding available is unknown</p>
<p>Where are the products to be shipped to from the factory?</p>	<p>Location will be disclosed after contract award</p>
<p>Regarding the schedule - Multiple copies of ready to run technology are expected to be delivered in November yes?</p>	<p>Yes to have multiple sets available and for the ability to integrate</p>
<p>What is the expected number of units to be deployed for the (Month3) Nov-26 and the (Month 6) JPMRC27-02 this opportunity?</p>	<p>Larger systems will require less quantities if they're designed to support, you know, company battalion brigade (. e.g., command post operations). Smaller technologies that are getting in the hands of the Soldiers require a larger density to proliferate across the force to get a fair evaluation of what a brigade set looks like. It is dependent on the technology. The number will not be the same for all of them.</p>
<p>Are their minimum/maximum TRL Level and readiness date.. Are higher TRL levels preferred?</p>	<p>This is a pretty ambitious effort with a relatively short timeline for getting the equipment to the soldier, unit, to the field - so higher TRL (prototypes already, built, and easy to transition to operation testing in the field.), yes, the higher TR level would support that.</p>
<p>Approximately how much power is "small unit power" vs "large unit power"?</p>	<p>Small unit power is typically squad and below. So ~300 W or below</p>
<p>Is the Government prioritizing any specific echelon (Soldier, Squad, Platoon, or Company-Brigade) for initial down-select, or will all echelons be weighted equally during white paper evaluation?.</p>	<p>All of them are equally considered - we'll down select based on what will provide the most impact to the unit overall and any fiscal resource constraints.</p>

Is there any future expectation for this to extend to the 86th IBCT or similar Cold Weather units after this event?	We are going to use this event to identify solutions that would be employable by similar units in similar cold weather environments. We can't guarantee there is a future event but the data from this event will help inform other units and associated technological developments or training.
Is software/algorithms for power and battery management, to accurately predict and improve amount of energy left, runtime, and fast charging under cold conditions a relevant topic area for the proposal?	That is correct. One of our mission threads is to provide a standardized method or tools to measure forecast and plan power consumption and support sustainment commodities across the entire echelon. Yes, this is an area of interest
Will you be publishing the total power requirements at each echelon. soldier, platoon, company, brigade?	We have some preliminary information and will determine if that's something we can release - but it is not intended to release information on total power requirements
We are a manufacturer of smart chargers and batteries for UAS. 1. Is integration with existing soldier power management architectures — SPM-622, the Universal Battery Charger family, the Adaptive Squad Architecture power interface — an explicit expectation, a desired stretch, or out of scope? 2. What primary power inputs should the hub be designed to accept — AMMPS-class generator AC, vehicle 28 VDC, soldier-portable solar, or a combination — and is there a priority order among them? 3. Does AAL have a preferred Phase II demonstration venue or end-user touchpoint that respondents should plan around — for example, ARTC at Fort Greely, CRREL's climatic chamber, an 11th Airborne Division home-station validation, or a JPMRC-AK 27-02 rotation?	Q1: Interoperability is specified in the solicitation> Q2: AC/DC, alternative power generators, solar, etc. there is no priority other than availability. Q3: This effort is aligned with JPMRC 27-02
It seems like the call is really asking for "Power Distribution" and "Arctic Power/Energy Sources." Is the perception that the power distribution part is solved, just not in the Arctic? Would Arctic capable batteries up and down the echelon's solve the problem alone, or is power distribution actually a unique problem in the Arctic?	We are looking for power distribution technologies that are functional in the Arctic
Is the Feb exercise near a body of water. That is, will power generation based on a floating platform be relevant?	It likely would not be prudent to rely on an unfrozen body of water to support the proposed solution
Is any part of this opportunity looking at thermal energy (heating / cooling)? Is that of interest?	If some form of a heating source to heat the batteries so they can remain in a state of charge, or to support charge or recharge or if there's encasement or some kind of heating element or insulation that is part of the technology we would be interested.
Locations for 2 and 3?	Location will be disclosed after contract award
Can we make more than one submission, and if so, should we submit separate white papers?	Yes for both
Is CMMC compliance needed to compete for this effort ?	CMMC is not a requirement for Army Contracts until NOV 2028. This effort does not require CMMC compliance, and will not be a factor in determination for award
Will there be multiple locations, which would require multiple people to ensure interaction with the units?	Yes. During the exercise 27-02, you're not going to have a brigade-sized element occupying a 1K by 1K space. There'll be multiple locations where the equipment will be employed. Prior to the exercise, it's really defined by those companies, battalions, and brigades. Yes, I would plan on multiple locations.
Are stated weight thresholds absolute limits, or target objectives subject to trade studies (e.g., increased capability or survivability)	These are target weight criteria. In this operating environment, the units are really constrained in their ability to have a logistics network and vehicles to move equipment. So, weight is a critical factor - minimizing the weight that Soldiers either have to carry or pull via sled is a factor in the solution. There's a difference between what Soldiers, Squads and Platoons are going to be able to pull from their sleds, and what the command posts will utilize. So the impact of weight is significantly higher for Platoon and below, because of the way that they maneuver.
Are "stand-alone" energy storage products eligible? Meaning, without integrated charging front-ends, or output power stages? Because 2590s and CWBs have been mentioned.	Yes, as long as your energy storage product meets the requirements in the special notice they would be applicable

SWaP requirements / parameters?	The solisitation outlines the size, weight, power/performance attributes of interest for the various levels of unit size, e.g., Soldier, Squad, etc.
From the Structure of White Paper: 3.b). xii) SBIR Eligible. Is this a yes/no response and will companies who are not SBIR Eligible be viewed negatively in your evaluations?	A yes / no response will be sufficient and is for informational purposes
Will multiple awards be made across the four echelons, or do you have a preference for vendors who span multiple tiers in a single submission?	We're looking to deliver a suite of capabilities to the 11th Airborne, if there is a capability provider that their technology focuses on the Soldier or the Squad level and another capability provider is providing a larger level, the award supports multiple contracts for multiple echelons so there's not going to be a, hey, you are solely the Soldier solution or solely for the Squad, Platoon, Company, Battalion. We also understand that production capacity can force us to utilize multiple solutions at echelons because of the timeline available, so potentially multiple contracts for multiple echelons, multiple companies.
are there any kind of power interface standards you are looking for field use, or is cold weather operability the primary focus?	It is cold weather driven. So the criteria is the extreme temperatures, lightweight and the probably the short timeline we have between now and February to support the mission. And this is a distributed environment where modular technology would scale up from small to a larger energy power system, at the company level or at a brigade level. So, modular and interoperability, would support standardization, but it is cold weather driven.
Are transport costs and logistics management covered and handled by the unit? Or, like some xTech comps, the responsibility of the participating company?	I think that's a mixed bag. We can build in transportation costs for this tech into the contract -that's not something unfeasible at this point in time. So we're talking like delivery to the unit, it's clearly going to be built in. If we're talking delivery to the training site, we can account for that as well. For movement of equipment by Soldiers, especially the Soldier carried equipment, much of that cost will be mitigated, But if you're talking about delivery, that can be included.
I guess what meant to say are their Threshold or Objective power requirements at each echelon that we can address in the white paper... And when we say power is there a preferred type of power? AC vs DC	DC is strongly preferred for Soldier, preferred for Squad but AC would be acceptable. Above that AC or DC is acceptable
Can you provide additional explanation of requirement 1C: "Energy storage and distribution systems must not degrade capability by more than 20% at or below -40C." Is this relative to the power and energy delivered by the unit at room temperature?	The battery technology that we're largely work with up to this point begin to degrade at of below -25C or -30C, some chemistries degrade rapidly, and therefore, once you reach a -30C where its energy is less than 20% of its rated amount. We're looking for a chemistry or a capability that has a slower degradation once you get to the extreme temperature ranges, at < -40C.
How should we estimate/present costs per unit without knowing the quantity that will be requested?	Look at initial cost of per unit by one and then playing out what the cost breaks look like for larger quantities. If it's cheaper to make 10, 25, 50, or 100 of something, and we can identify what that would look like for a Squad, Platoon, Company

We have a technology that is a 1kW generator. That falls between the squad and platoon level. The generator is heavier than 50 pound Platoon level but uses much less fuel than a 2kW conventional genset. If we show the weight advantage in generator mass + fuel over mission duration would that be responsive?	We encourage you to submit your technology capability. We are interested in modularity and scalability for the system to address each/multiple levels of unit size , e.g., Soldier, Squad, etc.
Are there specific temperatures the technology must be rated for?	Desired temperature parameters are outlined in the special notice
what are the battery cell counts utilized for the UAS 4S 6s 12s etc? What category uas' batteries are relevant to the application ?	COTS technologies used for small form factor Group 1 and 2 UAV and First Person View (FPV) drones.
If new cell packs with standard form factors were being developed, is there a requirement for UN38.3 certification for November testing?	We encourage you to submit your technology capability and you could note the certification requirement and timeline in the technology development plan.
Remind us if TAA compliance is required for follow on orders.	We encourage you to submit your technology capability. We will need to review Trade Agreement Act compliance necessary/applicable for the PoP.
For battery performance: -40°C is called out as a target for cold temperature operation. Is there a target for high temperature performance (i.e. needs to operate up to 30°C, 45°C, or 60°C) or is optimization for low temperature preferred.	The technologies are going to be evaluated and tested in Alaska in February, temperatures range anywhere from -20C to -40C and below. So the evaluation of the technology is in a Arctic environment,
Can you comment on other capabilities such as charging temperature, cycle life, calendar life, shelf life, self-discharge, and deep-discharge recovery requirements?	The environment/operating conditions for charge/discharge is -40C or colder and >72hrs. The additional technology attributes may become relevant factors based on results of the effort.
What are the anticipated full-rate production quantities for chargers and batteries?	Quantities depends on the level of unit size considered, e.g., Squad, Platoon, Company, etc.
To follow up on reduced degradation, would better charging patterns that reduce battery degradation, and extend battery life be considered for this proposal?	Yes
system maintenance - are expectations this would be at operator level?	Yes, that is correct, The units would reasonably be dispersed or have limited abilities to use a more developed logistics network to support maintainability.
Are preheating cycles allowed?	Yes, if your technology supports a preheating or room temp. There are other means to heat batteries, although if additional equipment is needed - the unit would need to carry or transport, then that would also be something to consider, where is the trade space between additional weight required for the system with preheating capability.
What operational duration thresholds are most important for disconnected or degraded environments — 24, 72, or longer?	We are looking for greater than 72 hours deployed or disconnected from a power source
What distinguishes the proposals that you believe will provide the greatest operational value for distributed Arctic operations?	We released the solicitation and the evaluation criteria is there, the timeline's there, and we are going to allow this competition to be open and fair across the board for all that submit. We will not discuss how to position your proposal better
Would the Army accept passive self-heating from conversion losses or controlled pre-warm strategies to maintain low-temperature performance?	If passive heating technology supports your capability, we encourage you to submit a White Paper. for consideration.
What logistics work products are expected to be delivered in November with the equipment?	System components, cabling, connections, etc. to support capability demonstrations and unit training.
Is this initiative interested in manufacturing technologies that could help soldiers maintain, repair, or reproduce power sources such as batteries in the field?	Maintainability is mentioned in the solicitation. However, producability, while not specifically excluded, was not an attribute previously considered.
Is there a desire for UAS specific batteries that fit the Group 1-2 platforms 11th Airborne operates that are optimized for cold wx operations.	Yes, there's an interest here in those types of batteries because these are the platforms that the unit employs, so extending the duration of their capability would be beneficial.

<p>Is your preference for traditional Commercial-Off-The-Shelf energy storage solutions currently available in the marketplace, or is the Government interested in evaluating emerging, lower TRL energy storage technologies designed to address limitations associated with thermal runaway, reliance on rare earth materials, energy density performance constraints, and operational performance across extreme temperature environments?</p>	<p>We encourage you to submit your technology capability there is no COTS/GOTS preference. We are focused on energy systems that support all levels of unit size(s) in extreme cold environments.</p>
<p>What primary power inputs should the hub be designed to accept — AMMPS-class generator AC, vehicle 28 VDC, soldier-portable solar, or a combination — and is there a priority order among them?</p>	<p>AC/DC, alternative power generators, solar, etc. there is no priority other than availability.</p>
<p>Is a non US (owned/controled) company able to particpate in this solicitation?</p>	<p>Eligibility to participate is stated in the BAA - and there is the NDAA requirement for U. S. sourced technologies that is being considered as part of the solicitation. If your technology has merit, then we will consider, this in making a selection.</p>
<p>Thermal and acoustic signature requirements / goals</p>	<p>Based on survivability of the formations. Clearly, the signature outputs at the Solder level are going to be significantly smaller, but when we talk about company, battalion, brigade command post, at that level the thermal as well as the acoustic signatures are highly identifiable, and it poses a risk to detection. So mitigating that is important to extend operational capability. When we're currently reliant on the generators and there's some solutions to like reduce heat, thermal identification or sound buffers. But Thermal and acoustic signature reduction is a goal.</p>
<p>Are you interested in thermal mitigation in the field so IR enabled drones and scopes can't see them?</p>	<p>We are interested in any opportunities for signature reduction and management of the proposed technology</p>
<p>What is the typical device mix that we can expect especially with regards to large consumer devices like HVAC/heaters or similar?</p>	<p>The solicitation, the special topic is more focused on the smaller Soldier, Squad level in the Arctic environment. For the large command post, while there is a company level and above part of the solicitation, if you're technology supports the larger end of the problem, please submit. But we're also interested in trying to get down to a small level - the ability to deliver a small form factor (lightweight, high energy density power) to a Soldier or Squad.</p>
<p>Can the KO confirm whether program funds have been formally allocated for this requirement, and if so, from which appropriation and fiscal year?</p>	<p>We are working with FY26.</p>
<p>Are there specific soldier squad teams that the industry could connect to or seminar events if the white paper is awarded ? The UAS batteries are requirements for specific for platoon/ squad and conops</p>	<p>For this solicitation, it is units of the 11th Airborne (their 2nd Brigade) Like, if a company is selected for award, you will be tied in with the unit. Earlier integration is always better. If we can get technology in the hands to familiarize early, that's a win. Once a contract's in place, I see no issue with early delivery, prior to the milestone, there's no problem there. The 11th Airborne Innovation team tied to the training events and the units that your technologies is directly associated with, you will have access to the units upon contract award for integration of your technology. And we will synchronize what that looks like across the board. With multiple contracts from multiple companies, we anticipate variations in arrival, delivery, production, and density throughout that initial period. Some companies will have technology that's immediately ready, some will have to build, some can pull from inventory - this won't be the same for every Provider. So access and early delivery is available upon contract award.</p>

The solicitation requires a significant leap in energy density at the Squad Level (2.5kWh at 15 lbs / ~367 Wh/kg) compared to the Soldier Level (~128 Wh/kg). Given that high-density chemistries capable of hitting that 367 Wh/kg mark—like Silicon Anode—typically struggle more at -40°C, is a hybrid-chemistry architecture managed by a Battery Operating System (BOS) to meet both the density and cold weather requirements of interest?	Yes, as long the system is safe and meets the power and energy requirements identified in the solicitation.
For battery solutions, what level of certification or validation testing will be required prior to fielding?	We encourage you to submit your technology capability. We will need to review applicable certifications, validations, safety releases necessary/applicable for the PoP.
What type of vehicle platforms can be expected for this unit that they operate from?	Cat V (because of the snow, that one is proliferated across the 11th) and the Polaris snow machine are like the primary with the sprinkling of, you know, wheeled vehicles.
follow up is, do you have a suggested head count? Two, perhaps three or four?	Please rephrase the question and/or provide any context so we can respond.
There is a specific mention for xt60 and xt90 batteries. what are the battery cell counts utilized for the UAS 4S 6s 12s etc? Also, what category uas' batteries are relevant to the application ?	COTS technologies used for small form factor Group 1 and 2 UAV and First Person View (FPV) drones.
Jumping way ahead, but could you provide context on projected future demand beyond the initial scope of the BAA and exercise upon successful demonstration. Sorry if I missed this and it's already being addressed.	Transition and follow-on efforts have not confirmed but there is a high demand for technologies that support operations in extreme cold environments.
What primary power inputs should the hub be designed to accept — AMMPS-class generator AC, vehicle 28 VDC, soldier-portable solar, or a combination?	Multiple sources of input power supports redundancy.
Could you please state the funded amount the white paper will be positioning for?	We are not able to specify the amount of funding associated with this solisitation.