

SBIR 25.4 Release 9 Q&A Telecon Transcript

17 Jun 2025

- SOCOM254-P005 Secure and Protect Infrastructure through Cyber-threat Emulation (SPICE)
- SOCOM254-P006 Visual Augmentation Systems (VAS)

SBIR Process Timeline

Jun 04, 2025: Topic issued for pre-release Jun 25, 2025: USSOCOM begins accepting proposals via DSIP Jul 09, 2025: DSIP Q&A closes to new questions Jul 23, 2025: Deadline for receipt of proposals no later than 12:00 p.m. ET

SOCOM254-P005 Secure and Protect Infrastructure through Cyber-threat Emulation (SPICE)

- 1. Is this just a phase I SBIR or is it also a Direct to Phase II? This is a Phase I SBIR only. SOCOM is only accepting Phase I proposals.
- 2. Is AI for vulnerability research enhancement is a priority? No, not as a primary focus. The topic is not scoped specifically around AI for vulnerability research.
- 3. Is there a geographic region you're most interested in for a phase 1 test case? What about phase 2? No geographic region is prioritized. Technologies should be globally applicable. Geographic considerations may emerge in Phase II.
- 4. Is a customer memorandum required for this phase I open topic? Please make sure to familiarize yourself with the USSOCOM BAA Instructions. The Customer Memorandum is a AFWERX requirement and not required by USSOCOM.
- 5. AOI 4): Wireless network sensing. Is a solution that extracts wireless sensing information from a commercial C2 system like 5G cellular within scope? Yes. Wireless technologies including 3G/4G/5G are within scope if integrated with commercial C2 systems.
- 6. Are Al/agentic code and command generation techniques of interest (e.g., from language models), and what be a compelling platform for deploying the solutions? Yes, if they align with the topic. Open-source LLMs and accessible platforms like Ollama are encouraged. Avoid SaaS like solutions which cannot be put on prem.
- 7. Does gov't have access to, or could facilitate access to, a preferred cyber range for testing, or should the vendor expect to simulate their own? Vendors should simulate their own for Phase I. Cyber range support would only be considered at Phase II.
- 8. During Phase I execution, would performers be provided access to in use government frameworks/systems (or related documentation) to assess feasibility? No, government frameworks/systems will not be provided during Phase I.
- 9. Does gov't find autonomous, adaptive, and/or learning solutions more compelling than human-in-the-loop techniques? Any expectations regarding HITL? Proposals will be evaluated on alignment with the topic rather than on HITL vs. autonomy.





- 10. Are solutions that demonstrate effects from portable/field systems more compelling than deploying on non-portable (e.g., from command center)? No inherent preference. Both remote and proximity-based solutions are welcome if they meet topic objectives.
- 11. Are you interested in novel AI-driven solutions that ENABLE / support OCO functions as described in your topic, but don't actually execute code remotely, etc? If it aligns with one or more of the four topic areas, it's in scope, regardless of whether it's AI or another solution.
- 12. What types of systems or operational environments are highest priority for cyberthreat emulation under SPICE? Network-based systems, embedded systems, operating systems, and routers. No specific priority was defined.
- 13. Are you interested in the exploitation of AI Models or exploitation of AI applications as the problem to be solved? No, not at this time.
- 14. Are you interested in a new, innovative AI-driven encryption solution that could serve as a preventive measure to address some of the listed challenges? No.
- 15. Is there an operational need to assess/validate software like compiled code running on embedded or COTS hardware that supports SOF missions without source code? Not under this topic.
- 16. How important are letters of support for this SBIR? Government letters of support are a disqualifier. Letters from subcontractors are acceptable.
- 17. Is there a transition pathway or designated customer inside PEO SOF Warrior or related components to own post-Phase II efforts? Yes. The Government Stakeholder team is actively engaged and interested in following through with Phase II and beyond.
- 18. Are there any red flags or technical domains that we should avoid? No.
- 19. How important is compatibility with existing SOF C2 or mission planning systems (e.g., ATAK, JADC2 elements)? Solutions should integrate with existing commercial system. Section four is not meant to develop a new C2 platform but expand the capabilities of any commercial mobile C2 solution.
- 20. You mentioned LPE at the beginning, so if we offer a specific LPE exploit is it in scope? Yes. Local privilege escalation falls under Area 1 and is within scope for research.
- 21. Is technology area #2 focused purely on offensive cyber capabilities or are novel defensive capabilities being considered as well? SOCOM is open to both offensive and defensive capabilities. Area #2 focuses on delivering effects (deny, degrade, etc.) but is not restricted to offensive-only concepts.
- 22. How are patent pending capabilites handled in terms of SBIR feasibility study? If we mention or discuss one of our patent pending capabilities in the doc? Question pending response.
- 23. Does topic reflect specific needs/gaps identified in recent SOF cyber/ISR missions or JSOC or MARSOF units? Want to know alignment w/ live TTPs, mission sets. No specifics will be shared at this time.





- 24. Describe role of detection and evasion of defensive cyber solutions as part of the solution? Not required, but if evasion/detection supports access, escalation, or persistence, it can be part of the proposal.
- 25. Does a tool that focuses on a novel technique that potentially allows new accesses for operators to exploit fit into the ask to focus on novel techniques? Yes.
- 26. Would a specific fuzzer for RCE be in scope? Interesting? A standalone fuzzer is not in scope, but a fuzzer used to develop novel RCE techniques could be relevant.
- 27. For topic #1, are both passive and active recon of interest? Yes. Network reconnaissance comes in many fashions, forms, and is not directly as a result of stimulating a network and getting a response.
- 28. Would embedded systems in an automotive context be within scope? Yes. That would align with Area 2.
- 29. Are the certain computer architectures that are of more interest (arm, fogs, intel, etc)? No. The architecture is not critical at the feasibility study stage.
- 30. A fully developed exploit is in interest but the tools that help find this exploits are not in scope? Correct. The focus is on developed capabilities, not tooling for exploit development.
- 31. Is compatibility with COTS exploitation frameworks of interest? Compatibility is not required or expected.
- 32. Are there any specific metrics or benchmarks for evaluating the feasibility of proposed solutions in Phase One? No. Metrics may be defined at Phase II for prototyping.
- 33. Is there a requirement regarding how quickly a solution needs to operate? No.
- 34. For topic 3, are RF air gap jumping capabilities of interest? Yes. Novel, non-standard access methods like RF air gap jumps are of interest.
- 35. It sounds like new, novel and unpublished capabilities are primary focus? Does feasibility of maturation of existing PoC in scope? Yes. Feasibility studies to mature PoCs are acceptable if aligned with topic areas.
- 36. Are the specific post exploitation capabilities that are of interest? Not explicitly, but deform (deny, degrade, etc.) payloads under Area 2 may relate to post-exploitation goals.
- 37. Is there an expected number of awardees? No.

SOCOM254-P006 Visual Augmentation Systems (VAS)

- 1. The SOCOM 254-P006 topic only references Phase I, Phase II, and Phase III. Does this indicate that D2P2s are discouraged? Yes, this is an open topic for Phase I only. Direct to Phase II (D2P2) proposals are not being accepted.
- 2. On item #13, what is the required Threshold and Objective for latency? The requirement is low enough latency to avoid user-observable ghosting or lag likely high single digits to low double-digit milliseconds for weapon-mounted or handheld





devices. Helmet-mounted systems would require lower latency, in the low single-digit ms range.

- **3.** On item #17, what laser frequency ranges are of interest? For item 17, which is laser detection/warning technologies, all ranges from near-infrared through the SWIR spectrum are of interest.
- 4. Please confirm the period of performance for Phase I & II Phase I is 7 months and includes submission of a Phase II proposal. Phase II typically runs 12–18 months, depending on the proposal.
- 5. **Please confirm the funding level for Phase I and Phase II.** The Phase I funding level is up to \$175,000. We will not be accepting phase two proposals.
- 6. Are multiple submission from the same entity allowed? No. Only one proposal is allowed per entity under an open topic.
- 7. Are submissions from different companies held by the same ownership allowed? Submissions from different companies held by the same ownership are allowed for a SBIR Open Topic.
- 8. Would AR HUD/HMD or other AR use cases fall under this proposal request? No. AR software and common HUD technologies like waveguides are not of interest unless they are truly novel in hardware. Display hardware innovations may be acceptable.
- 9. What are the requirements for point 9? Point 9 seeks novel display technologies that reduce the size and weight of visual augmentation devices including display hardware and the optics that relay visual data to the user.
- 10. Are helmet mounted, weapon mounted, or handheld devices of the most priority? Is there a set fraction being awarded to each type of system? There is no stated priority among device types. The topic was kept broad to include a range of applicable technologies.
- 11. Given the evolution in VAS, how does commercial scalability & integrator readiness weigh with scientific & technical merit when directing to Phase II proposals? Technical merit is the highest priority. SOCOM can help performers with scalability and integration.
- 12. RE: #20 Do you have any desired capabilities that you think are inadequately met by conventional sensors and for which event-based sensors may be appropriate? Event-based sensors are a new area for SOCOM. We are open to concepts of operation that show applicability, but we do not have predefined expectations.
- 13. For handheld systems, are screens expected to be within the system weight, or just the imaging system? The screen and all operational components must be included in the system weight.
- 14. What types of evidence best demonstrates a solution's potential to accelerate transition and collaboration with both defense integrators and commercial partners? Prior work and openness to collaboration are useful. SOCOM primarily values technical innovation and will work with performers on integration.
- 15. With regard to "only one open topic", does that mean if I'd like to submit a proposal for Technology Areas 7, 8, 10, and 12, I could only pick one to do? Yes. Only one proposal is allowed under this open topic. Focus on the area where your company is most confident.





- 16. Can we propose both a weapon mounted and handheld system in one proposal? Assuming they are similar technology with differing capabilities given the extra size. Not recommended. It would likely be too complex of a proposal/lacking sufficient details for both systems due to page limitations. SOCOM is currently more interested in weapon-mounted applications.
- 17. Could you elaborate on Topic 16 and clarify multi-sensor vs. multi-modal, multidomain sensing, and their relation to lethality?? Multi-sensor refers to systems using multiple sensors (e.g., SWIR and MWIR). Multi-domain includes other sensing like IMUs, etc, for sensor/data fusion. Both can support lethality via targeting enhancements for applications for joint fires.
- 18. For 10, can you give a ROM for Medium and Long Range? Medium range = 400–700 meters. Long range = 700 meters to 2km+.
- 19. Is there any interest for this proposal in sensing modalities other than IR, such as different electromagnetic spectrums? e.g. lidar to eyepiece? Yes, but include a clear concept of operations. SOCOM is open to novel approaches beyond IR, depending on demonstrated value.
- 20. Could you please elaborate on item #1 & #14? Would this topic be open to software approaches that process imaging data post-capture for display in hardware? Yes, if near real-time or real-time. Post-mission/offline processing is not of interest.
- 21. Is the intent to produce a "complete device" eg, handheld camera system, or are efforts related to component enhancement the priority? eg, novel NIR sensor. Both system-level and component-level efforts are acceptable. There is no preference stated between the two.
- 22. Can you elaborate on the desire for increased field of view with decreased SWaP. What FOV is desirable? What is the SWaP today, and what reduction would be ideal? For night vision goggles, current FOV is ~40°. A meaningful increase would be 60° or more. A 15–25% reduction in SWaP would be considered significant.
- 23. Does the handheld variant have to run off CR-123 or are 18650 accepted and is that included the weight of the product. CR123 and L91 lithium AAs are acceptable. Battery weight must be included in the total system weight.
- 24. Are innovative optical components in support of a final device of interest, or do we need to propose a complete system / complete product as our proposal? Component-level proposals (e.g., optical sensors) are acceptable. A complete system is not required.
- 25. **Can we show feasibility of novel sensor capability but integrate a COTS display?** Yes. Using COTS for part of the system (like display) is fine if the novel capability is demonstrated.
- 26. Event-based sensors and concepts of operation. Are you interested in event-based and event-frame based object detection and tracking? Yes. SOCOM is interested in novel applications of event-based sensors, including object detection and tracking.
- Do you have any ballpark estimate for how many total awards might be given? Typically 1–3 awards, but open topics allow flexibility for more depending on proposal quality.





- 28. Section K: If Section K is not submitted with the proposal, the proposal will still be considered responsive. What is Section K? Yes, the proposal is still considered responsive. Section K refers to the Representations and Certifications ("Reps & Certs").
- 29. Related to topic 1, is this proposal interested in the generation of synthetic data in support of AI/ML imaging systems? No. SOCOM is not interested in synthetic data generation for this topic.
- 30. You mentioned earlier "AR" HUD is not of interest, can you go over that again? No interest in AR glasses /IVAS type or no HUD weapon sight/handheld interest? SOCOM is not interested in AR software or IVAS-style systems. Only truly novel display hardware might be considered.
- 31. **Topic 8. Can you elaborate on fire control?** Fire control includes systems that help determine where to aim such as measuring target distance or guiding the user for lead and correction not just zeroing the sight to the weapon
- 32. For modular night vision goggles, what wavelength bands beyond traditional image intensifier tubes be of interest? SWIR, mid-wave, and long-wave IR bands are all of interest due to their additional capabilities.
- 33. For a "modular" NVG concept to increase depth of field, would this imply a clip-on solution, or would a replacement lens be acceptable? Either is acceptable. SOCOM is not specifying a solution the goal is to increase depth of field without requiring frequent focus adjustment.
- 34. How does one "increase lethality"? What system performance (hardware, processing, display) results in increased lethality? e.g. better contrast, target ID,... Improvements in self- and target-location, better imaging in dynamic environments, and enhanced accuracy in targeting/joint fires delivery all contribute to increased lethality.
- 35. Would subcomponents be acceptable for proposal? (For example a novel sensor that enables wide FOV and low SWaP in a modular NVG, but not the goggle itself) Yes, subcomponent proposals are acceptable and encouraged under this open topic.
- 36. Unclear on novel display system for HUD. Why is a waveguide a "no"? No to devices using WG? Waveguides are typically not novel and have known issues (e.g., brightness, light bleed, power use). Unless significantly innovative, waveguide-based solutions are not of interest.
- 37. Do you accept a proposal for an innovative Al-driven realtime solution whose foundation has been developed & can be further enhanced to meet the program's needs We would be interested in reading a proposal, as long as it fits one of the topic areas and operates within real-time and SWaP constraints.
- 38. Is the focus on innovative near-to-eye (HMD) AR displays or standalone HUDs is also sought? Only near-to-eye displays are of interest. Standalone HUDs (e.g., in vehicles) are not.
- 39. Are vehicular weapon systems included in "weapon mounted" Only if user-operated (e.g., M240 or M2). Vehicle gun systems like those on tanks are not included.
- 40. **Application-wise: helmet mounted AR systems or, for instance, vehicle HUD?** Vehicle HUDs are not of interest. Helmet-mounted or near-eye display technologies are.





- 41. Previous mention of priority interest: weapon sight before hand-held system. If given choice between multi sensor goggles and weapon sights? Preference is currently for multispectral weapon sights, especially for medium to long range use.
- 42. What's the page limit for volume 2? 5 pages, plus a required quad chart. Details are in the SOCOM-specific instructions on DSIP.
- 43. What is the minimum runtime? Approximate guidance: 4 hours for clip-on weapon sight and handhelds, 8 hours for NVGs. These are not hard limits.
- 44. Is there a limit specific to the battery pack other than the system SWaP? No specific battery limit, but most systems use 1–2 cells. High-power systems may use up to 6.
- 45. Do hand carried drones count as weapons for "weapon mounted"? No. "Weaponmounted" refers specifically to small arms, not drones.

