



Rising Smoke Ask Me Anything Session

This document captures questions submitted by industry during the Rising Smoke Prize Challenge AMA conducted on June 8, 2026, along with responses provided by the Government team during the session. This Q&A document is intended to supplement the Rising Smoke Prize Challenge solicitation and should be read in conjunction with the official challenge materials.

| QUESTION | ANSWER |
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| When will the Phase 1 template be released? | Week of 8 June |
| Is there a ROM (Rough Order of Magnitude) requirement? The FAQ shows a non-binding ROM is requested, but the 7 major criteria does not include a ROM component. | A ROM is not explicitly requested and is not listed for this challenge. The guidance referenced is not applicable to this challenge. |
| How will the Phase 2 rapid acquisition be solicited (e.g., DIU CSO)? | The Rising Smoke Challenge Open Announcement on diu.mil website is the entry point. Rising Smoke Challenge Phase I top performers may be invited to submit a proposal for the \$50M rapid acquisitions program contract without further competition. |
| When will pricing be requested? | Companies who are invited to participate in the follow-on contract will have an opportunity to provide a ROM. |
| How soon will a prototype need to be delivered? | The Phase 2 rapid prototyping contract is scheduled to begin in August 2026, with the prototyping phase expected to last 18-24 months |
| <p>The "Rising Smoke Prize Challenge" states "The white paper submission must not exceed 25 pages in length".</p> <p>By contrast, the "Solution Brief Guidance" states "we strongly recommend that Solution Briefs not exceed 5 written pages using 12-point font or 15 briefing slides".</p> <p>Can you please clarify which guidance is more appropriate for this specific opportunity?</p> | <p>The white paper requirements listed in the Rising Smoke Prize Challenge solicitation are the requirements that apply to this opportunity.</p> <p>The "Solution Brief Guidance" referenced in the submission portal is standard guidance used across a variety of DIU opportunities and is not specific to the Rising Smoke Prize Challenge.</p> |

| QUESTION | ANSWER |
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| | For Rising Smoke, proposals should follow the solicitation instructions and may submit a white paper of up to 25 pages, consistent with the requirements outlined in the challenge documentation. |
| When do you anticipate first deliveries of production units? | Approximately 18 months after contract award, with prototypes available to begin live testing. |
| Is the solution explicitly required to be an active RF radar seeker, or will a passive, semi-active, or bistatic sensing approach be considered? | Yes. The solution must be an active RF radar seeker. Passive, semi-active, and other sensing modalities will not be considered. |
| Is the seeker length of 5-7" a fixed value, or can it be longer? | The seeker length is intended to remain within the specified 5–7 inch range. The seeker should be a standalone module and not integrated into the guidance section. |
| Can some of the seeker hardware be integrated with the guidance control unit? | No. The seeker is expected to be a standalone component. |
| The desired bands are Ku or Ka, with "higher than Ka still considered" and a note to avoid commercial and atmospheric-absorption frequencies. Would operation below Ku (e.g., S or X band) be considered if the link budget and producibility case are strong. | Yes. The aperture has been opened and all frequencies will be considered during the challenge phase. |
| Related question: if we make a case for 60+ GHz (mitigating any atmospheric absorption), will that also be considered? | Yes. |
| When designing power and communication interfaces, can we apply our own specifications, OR, must we design the interfaces as modular according to the WOSA/MOSA guidelines? | Full WOSA constraints are not required. Proposals should include provisions that would allow integration with a munition data bus. |
| Can you provide the LAU-131 and LAU-68 interface details and the exact guidance-section interface (mechanical, electrical, and data)? | No, not at this time. |

| QUESTION | ANSWER |
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| Are both LAU-131A and LAU-131A/A form factors in scope for the solution? | The solution should be based on the longer LAU-131 launcher configuration. The shorter configuration is not currently being considered. |
| What target data and interface information are transmitted from the system (aircraft or ground launch system) to the seeker? | There is no data link before or after launch. |
| Should the 6km range be viewed as a threshold or objective requirement? If it's an objective, is there some minimum threshold for the detection range that must be satisfied as the threshold? | The 6 km detection requirement against a 0 dBsm target should be treated as a threshold requirement. |
| Is there a specific target driving the 0 dBsm estimated RCS at Ka-band? Is that a mean RCS value? | No additional details can be provided at this time. The 0 dBsm value should be treated as a normalized reference value for evaluating proposed solutions. |
| Are there specific accuracy requirements? Update rate requirements? | No specific accuracy or update-rate requirements are being provided at this stage. |
| Is there any mission analyses that can be shared driving the 6 km detection range and +/- 15 deg field of regard specifications? | No additional mission analysis information is available at this time. |
| What is the estimated delivery date for the first production units? | For teams selected into the follow-on effort, the government expects prototypes to be available for live testing approximately 18 months after contract award. |
| Is the requirement to detect at 6 km or to detect and track from 6 km to 0 (up till kinetic hit)? | The seeker must be capable of detecting the target at 6 km and initiating track shortly thereafter. Detection and track initiation at 6 km is the key requirement. |
| Is there any anticipated seeker hand-off error from a launch cue and/or mid-flight targeting updates? | No. The seeker is expected to operate as a standalone system. There are no planned data links, launch-cue updates, or mid-flight targeting updates. |
| Can you share any expected detection-range conditions, including probability of detection, probability of false alarm, and target fluctuation model/statistics such as the Swerling case? | No additional information is available at this time. |

| QUESTION | ANSWER |
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| What sort of box/pod ground launch systems are referred to, and how different are they from the more clearly defined LAU-68 and LAU-131 aircraft launch systems? | There are only a few ground launchers out there, so proposers should conduct their own research. No additional details are being provided at this time. |
| How many production units are expected at FRP per year? | Specific quantities are not being provided at this time. Proposals should describe what they believe they can produce and what they project their production capacity could be. That information will help inform follow-on discussions if selected. |
| Are there any radome requirements (materials / geometries) to be aware of or is this up to seeker designer's discretion? | The radome should be considered part of the seeker. This was not included in the original description but should be addressed in the proposal. |
| What CONOPs are these requirements derived from (e.g. target characteristics (altitude, speed, RCS, etc.))? | No additional information is available at this time. For this phase, Proposals should focus on the ability to detect a 0 dBsm target at 6 km. Additional details may be discussed during the follow-on effort. |
| Are there limits or expectations for seeker frame time/update rate in search/detection mode? | There are no specific expectations at this time. The government is interested in seeing what proposers can provide. |
| What are the required capabilities of the warhead? | No answer is being provided at this time. Warhead requirements do not come into play for this phase. |
| Is a radome provided or is the vendor responsible for it? Is the outer mold line defined and available? What is the usable internal volume (2.75" is 69.85mm)? | The vendor is responsible for the radome. The system is based on a 70 mm form factor, and proposers should determine the usable internal volume needed for their design. |
| Is there any geometric taper the seeker must be compliant with (vs just a 2.75" diameter)? | There is no taper requirement for the white paper phase. Proposers may consider any geometry including but not limited to hemispheres, cones, and ogives. |
| When will the whitepaper template be available? | The white paper template is expected to be posted on the website by 12 June. |
| Is there a cost or scaling target? | A specific cost target was not listed for the white paper phase. Proposals should provide the best pricing information they can. Cost detail is helpful for evaluation, even though it was not explicitly required. |

| QUESTION | ANSWER |
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| How many seekers need to operate simultaneously in an area of engagement? | A specific number is not being provided at this time. If a design can handle multiple seekers and radiators and can mitigate related interference or deconfliction issues, that should be included in the proposal. |
| Are specific power-source chemistries or activation methods required or preferred? For example, is a long-dormant storage/activated source such as a thermal battery required or desired, or are lithium-based solutions acceptable if safety requirements? | Both types have been considered. There are pros and cons to each. Proposals should identify the power source preferred for their design and explain why. |
| Is the seeker expected to produce raw instantaneous measurements or filtered target information (EKF output for example)? | At a minimum, the seeker should output range, range rate, and angle information. Some amount of filtering is expected to be needed. |
| Can you share any more details on the radome geometry requirements? | No additional geometry requirements are being provided for this phase. Proposals do not need to fully address the shape for the white paper, but may consider any geometry including but not limited to hemispheres, cones, and ogives. |
| What information is required in the track file(s)? Range, AOB, errors, etc. and what data format is expected? Is there an ICD defined? | No answer is being provided at this time. Many of those details remain TBD. |
| What is the maximum speed of the rockets? And what is the expected flight time? | That information is for the follow-on contract phase and is not being provided during this phase. |
| Is there a polarization requirement? | Proposals should describe the seeker polarization capabilities and benefits of the proposed approach. |
| Is the 6km the munition engagement range or the desired lock on after launch detection range. | The seeker should be able to detect and lock on at 6 km and begin guiding as soon as it sees the target. |
| Can you share any details on requirements for software safety standard compliance (specific MIL-STD requirement)? | Not at this phase. The government wants to see what is available first. If a design looks promising, more stringent requirements will be addressed later. |

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| Will the seeker be located in a 70mm diameter nosecone versus distributed aperture? | The government is currently thinking in terms of a 70 mm nosecone configuration. However, if an offeror has a distributed aperture design, they should submit it and it will be considered. |
| Besides the rocket motor firing circuits, do launchers of choice have means of powering up and communicating with the missiles prior to launch, such as external missile power, Built-in-Test, health check, transfer alignment, mission and target data upload etc.? Or are the missiles fired "cold" in the direction of the target and then it powers up in flight and begins seeker target search autonomously | For this effort, there should be no communication with the missile. The concept is essentially a simple fire pulse, with no real communications. |
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| Performance: Detection of, and guidance to, a 0 dBsm (normalized value) target at a range of 6 kilometers. What are the accuracy (azimuth/elevation) requirements of the seeker to the guidance system to ensure successful hit? | Proposals should describe what they can achieve with their aperture. No specific azimuth/elevation accuracy requirement is being provided at this phase. |
| Does the USG anticipate Blue Horizons and AFRL participation in the development of the technology? Will there be a CRADA? | AFRL is leading the funded development effort. There will not be a CRADA. Blue Horizons is funding the challenge awards and has remained involved in curation and coordination of the prize challenge. |
| What level TDP and MRP are Blue Horizon/AFRL looking for? | No specific TDP or MRP level was provided. |
| Can we assume the first target set is airborne? Do you know the specific group/size? | The effort is focused on counter-UAS. Ground launch and air-to-air launch are both possible. No additional target group or size details are being provided at this time. |
| Are there Minimum and Maximum engagement ranges? | No additional minimum or maximum engagement ranges are being provided at this time. Proposals should focus on detection and guidance to a 0 dBsm target at 6 km, which is the primary technical performance parameter for this phase. |
| Based on specified launcher models is the RF seeker expected to be a variant of APKWS? | The seeker needs to be modular to all versions. No further detail is being provided at this time. |
| How do we get a copy of the presentation? | DIU will check whether the presentation can be added to the website. However, the Q&A document will be provided within the following week, and the |

| QUESTION | ANSWER |
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| | information on the slides is already reflected in the solicitation, pending the updates discussed during the AMA. |
| Noted on the solution diameter and weight, are there hard limits on other SWAP requirements? | There are no additional hard limits at this time. Proposals should provide the total value. |
| What is your definition of "affordable" for a per unit price? | The target is competitive and in the low tens of thousands, roughly in the \$20,000–\$30,000 range. Price matters and is an independent variable, but it will be balanced against the technology proposed. |
| How do seeker qualifications and OT&E fall into the proposed timeline? | This is a rapid-fielded effort. Qualification and OT&E details will be discussed further if and when the effort reaches that phase. |
| Target: <ul style="list-style-type: none"> a. Is there a minimum RCS needed? b. Is there any information on expected target velocity range? | No additional target RCS or velocity information is being provided at this time. For the prize challenge, Proposals should focus on detection and guidance to a 0 dBsm target at 6 km. |
| Target <ul style="list-style-type: none"> a. Are we correct to assume there are no defensive aids on the target set? b. Is there any information on likely target dynamics to support tracking algorithm capability? | No answer is being provided at this time. |
| Environment: How congested is the target environment? How should the primary target be selected? | Proposals should consider performance under blue sky, heavy fog, and light to moderate precipitation conditions. Designers should also account for at least commercial emitters and telecommunications. No additional environmental detail is being provided at this time. |
| Where is electrical power coming from? Is this part of our solution or provided by the rocket system? | Electrical power should be part of the proposed solution. Proposals should include how the seeker will bring their own power. |
| What are the seeker to projectile internal interfaces (logical, electrical, mechanical) we need to be compliant with? Are they different between the ground and air launchers? | The government does not anticipate different internal interfaces between ground and air launch. However, nothing is fixed at this stage. Proposals should have flexibility to pivot if interface requirements change. |

| QUESTION | ANSWER |
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| What is the likely required proximity range? What is the expected time of flight / time of guidance? Do we need to provide inertial reference? | No answer is being provided on proximity range or time of flight at this phase. Ideally, the munition would achieve a kinetic hit. If an offeror's design includes inertial capability, that would be beneficial. There are also hooks in the architecture to obtain information from the guidance section. |
| Is it desirable for the seeker to provide a fusing signal based on an anticipated crossing time? Or is fusing based on crossing a slant-range threshold meet anticipated needs? | That level of detail is too deep for this phase. |
| As part of your multi-team award, will you accept sub-system proposals, such as an array only? | No. The government would like to receive complete system proposals. |
| Referring to "resident power source," does that mean the seeker module must include its own battery, OR is it possible to obtain power from other components of the guided missile? | Proposed seekers need to have their own power. There may be an enable line that powers up the battery, but the seeker module should include its own power source. |
| Will L/S bands be considered? | Yes. At this point, L/S band solutions will be considered. The government is interested in seeing what the proposed solution would be. |
| What is available power (voltage & current) in the platform for this RF-Seeking radar? | No specific platform power, voltage, or current information was provided in this transcript section. The related answer was that Proposals should bring their own power. |
| What are the programmatic timelines and expectations for the potential prototyping and rapid acquisition programs? | The effort is rapid and intended to move quickly. Earlier in the AMA, AFRL described the follow-on effort as an 18–24 month effort, with PDR expected no later than six months after award and CDR no later than six months after PDR. Faster performance is acceptable and should be conveyed in the proposal. |
| What is the unit price expectation? | The expected unit price is competitive and in the low tens of thousands, approximately \$20,000–\$30,000. Price matters and is an independent variable, but it will be evaluated in balance with technical capability. |
| What are the seeker quantities associated with LRIP? | At the end of the follow-on effort, at least ten seekers are needed. LRIP quantities are not being provided at this time. |

| QUESTION | ANSWER |
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| Are the LAU-131 and LAU-68 the only compatible aerial launchers, or will a proposal for an integrated, self-contained launcher concept also be considered? | The solution needs to be compatible with current launchers. There are multiple launcher types available, but no additional details are being provided at this time. |
| For companies that possess outstanding RF engineering expertise but may not have access to aircraft, how do you connect prototype developers with flight-test aircraft, payload integration support and operational demos to accelerate the transition to the field? | The government has those resources, so proposers do not need to worry about flight-test aircraft or operational demonstration access at this stage. The government is primarily interested in strong seeker designs. |
| Does the 5-7" length include the radome? | Yes. The radome is part of the overall length because launcher length limits apply. However, if a proposed solution is slightly longer, it should still be included in the proposal. The government does not intend to reject an otherwise strong solution solely because it is slightly over the stated length during this phase. |
| The CONOPS calls for all-weather LOAL but the 6 km line carries no weather qualifier — is clear-air 6 km with quantified degradation in rain acceptable or must 6 km be met in all weather? | The requirement should be treated as all-weather, consistent with the all-weather LOAL concept. |
| Are there any temperature considerations for the radome? Do you know how hot it is expected to get | Proposers should use their own resources to determine expected heating and thermal considerations, including thermal effects from atmospheric. |
| Is it AFRL's intention to maintain Government Purpose and/or Unlimited IP rights to the seeker design? Will it be a requirement of the contract to supply these rights to the government? | IP will be a significant factor because the government needs to move quickly. If a selected vendor cannot supply what is needed, the government may need the ability to take a technical package to another vendor to supplement the initial effort. No additional detail is being provided at this time. |
| Can you share any details on the quality of detection at 6 km? Will solutions be required that detect a 0 dBsm threat with a low probability at 6 km? | No answer is being provided beyond the previously stated 0 dBsm target at 6 km requirement. |
| Is there a minimum interval between rocket launches? | Proposals should state what their seeker can support. Specifically, they should identify how quickly their seeker can handle another launch or another seeker operating in the area. |

| QUESTION | ANSWER |
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| Can you give a sense of "on-time" so we have a sense of thermal requirements and power consumption? | Proposals should use their own research and design assumptions. The government acknowledged this is a valid design question, but noted that resources are available for 2.75-inch munitions and Proposals should rely on those. |
| Are we correct to assume that we will provide the power source? | Yes. Proposals should provide the power source. |
| The DIU website states up to 3 companies shall be selected for prize award, but 5 are earmarked to be carried through PDR. Is the follow-on program open to companies that do not win a prize? | Yes. The follow-on program may be open beyond the prize winners. AFRL may select up to five performers, and may also look at companies that did not submit a proposal, if appropriate. |
| How is terminal distance for seeker integrated fuzing determined? Will it be specified? | At this stage, proposals should describe what their design can support and provide a range. More information may be required in the next phase. |
| Class I and II UAS are significantly smaller than OdBsm. Is there a smaller dBsm target detection desired? | The previously stated RCS and detection range requirements hold. Additional details may be discussed during the follow-on effort. |