“America’s security and prosperity are increasingly linked with the health of our technology and industrial bases. In order to maintain our strategic advantage well into the future, the Department requires a consistent, realistic, and long-term strategy for shaping the structure and capabilities of the defense technology and industrial bases—a strategy that better accounts for the rapid evolution of commercial technology, as well as the unique requirements of ongoing conflicts.”

—2010 Quadrennial Defense Review (QDR) Report

“Essentially, the industrial base is part of our force structure and we have to treat it like it is.”

—Hon. Frank Kendall, USD(AT&L)
February, 2012

ManTech focuses on the timely development, production, and sustainment of defense systems, and thereby enhances our affordability and technological edge in a dynamic, diverse, and evolving threat environment.”

—Mr. Brett Lambert, DASD(MIBP)
November 2011

Manufacturing Technology Priorities

**Advanced Manufacturing Enterprise (AME)**
Key investment areas include manufacturability tools to enable better designs, implementation of improved 3D technical data packages, intelligent manufacturing methods, supply network modeling and integration, and product/process data interoperability.

**Composites**
Key investment areas include high temperature, light weight, marine durable structures, radomes, body armor and enabling manufacturing technologies for specialty applications.

**Electronics**
Key investment areas include wide bandgap and silicon carbide (SiC) devices, lithium ion (Li-ion) batteries, advanced packaging and fabrication technologies, infrared sensors and lasers and their associated components, and flexible electronics and display technologies.

**Metals**
Key investment areas include material processing, castings and forging, and joining. Critical application areas include ballistic armor, affordable vehicle components, and lightweight, thin-walled structures. Additional priorities include intelligent machining, titanium powder metals, and lightweight alloy initiatives.

DoD Manufacturing Technology Program

2012 Strategy

The complete 2012 Defense Manufacturing Technology Program Strategic Plan can be downloaded at the program’s website, above.

DoD ManTech Resources
DoD Manufacturing Technology Program
Defense acquisition programs rely on innovative manufacturing capabilities and an industrial base that can deliver them. For over fifty years, the DoD Manufacturing Technology (ManTech) Program, comprised of Component ManTech programs within the Army, Navy, Air Force, DLA, and OUSD, has been the Department’s investment mechanism for staying at the forefront of defense-essential manufacturing capabilities.

DoD ManTech Program Organization
The DoD ManTech Program is executed through the Component ManTech programs with joint planning and coordination accomplished by the Joint Defense Manufacturing Technology Panel (JDMTP) in concert with the Office of the Deputy Assistant Secretary of Defense for Manufacturing and Industrial Base Policy (ODASD(MIBP)). The JDMTP embodies two tiers of coordination: a “Principal” panel, comprised of a senior technology manager from each Component program, overseeing a family of technical “subpanels,” each defined by an associated technology sector.

2012 DoD ManTech Program Strategic Plan
The 2012 DoD ManTech Program Strategic Plan documents the program’s priorities in support of the defense industrial base. It leverages the new positioning of the Department’s ManTech oversight function within ODASD(MIBP) and builds on the framework and momentum established by the 2009 strategic plan. Strategic Thrust 1 has been restructured to focus joint ManTech activities more clearly on program responsiveness and balance across the Component investment portfolios. This emphasis is then extended across three additional strategic thrusts in support of the Department’s broader, advanced manufacturing enterprise needs.

Thrust 1: A Responsive and Balanced Manufacturing Technology Investment Portfolio to Meet DoD Requirements. ManTech must focus on both responsiveness and balance in order to meet strategic DoD priorities, deliver advanced manufacturing quickly, and enable affordable modernization. The pursuit of this strategic thrust encompasses engagement with the wider manufacturing enterprise, analysis and prioritization of investments, and effective execution of the portfolio.

Thrust 2: Active Support for a Highly Connected and Collaborative Defense Manufacturing Enterprise. The Department must encourage innovation that leverages highly connected, collaborative and increasingly global supply base, with “above the factory floor” enterprise capabilities that enable a rapid response to continually changing defense needs. Such capabilities can provide broad benefits to the industrial base and powerfully enhance weapon system affordability and timely delivery.

Thrust 3: Active Support for a Strong Institutional Focus on Manufacturability and Manufacturing Process Maturity. The Department must also champion a pervasive culture that embodies a cradle-to-grave focus on manufacturability across each system’s research, development, acquisition and sustainment phases. This includes DoD and industry developing deeper insight into manufacturing cost drivers across these phases.

Thrust 4: Active Support for a Healthy, Sufficient, and Effective Defense Manufacturing Infrastructure and Workforce. The Department increasingly emphasizes the need for a robust defense industrial base, underscored by Under Secretary Kendall’s message that it is essentially part of our force structure—and must be treated that way. ManTech must therefore search for ways to partner with industry and government in support of a healthy, sufficient, and effective defense manufacturing infrastructure, integrated with a flexible, innovative and capable defense manufacturing workforce.

Ten Enabling Goals
The 2012 ManTech strategy features ten enabling goals, aligned to the four thrusts.

- **Goal 1.1**: Enterprise-wide engagement to develop manufacturing technology priorities
- **Goal 1.2**: Rigorous internal ManTech analysis and prioritization of the portfolio
- **Goal 1.3**: Timely and effective delivery of defense-essential manufacturing technology solutions
- **Goal 2.1**: Innovative, enterprise-level ManTech initiatives enabling collaborative and network-centric manufacturing
- **Goal 2.2**: Robust deployment of ManTech Program results throughout the defense industrial base
- **Goal 3.1**: Effective policies and practices to assess and improve manufacturing readiness
- **Goal 3.2**: Full integration of “Design for Manufacturability” across the defense acquisition cycle
- **Goal 3.3**: Structured analysis of manufacturing cost drivers for ManTech emphasis, in partnership with PEDs and Industry
- **Goal 4.1**: Active promotion of investment and innovation in manufacturing infrastructure and management systems
- **Goal 4.2**: Effective ManTech contribution to a highly capable, well educated defense manufacturing workforce

**Implementation**
This 2012 ManTech Strategy is implemented through the Component ManTech programs, complemented by the joint planning processes of the JDMTP and ODASD(MIBP). The JDMTP will continue to define highest-priority joint pursuit areas which align with the thrusts and goals of this strategy and leverage Component ManTech program portfolios for greatest benefit to the Warfighter, the Department, and the Nation.

**ManTech Mission**
ManTech anticipates and closes gaps in manufacturing capabilities for affordable, timely, and low-risk development, production, and sustainment of defense systems.