Program Solicitation (PS) Amendment

- (U) Funding Opportunity Title: Carbon Crunch
- (U) Announcement Type: Amendment 02
- (U) Funding Opportunity Number: DARPA-PS-26-15
- (U) Changes Made: All changes highlighted in yellow
  - Announcement Type: (page 3)
    - Originally released: January 30, 2026
    - Amendment 01 released: March 5, 2026
    - **Amendment 02 released: April 2, 2026**
  - Written Proposal Packages Due Date and Time: (Page 3)
    - Originally due: April 10, 2026, at 4:00 p.m. ET
    - **Amendment 02 due: April 24, 2026, at 4:00 p.m. ET**
  - Video Interview Sessions: (page 3)
    - Originally: Between April 20, 2026 and April 28, 2026
    - **Amendment 02 due: Between May 4, 2026 and May 12, 2026**

Program Solicitation

Carbon Crunch

Defense Advanced Research Projects Agency (DARPA)

Tactical Technology Office (TTO)

DARPA-PS-26-15

Release Date January 30, 2026

PROGRAM SOLICITATION OVERVIEW INFORMATION

- **Federal Agency Name** – Defense Advanced Research Projects Agency (DARPA), Tactical Technology Office (TTO)
- **Funding Opportunity Title** – Carbon Crunch
- **Announcement Type**
  - Initial Announcement – Released January 30, 2026
  - Amendment 01 – Released March 05, 2026
  - Amendment 02 – Released April 02, 2026
- **Funding Opportunity Number** – DARPA-PS-26-15
- **Dates/Times - All Times are Eastern Time Zone (ET)**
  - Final Solicitation Posting Date: January 30, 2026
  - Proposers Day: February 3, 2026
  - Last Day to Request CUI Addendum: February 12, 2026
  - Abstract Questions Due: February 13, 2026 at 4:00 p.m. ET
  - Abstracts Due Date and Time: March 2, 2026 at 4:00 p.m. ET
  - Feedback from Abstracts Sent No Later Than: March 20, 2026
  - Written Proposals Questions Due: March 27, 2026 at 4:00 p.m. ET
  - **Written Proposal Packages Due Date and Time: April 24, 2026, at 4:00 p.m. ET**
  - **Video Interview Sessions: Between May 4, 2026 and May 12 2026**
  - Estimated period of performance (PoP) start: October 2026
- **Concise description of the funding opportunity –** Carbon Crunch aims to enable scalable, fast, and agile production of hypersonic aeroshells. The program will focus on accelerating carbon-carbon (C-C) hypersonic aeroshell production by developing and applying cutting-edge composite manufacturing methods that are inherently faster and more scalable. Performers will be asked to demonstrate an end-to-end manufacturing process (from raw materials to near-net-shape densification) that demonstrates high quality, rapid production, and quick design-cycle turnaround. Once the process demonstrates reasonable cost and orders-of-magnitude improvement in throughput, the technology can be transitioned to hypersonic programs of record.
- **Multiple awards are anticipated**.
- **Types of instruments that may be awarded** – Other Transaction (OT) for Prototype Agreement
- **Cost Sharing Requirements-** in accordance with 10 U.S.C. § 4022, cost sharing may be required for OT for prototype awards.
- **Proposer Requirements** – All proposers must comply with export control laws and International Traffic in Arms Regulations (ITAR) and Export Administration Regulations (EAR) and be able to protect sensitive and controlled data, including critical technologies. Participation is limited to U.S. persons; foreign nationals are prohibited from accessing data/information and participation. Non-U.S. organizations may only participate through U.S. subsidiaries or teaming arrangements staffed exclusively by U.S. persons and in strict compliance with applicable security and export control requirements. Phase 1 will involve Controlled Unclassified Information (CUI) and Phase 2 will involve Secret collateral information; proposers must implement appropriate CUI safeguards and, by the start of Phase 2, possess and maintain facility and personnel clearances commensurate with the classification level, consistent with applicable security

regulations and the program Security Classification Guide (SCG). SCG will be distributed to performers at a later date prior to the start of Phase 2. Proposers must maintain a program security plan addressing operational security (OPSEC), export-control compliance, foreign participation/materials, and public affairs/communications.

- **Additional Information**
  - Attachment A – Abstract Summary Slide Template
  - Attachment B – Abstract Template
  - Attachment C – Written Proposal Template
  - Attachment D – Cost Proposal Spreadsheet
  - Attachments E1, E2, E3, and E4 – Four (4) SAMPLE Model OT for Prototype Agreement
  - Attachment F – Task Description Document (TDD)
  - Attachment G – Milestones and Payments
  - Attachment H – Data Rights Assertion List
- **Reference Documents (available upon request)**
  - Carbon Crunch Program Solicitation CUI Addendum
  - Carbon Crunch CUI Guide
  - National Aeronautics and Space Administration (NASA) Advanced Carbon-Carbon (ACC)-6 CUI Publication
- **Agency Contact**
  - The Solicitation Coordinator for this effort can be reached at:
    DARPA-PS-26-15@darpa.mil
    DARPA/TTO
    ATTN: DARPA-PS-26-15
    675 North Randolph Street
    Arlington, VA 22203-2114
- **List of Sections to Follow:**
  1. Program Solicitation Authority
  2. Program Information
  3. Guidelines for Abstracts and Written Proposals

  Appendix 1: DARPA-PS-26-15 CUI Document Request Form

The effort being solicited by this Program Solicitation is CUI. A formal request for the CUI addendum may be submitted by filling out the DARPA-PS-26-15 CUI ADDENDUM REQUEST FORM (**Appendix 1**) and by emailing the Request Form to DARPA-PS-26-15@darpa.mil with the subject line "Request DARPA-PS-26-15". Items will be transmitted electronically via DoD SAFE.

Proposers are required to submit this request no later than February 12, 2026, by 11:59 PM ET to allow for adequate time for delivery of the material. Requests submitted after this date will be disregarded. Requestors should allow up to 48 business hours for a response. The Request Form below is the only method of request that will be accepted.

PROGRAM SOLICITATION
Carbon Crunch

1. PROGRAM SOLICITATION AUTHORITY

This Program Solicitation may result in the award of Other Transaction (OT) agreements for prototype projects authorized by 10 U.S.C. § 4022. Prototype efforts may include commercially available technologies, concept demonstrations, pilots, and agile development activities that incrementally improve commercial technologies, existing Government-owned capabilities, and/or concepts for broad defense applications. The Government reserves the right to award multiple OT agreements or make no award. Follow-on production contracts or transactions may be awarded pursuant to 10 U.S.C. § 4022(f), where the statutory criteria are met. In all cases, the Government Agreements Officer will have sole discretion to negotiate all agreement terms and conditions with selected offerors. Use of OT authority requires that proposers meet at least one eligibility condition under 10 U.S.C. § 4022(d)(1); proposers should identify the applicable condition(s) in their Written Proposal Package as outlined in this solicitation. Cost sharing, if applicable, will be addressed consistent with 10 U.S.C. § 4022(d)(1) and during negotiations.

2. PROGRAM INFORMATION

This Program Solicitation encourages solutions from all responsible sources capable of satisfying the Government's needs, including large and small businesses, and nontraditional defense contractors as defined in 10 U.S.C. § 3014.

2.1. Program Background

For hypersonic flight above Mach 7, carbon-carbon (C-C) composites are the preeminent material capable of withstanding the extreme thermal and mechanical loads. This makes C-C the material-of-choice for encasing and shielding hypersonic glide vehicles. Manufacturing C-C material is a slow, arduous process that is not readily scalable without having to make tradeoffs in quality and/or cost. The Carbon Crunch program will overcome these limitations by developing and applying innovative C-C manufacturing methods that are inherently faster and more scalable.

2.2. Program Description/Scope

Carbon Crunch's objective is to enhance the scalability of hypersonic aeroshell production by developing disruptive manufacturing technologies. Scalability in Carbon Crunch is defined as achieving high, reliable production throughput for relevant aeroshell geometries while maintaining quality and controlling cost. The program is particularly interested in approaches that enable scalability via high throughput together with manufacturing agility (e.g., rapid changeover between designs). DARPA is open to diverse technical and manufacturing concepts that can credibly demonstrate scalable production performance against program metrics. Rather than focusing on incremental improvements to existing processes, Carbon Crunch will motivate performers to take an original approach and rethink methods for aeroshell production.

Performers will develop a new integrated process for producing C-C aeroshells. They will demonstrate that their process yields C-C aeroshells at a high rate and that the process is agile

enough to switch from one design to another with minimal downtime. Performers will be required to assemble teams to demonstrate the entire aeroshell production process starting with preform layup and ending with near-net-shape aeroshells.

The Carbon Crunch program is predicated on the hypothesis that the primary step limiting scalability of C-C today is carbonization/densification. Since matrix density and porosity is extremely important for ensuring quality, this step cannot be rushed with current densification methods. Furthermore, current needs for multiple carbonization densification cycles add significant touch labor to the process. Therefore, reducing the time to densify, and thus the resulting manual labor, will be a major program goal.

The scope of Carbon Crunch includes the aeroshell, at a minimum, and if possible, with the proposed process, the hot structure portions (e.g., the leading edge or nosetips). Final steps such as coatings or machining will not be necessary for demonstrating throughputs, unless they are necessary to achieve final density and quality or otherwise demonstrate an innovation that substantively contributes to meeting the program objective. Minor changes to the aeroshell designs may be considered, so long as they do not deviate from the original outer mold line and interface with the underlying primary structure.

Given the focus of the Carbon Crunch effort, DARPA is **NOT** interested in technology development within following areas:

- Novel thermal protection system materials
- Technologies aiming to improve cooling
- Parallelizing existing processes
- Processes reliant on touch labor
- Final machining methods

3. GUIDELINES FOR ABSTRACTS AND WRITTEN PROPOSALS

3.1. Abstracts Basis of Evaluation

Abstracts will be evaluated using the evaluation criteria for selecting abstracts, their relative importance, and the method of evaluation contained in the CUI addendum.

3.2. Written Proposals Basis of Evaluation

Written Proposals will be evaluated using the evaluation criteria for selecting Written Proposals, their relative importance, and the method of evaluation contained in the CUI addendum.

APPENDIX 1. DARPA-PS-26-15 CUI DOCUMENT REQUEST FORM

This inquiry requests the following documents unless otherwise stated: Carbon Crunch Program Solicitation CUI Addendum, Carbon Crunch CUI Guide, and NASA ACC-6 CUI Publication. Items will be transmitted electronically via DoD SAFE.

Proposers are required to submit this request no later than February 12, 2026, by 11:59 PM Eastern Time to allow for adequate time for delivery of the material. Requests submitted after this date will be disregarded. Requestors should allow up to 48 business hours for a response. The Request Form below is the only method of request that will be accepted. Send requests to DARPA-PS-26-15@darpa.mil

Date	
Company Name	
Company Address	
Point of Contact (POC) Name	
POC E-mail	
POC Phone Number	
NSF number or CAGE code	
Notes	