

REQUEST FOR PROPOSAL

The American Center for Optics Manufacturing (AmeriCOM) Defense Precision Optics Consortium (DPOC) invites proposing businesses, non-profits, or other research institutions to submit proposals to address significant challenges to defense precision optics manufacturing.

1) Overview

AmeriCOM has two primary purposes. The first is to address the national shortage of qualified optics technicians by partnering with community colleges to create a national network of precision optics training programs. The second is to create an industry-led cooperative with the government and academia focused on continuous improvement to drive the development of defense precision optics manufacturing. The goal of DPOC is to advance the state of defense precision optics technologies and manufacturing capabilities. The partnership will boost the domestic precision optics industry by identifying gaps in the precision optics defense industrial base and undertaking R&D to solve the industry's technical challenges, thereby securing the supply chain for critical defense needs.

To ensure the work and funding AmeriCOM provides is in line with what would provide the greatest benefit to the defense precision optics industry, AmeriCOM encourages proposers to submit proposals in accordance with the instructions provided below. All proposals are subject to a risk-based due diligence review and the availability of funds. AmeriCOM is not responsible for any expenditure by the proposer before the issuance of any funding.

2) Scope of Effort

AmeriCOM has identified several key areas of interest for defense precision optics manufacturing research and development related to manufacturing and design challenges currently ubiquitous in the industry. These are listed below and are intended to provide ideas of potential topics rather than to limit ideas to these specific systems.

- Improvements to optics manufacturing processes or metrology that boost production, increase efficiency, reduce cost or otherwise improve the production of defense related optics in the US. Ultra-accurate fabrication including conformal/freeform optics and metrology systems for measuring large conformal/freeform optics during fabrication are of particular interest.

- Address materials supply chain challenges especially focused on materials for multi-spectral infrared optical systems as well as visible glasses that are no longer manufactured in the US. Reducing the dependence on Chinese dominated markets for Ge, GaAs, and GaP are of particular interest as are materials such as non-Ge bearing glasses from the chalcogenide family and materials transmissive in the LWIR band that are not subject to rain erosion.
- Coatings for challenging defense optics applications including high-energy lasers (HEL) and hypersonic platforms. In particular, there is interest in issues such as contamination or other defects to optical surfaces that reduce optics damage thresholds.

Selection criteria will include the breadth of the impact of the solution to the problem, the risk of success, and the likely duration of the development of a solution. A mixture of short term, quick result and long term, high reward, higher risk projects will be considered.

3) Confidentiality Agreement

AmeriCOM and the proposer recognize and agree that disclosing or disseminating confidential or proprietary information to a third party may have a materially adverse effect on the other party and agrees not to disclose or disseminate confidential or proprietary information to any third party. Confidential or proprietary information, if any, must be clearly marked on all materials. All information received in this request that is marked "Proprietary" will be handled accordingly.

Proposal abstracts and quad charts may be used for marketing purposes and should not contain any confidential or proprietary information.

4) Foreign Citizens and Ties to Foreign Entities

AmeriCOM is tasked with advancing the U.S. defense precision optics industrial base and as such is only funding efforts from businesses, non-profits, or other research institutions based within the United States of America. The proposer must disclose any foreign affiliations or relationships to foreign countries. No part of the proposed effort shall take place outside of the United States. The proposer is responsible for following all regulations related to export control through either the International Traffic in Arms or Export Administration Regulations (ITAR/EAR). Any foreign citizens or individuals holding a dual citizenship expected to be involved on the project must be identified. Please specify their country of origin, the type of visa or work permit under which they are performing, and an explanation of their involvement in the proposed project.



5) Proposal Instructions

Proposals shall consist of a proposal abstract, technical volume, quad chart, and cost proposal.

Proposal Abstract

The proposal should include a brief technical abstract that describes the proposed R&D project including any anticipated benefits to the defense precision optics industrial base. Do not include confidential or proprietary information in the proposal abstract. If the proposed effort is funded, the proposal abstract and anticipated benefits may be publicly released.

Technical Volume

The technical volume provides a description of the work to be performed. A statement of work should indicate what tasks are planned and how the work will be conducted including major milestones and any anticipated deliverables and schedule. All information within the technical volume will be used by AmeriCOM only for the purposes of evaluating the proposal, however any data that is included in the proposal that the proposer does not want disclosed should be marked as confidential or proprietary. Include the following statement on the first page of the technical volume and the subsequent pages containing confidential or proprietary information:

“This proposal includes confidential or proprietary data that shall not be disclosed outside of AmeriCOM and shall not be used for any purpose other than to evaluate this proposal.”

The technical volume shall be proposer’s format though please limit font to no smaller than 10-point on standard 8-1/2” x 11” paper with one-inch margins. The technical volume shall contain the following items:

- Description of the problem or challenge being addressed and its impact on precision optics manufacturing
- List of the specific technical objectives of the proposed effort and the feasibility of the proposed approach
- Statement of work indicating the tasks planned, anticipated period of performance, schedule of milestones, and description and schedule of deliverables
- Description of resources required for the effort including a summary of the cost proposal along with a description of the key personnel, facilities and equipment, and any subcontractors or consultants that will be used on the proposed effort
- Description of related work or other significant activities related to the proposed effort demonstrating capability of the proposer to advance the state-of-the-art of the proposed topic



- Finally provide a description of any current or pending support for the proposed effort or similar efforts. This may include but is not limited to letters of support, cost sharing, or matching funds provided by the government or other entities.

Quad Chart

The proposed effort shall be summarized within a quad chart. Please include i) a diagram or visual description of the proposed technology advancement or prototype; ii) a brief description of the technology including its operational capability, key aspects of the technology, and benefits to DoD or the defense precision optics industry; iii) the proposed technical approach and anticipated TRL/MRL; and iv) the estimated cost, period of performance, and deliverables. A quad chart template will be provided by AmeriCOM. Do not include any confidential or proprietary information within the quad chart.

Cost Proposal

The cost proposal shall include a breakdown of the anticipated costs of the proposed effort. Enough information shall be included to allow AmeriCOM to understand how the proposer plans to use the requested funds. The cost proposal shall include the following information:

- List of key personnel including the anticipated number of hours and labor rate dedicated to the proposed effort as direct labor
- List tooling or material costs associated with the proposed effort. Costs must be justified and related to the needs of the project.
- Cost for anticipated travel directly related to the needs of the project
- Subcontractor and consulting costs
- List of any cost sharing or matching funds provided by the government or other entity

6) Evaluation

Proposals shall be evaluated based on the technical merit, perceived risk versus potential reward of the effort, and how well the proposed effort fits within the scope of AmeriCOM's mission to bolster the defense precision optics manufacturing base. The qualifications of the key personnel, previously demonstrable ability to perform research and development, and the anticipated cost will also be used in the evaluation of the proposed effort. If the proposed effort is funded, AmeriCOM will require periodic updates as the project progresses. The format and schedule of these periodic updates will be discussed upon agreement of funding. AmeriCOM reserves the right to alter the format or frequency of the updates if deemed necessary.

7) Submission

Proposals shall be submitted by email to Justin Sigley at jsigley@americom.org

