**Request for Information**
**DARPA-SN-25-62**

**Rapid Operational Guided Unmanned Execution (ROGUE)**
**Defense Advanced Research Projects Agency**
**Tactical Technology Office**

Responses due 7 May 2025, by 4:00 PM Eastern Time (ET).

This Request for Information (RFI) from the Defense Advanced Research Projects Agency (DARPA)'s Tactical Technology Office (TTO) seeks innovative and cost-effective concepts for rapidly deployed mobile instrumentation to collect critical data on long range flight tests.

Responses to this RFI may be used to inform and explore future programs that will seek to build and test such concepts at scale.

Intellectual or other privileged or proprietary information contained in responses to this RFI will not be distributed outside of the U.S. Government. In the event that a new DARPA program is developed in response to this RFI, and a solicitation is issued, no intellectual or other proprietary information received in response to this RFI will be divulged to agencies outside the U.S. Government.

**BACKGROUND:**

The Department of Defense (DoD) has identified the need to solve the capacity issues that exist at traditional Major Range and Test Facility Bases (MRTFB) for long range flight tests. Research and developmental test programs rely on flight tests for gathering critical data, but frequently compete for limited test resources, approvals, and access, which constrains learning opportunities and early fielding.

**DESCRIPTION:**

DARPA is interested in breakthrough concepts that radically alter conventional flight-testing methods and processes.

This RFI seeks information on technologies that can remove dependencies on traditional test ranges and enable programs to test on demand. These concepts should advance the state of the art for collecting critical flight test data allowing for rapid deployment and execution while providing fewer observable indicators of imminent testing. Surface, sub-surface, air-based and space-based solutions shall be considered, with an emphasis on autonomous capabilities.

The objective is an autonomous, networked system of mobile, reusable instrumentation that can collect critical test data. All instrumentation and data relevant to test ranges are

of interest, including telemetry, optics, radar, targets, scoring, communications and data backhaul for real time data transmission to dispersed test operators.

**REQUESTED INFORMATION:**

Responses are welcome from all capable sources including, but not limited to, private or public companies, individuals, universities, university-affiliated research centers, not-for-profit research institutions, and U.S. Government-sponsored labs. DARPA is interested in technologies that address any of the following areas (responders do not need to address all categories):

1. Data collection systems and techniques for long range flight tests including telemetry, optics, radar, targets, and scoring with an emphasis on autonomous operations.
2. Communications and data transmission of real time critical data with increased bandwidth over current standards, including novel approaches to data prediction, real-time data analysis, model verification, test point optimization, digital modeling and new analytical tools.
3. Process changes to traditional range procedures and toolsets, including clearing of air space and identification of corridors that can reduce the need for Notices to Air Missions (NOTAMs) and Notices to Mariners (NOTMARs) and other early indicators of imminent testing.

Responders should consider the current solution space, concepts to revolutionize the way DoD conducts flight testing now including deployment and recovery of sensors, and how future technology improvements can lead to additional advancement of capabilities. Concepts should have the availability to scale to different missions and distances from 250nm – 2000nm.

Responders may submit individual technology concepts or entire networked solutions.

Responders are encouraged to provide rough order of magnitude (ROM) cost estimates for each concept, noting that complete system solutions shall be able to be developed, produced and deployed during a representative flight test at a cost of <$70M.

**SUBMISSION:**

This announcement contains all information required to submit a response. No additional forms, kits, or other materials are needed.

Respondents to the RFI should be concise. Responders should submit a single integrated response addressing the areas described above. DARPA will only review responses submitted in a Microsoft Word (.doc or .docx) file or unprotected Adobe Acrobat (.pdf) file. Each response is limited to not more than five pages using 12-point font and 1-inch margins on 8.5-inch by 11-inch paper. Effective responses that can be provided in fewer

than five pages are encouraged. Any submitted material in excess of this limit will not be reviewed.

The contact information should include the respondent's technical and/or administrative points of contact (names, addresses, phone numbers, fax numbers, and e-mail addresses) to enable potential clarification discussions.

All technical and administrative correspondence and questions regarding this announcement and how to respond to this RFI should be sent to DARPA-SN-25-62@darpa.mil. E-mails pertaining to this RFI that are sent directly to individual DARPA program managers will not receive a response. No telephone inquiries will be accepted.

NOTE: DARPA intends to conduct individual discussions with respondents as necessary to gain a full understanding of the technical and partnership models submitted. DARPA will contact respondents individually via e-mail.

**DISCLAIMERS AND IMPORTANT NOTES:**

This is an RFI issued solely for information and program planning purposes; this RFI does not constitute a formal solicitation for proposals or proposal abstracts. In accordance with FAR 15.201(e), responses to this notice are not offers and cannot be accepted by the Government to form a binding contract. Submission of a response is strictly voluntary and is not required to propose to subsequent Broad Agency Announcements (if any) or research solicitations (if any) on this topic. No solicitation exists; therefore, do not request a copy of the solicitation. If a solicitation is released, it will be synopsized on the SAM.gov website. It is the responsibility of any potential offerors/bidders to monitor this site for the release of any solicitation or synopsis.

DARPA will not provide reimbursement for costs incurred in responding to this RFI or participating in any subsequent workshop pertaining to this RFI.

If a response is classified, it should be coordinated with DARPA prior to submission. Responders wishing to provide a classified response should send an e-mail to the SN mailbox as soon as possible with the subject line "Classified Coordination Requested" to allow time for proper coordination. NO CLASSIFIED INFORMATION SHOULD BE INCLUDED IN THE RFI RESPONSE SENT TO DARPA-SN-25-62@darpa.mil.

To the maximum extent possible, please submit non-proprietary information. If proprietary information is submitted, it must be appropriately and specifically marked. It is the submitter's responsibility to clearly define to the Government what is considered proprietary data. Any proprietary information should clearly be labeled as "Proprietary." DARPA will not publicly disclose proprietary information obtained as a result of the RFI. To the full extent that it is protected pursuant to the Freedom of Information Act and other laws and regulations, information identified by a respondent as "Proprietary" will be appropriately controlled. Submissions may be reviewed by Government personnel and

support contractors bound by appropriate non-disclosure agreements. Responses to this RFI will not be returned.

Respondents are advised that DARPA is under no obligation to acknowledge receipt of the information received or provide feedback to respondents with respect to any information submitted under this RFI. Responses to this RFI do not bind DARPA to any further actions.

**Point of Contact:**
DARPA/TTO
DARPA-SN-25-62@darpa.mil