Navy Manufacturing Technology (ManTech) Program
ManTech 101

Navy ManTech funds projects that develop and improve manufacturing processes to reduce the cost of building and repairing naval platforms.

Navy ManTech resources are focused on key, high-priority acquisition platforms. For FY23, the platforms for investment include CVN 78 Class aircraft carrier, DDG 51 Class destroyer, VIRGINIA Class submarine (VCS), COLUMBIA Class submarine (CLB), F-35 Lightning II aircraft, and FFG 62 frigate. Navy ManTech also supports select manufacturing technology projects that accelerate the delivery of capabilities to the Navy. Capability Acceleration focus areas include the following: Swarm / Unmanned / Autonomous Vehicle Production, High Energy Laser (HEL) Weapon Systems / Directed Energy, Advanced Submarine Fabrication Technology, Fleet Sustainment Technology (Ships / Aircraft), Energetics Production Improvement, Hypersonics Fabrication, and Manufacturing Acceleration of Other ONR Activities.

ManTech projects that have cost reduction as the primary benefit are the most likely to be funded.
Not all proposed ManTech projects can be funded. Resources are limited. To improve the chance of funding:
- Make sure the project qualifies as ManTech
- Specify the cost savings and how they will be achieved

To qualify as ManTech, the proposed project must:
- Have a well-defined Navy need
- Be completed in time to address that need
- Result in a technology that is not proprietary
- Involve the application or improvement of a previously demonstrated manufacturing process or procedure
- Be beyond the normal risk of industry to accomplish on its own

Each ManTech project must have:
- A specific objective
- Specific technical goals to achieve the objective
- Clearly defined benefit (usually cost reduction)
- A timely schedule
- A plan for transition and implementation of the results

ManTech funds MAY NOT be used for investments more appropriately funded by other means, such as:
- Routine application of existing technology for the production of specific equipment, manufacturing systems, or parts
- Investments specifically intended to change a design
- Purchase of capital equipment, unless it constitutes a minor portion of the investment and is required to establish the first-case application of the ManTech project results
- A technology application unique to a single weapon system or naval platform

Decisions on funding of ManTech projects are based on:
- Platform need
- Priority of that platform in the Navy
- Risks including:
  - Project technical risks
  - Level of approvals needed to implement the results after project completion
  - Non-ManTech funding needed after project completion to implement, such as:
    - Capital Equipment expense
    - Certification testing

Navy ManTech maintains seven Centers of Excellence (COEs) that are focal points for specific technology areas for the development and transition of manufacturing processes and equipment. The Navy ManTech COEs:

- Execute projects; manage project teams
- Serve as corporate expertise in technological areas
- Collaborate with acquisition Program Offices and industry to identify and resolve manufacturing issues
- Develop and demonstrate manufacturing technology solutions for identified Navy requirements
- Facilitate transfer of developed manufacturing technologies

Navy ManTech COEs include:
- Center for Naval Metalworking (CNM) - www.navalmetalworking.org
- Composites Manufacturing Technology Center (CMTC) - https://cmtc.ati.org
- Electronics Manufacturing Productivity Facility (EMPF) - www.empf.org
- Electro-Optics Center (EOC) - www.eoc.psu.edu
- Energetics Manufacturing Technology Center (EMTC) - https://www.navsea.navy.mil/home/warfare-centers/nswc-indian-head-eod-technology/
- Institute for Manufacturing and Sustainment Technologies (iMAST) - http://www.arl.psu.edu/content/institute-manufacturing-sustainment-technologies
- Naval Shipbuilding and Advanced Manufacturing (NSAM) Center - www.nsamcenter.org

The three basic types of ManTech projects are:
- **Standard Projects:** 12-36 months duration; $500K - $3M range
- **Rapid Response projects**: Urgent requirement. Typically, 4-6 months duration and $50K-$200K range
- **Mega Rapid Response projects**: Urgent requirement, but larger effort than Rapid Response. Requires a transitionable product / process at project end; not a quick start to standard project. Maximum 9 months duration and $500K funding (by exception, 12 months duration and $750K funding).

The Navy ManTech Program is managed by the Office of Naval Research (ONR), with direct oversight from the Chief of Naval Research.

Frequently Asked Questions:

1. **I need to redesign an equipment shelf so that it adequately supports the electronics. Can I use ManTech?** *No. ManTech cannot be used to change the design unless there is another appropriate manufacturing benefit.*
2. **I need to redesign an equipment shelf so that it will cost less to build, take less time to install, perhaps require less maintenance, and more adequately support the electronics. Can I use ManTech?** *Yes, although ManTech may require that the platform Program Office or your company pay for the part of the project that is not ManTech such as qualification costs, capital equipment costs, etc.*
3. **How does ManTech rank possible projects?** *In general, projects are prioritized for funding based on the following criteria:*
   a. *Is it ManTech?*
   b. *Does it make sense technically?*
   c. *Will it be completed in time to make a difference for the weapon system? Is there a commitment to implement the technology on the factory floor?*
   d. *What is the benefit? Is it cost reduction?*
   e. *What are the risks? Technical? Schedule? Funds and approvals needed after completion of project? Other?*
   f. *What is the platform Program Manager's / PEO's priority?*
4. **If I have an idea for a ManTech project, who should I discuss it with in ManTech?** *Your first contact within ManTech should be with the appropriate Center of Excellence. Points of Contact are included on each COE web site. If you are in industry and have a ManTech manager at your facility, discuss your idea for a ManTech project with him/her.*
5. **Where do I go to get more general information on Navy ManTech?** *The Navy ManTech Web site can be found on the* https://www.onr.navy.mil/ *web site at* https://www.onr.navy.mil/work-with-us/navy-mantech.