**White Paper Due Date:**

As an AMMP member, we invite you to submit whitepapers for the AMMP initiative.  What we are hoping you can provide are potential prototype projects that fall within the technology objective areas listed below.

* Essential Science and Technology for Advanced Manufacturing, Materials, and Processes (EST-AMMP)
* Feedstocks for Additive Manufacturing (FAM)
* Innovative Design Integrating Additive Manufacturing Processes (iDIAMP)
* Process Visualization, Sensing, Probing, and Feedback toward Real-Time Additive Process Control (RTAPC)
* Materials Manufacturing Science and Technology for Lethality (M2S&T-L)
* Materials Manufacturing Science and Technology for Protection (M2S&T-P)

**What is a Prototype Project?**

**From the OTA Guide (JAN 2017):**

*OT prototype authority may only be used to carry out prototype projects that are “directly relevant to enhancing the mission effectiveness of military personnel and the supporting platforms, systems, components, or materials proposed to be acquired or developed by the Department of Defense, or to improvement of platforms, systems, components, or materials in use by the armed forces.” As such, any resulting OT awards are acquisition instruments since the Government is acquiring something for its direct benefit.*

*Terms such as “support or stimulate” are assistance terms and are not appropriate in OT agreements for prototype projects.*

*A prototype project can generally be described as a preliminary pilot, test, evaluation, demonstration, or agile development activity used to evaluate the technical or manufacturing feasibility or military utility of a particular technology, process, concept, end item, effect, or other discrete feature.* ***Prototype projects may include systems, subsystems, components, materials, methodology, technology, or processes****.*

*By way of illustration, a prototype project may involve: a proof of concept; a pilot; a novel application of commercial technologies for defense purposes; a creation, design, development, demonstration of technical or operational utility; or combinations of the foregoing, related to a prototype. The quantity should generally be limited to that needed to prove technical or manufacturing feasibility or evaluate military utility.*

**Modernization Priorities for the U.S. Army**

Per the memo dated October 03, 2017, from Army Chief of Staff Mark A. Milley, we are required to implement the 6 modernization priorities required in the Army’s acquisitions processes. Each whitepaper submitted must also fall within one of these priority areas.

1. **A Long-Range Precision Fires** - capability that restores US Army dominance in range, munitions, and target acquisition.
2. **A Next Generation Combat Vehicle** – along with other close combat capabilities in manned, unmanned, and optionally-manned variants – with most modern firepower, protection, mobility, and power generation capabilities to ensure our combat formations can fight and win against any foe.
3. **Future of Vertical Lift Platforms** – attach, lift, recon – in manned, unmanned and optionally-manned variants that are survivable on the modern and future battlefield.
4. **Army Network** - hardware, software, and infrastructure – sufficiently mobile and expeditionary – that can be used to fight cohesively in any environment where the electromagnetic spectrum is denied or degraded.
5. **Air and Missile Defense Capabilities** - ensure our future combat formations are protected from modern and advanced air and missile delivered fires, including drones.
6. **Soldier Lethality** - spans all fundamentals – shooting, moving, communicating, protecting and sustaining. We will field not only next generation individual and squad combat weapons, but also improved body armor, sensors, radios, and load-bearing exoskeletons. Putting this all together we must improve the human performance and decision making by increasing training and assessment, starting at the Soldier level. This will require a rapid expansion of our synthetic training environment and deeper distribution of simulations capabilities down to battalion and companies, with simulation capability to model combat in megacities, a likely battlefield of the future.

**COVER PAGE – White Paper Submission**

After completing the whitepaper response per the instructions on the following page, please fill out this form and use as your cover page for proposal submission. Please send completed whitepapers to [Contracts@ncms.org](mailto:Contracts@ncms.org), 734-995-7061.

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| --- | --- | --- | --- |
| **AMMP Member:** |  | **Period of Performance:** |  |
| **Project Number:** |  |  |  |
| **Proposal Title:** |  | | |
| **Member POC:** | **Technical POC**  NAME:  PHONE: (###) ###-####  EMAIL: | **Business POC**  NAME:  PHONE: (###) ###-####  EMAIL: | |
| **Objective Area:**  *(Check One)* | \_\_\_\_ Essential Science and Technology for Advanced Manufacturing, Materials, and Processes  (EST-AMMP)  \_\_\_\_ Feedstocks for Additive Manufacturing (FAM)  \_\_\_\_ Innovative Design Integrating Additive Manufacturing Processes (iDIAMP)  \_\_\_\_ Process Visualization, Sensing, Probing, and Feedback toward Real-Time Additive Process  Control (RTAPC)  \_\_\_\_ Materials Manufacturing Science and Technology for Lethality (M2S&T-L)  \_\_\_\_ Materials Manufacturing Science and Technology for Protection (M2S&T-P) | | |
| **NDC Status:** | A non-traditional defense contractor (NDC) is an entity that is not currently performing and has not performed, for at least the one-year period preceding the solicitation of sources by the Department of Defense for the procurement or transaction, any contract or subcontract for the Department of Defense that is subject to the full coverage under the cost accounting standards prescribed pursuant to Section 1502 of title 41 and the regulations implementing such section. (10 U.S.C. § 2371b, Section 815 of the 2016 National Defense Authorization Act, P.L 114-92)  **Is your company an NDC per the above definition?**  **\_\_\_\_\_ Yes \_\_\_\_\_No** | | |
| **Nonprofit Research Status:** | Is your company a nonprofit research institution?  **\_\_\_\_\_ Yes \_\_\_\_\_No** | | |
| **ROM Project Cost** | **FYXX: $XXX,XXX.00**  **FYXX: $XXX,XXX.00**  **Cost Share: $XXX,XXX.00**  **If there are no NDCs participating to a significant extent on this project, 1/3 of the project’s total cost must be cost-shared by the Member.** | | |

***Whitepaper Response***

Excluding the cover page, your response should be **NO MORE than XX pages**, using font no smaller than 11pt. Any font used must be easily read, or the response will be rejected. Please send completed whitepapers to [Contracts@ncms.org](mailto:Contracts@ncms.org), 734-995-7061.

1. ***Project Description***
   1. *Provide Background and Assumptions*
   2. *Detail Objective(s)*
   3. *Describe Scientific Approach to Objective(s)*
   4. *Describe Nature and Extent of the Anticipated Results (Deliverables)*
   5. *Detail how this prototype project is directly relevant to enhancing mission effectiveness of military personnel and the supporting platforms, systems, components, or materials proposed to be acquired or developed by the Department of Defense, or to improve platforms, systems, components, or materials in use by the armed forces*
2. ***Organization Description***

*Provide a brief description for each of the AMMP member organizations making up your team. Provide only information that is relevant to the scope of this effort. Limited to a half page per organization.*

1. ***Provide Rough Order of Magnitude of Costs***
   1. *List Period of Performance broken down by potential phase, with costs associated for each phase.*
   2. *Provide estimated Nontraditional Defense Contractor, Nonprofit Research Institute participation or cost share percentage.*

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