



**S²MARTS Project: Additively Manufactured Prototypes (AMP) for Hardware Technology Protection  
Project TalX Question & Answer | Date: July 29, 2022**

**1. When will the list of threats to be protect again be posted?**

Answer: The list of threats will be provided in the Classified Annex, available upon request.

**2. I was introduced to NSTXL through a subcontractor on a NASA grant. We are an early-stage company that spun-out from Duke University and manufacture novel electronic components using a best-in-class conductive polymer and 3D-printing technology. I'd like to learn more about NSTXL and potentially participating in the AMP Project No. 22-05.**

Answer: Information on selection and can be found here: <https://nstxl.org/amp-awardees-selected/>. Information on membership can be found here: <https://nstxl.org/opportunity/additively-manufactured-prototypes-for-hardware-technology-protection/>. For further questions please contact [s2marts@nstxl.org](mailto:s2marts@nstxl.org)

**3. How is this different from the prior project, 20-08, as documented at <https://nstxl.org/opportunity/innovative-prototyping-concepts-for-using-additive-manufacturing-for-technology-protection/> and <https://nstxl.org/amp-awardees-selected/>? If it is not different, is this project an excuse to make a further award to one or more of the previous awardees? If so, why is it believed appropriate to ask anyone else for proposals for this effort (since no other proposals would stand a reasonable chance of being awarded in this case)?**

Answer: Please refer to the answers for questions 3 and 12.

**4. What size envelopes are required for the hardware encasements? What type of metal materials are of interest? What TP features are of interest?**

Answer: 1. The dimensions of the provided board will be 2.28in x 4.00in. The hardware encasement is limited to a nominal size no larger than 2.78in x 4.5in x .2 in.  
2. Materials are up to the discretion of the performer. Materials that will mitigate the threats contained in the Classified Annex are of interest.  
3. TP features that are of interest are discussed in the Classified Annex.

**5. Coming into this late. Has the notice come out yet? We want to submit a proposal. What do I need to do to make sure we get you all something?**

Answer: This is the Request for Solutions (RFS) for the project. Selections will be made based on the submitted proposal in response to the RFS. Proposals are due by August 15 (see the NSTXL website for any updates). The submission process is described on the website and the submitter must be an NSTXL member.

**6. Are there size parameters for the 3d objects that need to be printed? Can they be shared? This parameter has a great effect on the process / materials that can be used.**

Answer: There is not a minimum size requirement, but the device is limited to a nominal size no larger than 2.78in x 4.5in x .2 in. It is also required that the functionality of the board remains the same and all ports are accessible with the provided solution.

**7. Are there temperature range specifications for the 3d printed items? Can this information be provided? This parameter has a great effect on the process / materials that can be used."**

Answer: The device should perform in standard operating conditions for the provided board. Environmental testing is not performed on these prototypes but might be taken into consideration and addressed for follow on work. See the answer for question 18.



**8. GE Research is currently working a seedling effort with NSTXL in this area and would like to work to get engaged with others to collaborate on this upcoming opportunity. Any idea best way forward on that?**

Answer: Solicitation through the AM TP consortium for collaboration is a good start.

**9. Is cost share required for proposals?**

Answer: Cost Share is not required. Cost share is an eligibility condition to be awarded an Other Transaction Authority. Please review 10 USC 4022 and the DoD Other Transaction Guide for additional information.

**10. Any idea when call will be put out related to this opportunity?**

Answer: The Request for Solution (RFS) has been released. Proposals should be submitted to NSTXL by August 15th (refer to the NSTXL website for any updates). The associated Classified Annex is available upon request. Submitters must be NSTXL members and details of submission are available on the website.

**11. Does AMP include additive manufacturing for semiconductors?**

Answer: AMP could benefit from similar technologies and techniques used in additive manufacturing for semiconductors, but this RFS calls for technology protection prototypes on a COTS device which is detailed in the Classified Annex.

**12. Per the solicitation, it is suggested that classified submissions be sent via SIPR. Is there an alternate method of submitting a classified submission if an organization does not have SIPR access?**

Answer: Any other form of classified communication is acceptable. This includes snail mail and fax, depending on availability. This will require NIPR coordination.

**13. Our questions are as follows: • Any interests in the Powder Bed Fusion Metal Additive Manufacturing process? • Any specific examples of Technology Protection (TP). • What would be the specification of TP?**

Answer: 1. Any AM processes that can mitigate the threats listed in the Classified Annex are of interest.  
2. Specific examples of TP are covered in the Classified Annex.  
3. Specifications of TP are provided in the Classified Annex.