



DoD Hypersonics Industrial Engagement

Office of the Deputy Assistant Secretary of Defense Industrial Policy

Office of the Under Secretary of Defense (Research & Engineering) Technology & Manufacturing Industrial Base



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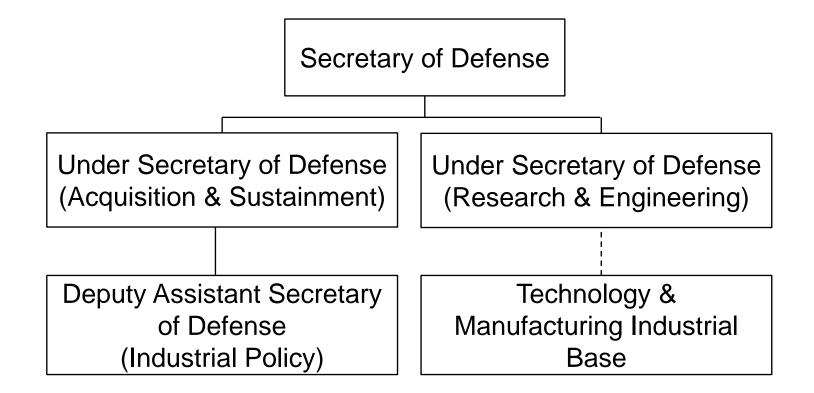


A&S and R&E Industrial Base Collaboration





The Office of the Deputy Assistant Secretary of Defense Industrial Policy and the Deputy Director, Research & Engineering – Technology & Manufacturing Industrial Base work together to ensure a robust defense industrial base, from development through production





Industrial Policy Mission





Ensure robust, secure, resilient, and innovative industrial capabilities upon which the Department of Defense can rely in an era of great power competition to fulfill current and future Warfighter requirements.





"A healthy defense industrial base is a critical element of U.S. power and the National Security Innovation Base. The ability of the military to surge in response to an emergency depends on our Nation's ability to produce needed parts and systems, healthy and secure supply chains, and a skilled U.S. workforce."

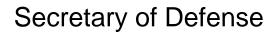
2017 National Security Strategy



Industrial Policy Organization







Under Secretary of Defense (Acquisition & Sustainment)

Deputy Assistant Secretary of Defense (Industrial Policy)

Global Markets and Investments

Defense Production Act Title III

Assessments

Industrial Base Analysis and Sustainment Small Business Programs Policy and Industry
Outreach

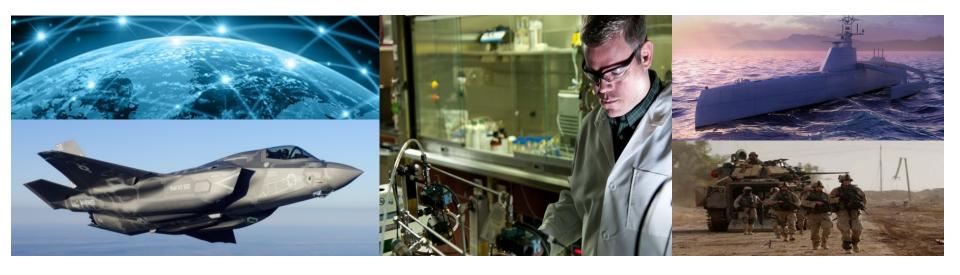


Technology & Manufacturing Industrial Base Mission





Develop long-term strategies and employ mechanisms to retain US advantage in current and emerging technologies and the industrial base developing, manufacturing and sustaining them. Provide direct support in the development and execution of technology modernization activities and priorities.



"The drive to develop new technologies is relentless, expanding to more actors with lower barriers of entry, and moving at accelerating speed. New technologies include advanced computing, "big data" analytics, artificial intelligence, autonomy, robotics, directed energy, hypersonics, and biotechnology— the very technologies that ensure we will be able to fight and win the wars of the future." 2018 National Defense Strategy



Technology & Manufacturing Industrial Base Organization





Secretary of Defense

Under Secretary of Defense (Research & Engineering)

Director of Defense Research & Engineering (Research and Technology)

Technology & Manufacturing Industrial Base (TMIB)

Manufacturing Technology/National Manufacturing Institutes Technology Protection/
Committee on Foreign
Investments in the
United States R&E
Reviews

Emerging Technology Supply Chain Assessments



Hypersonics Industrial Base Assessment





- The Defense Contract Management Agency's (DCMA) Industrial Analysis Group (IAG) performs industrial capacity analyses
- In February 2019, DCMA-IAG began a study to analyze the industrial base capacity and capability (existing or in development) for DoD hypersonic weapons, as well as to assess future technology base needs
- Existing Service IB studies served as a starting point to identify key areas to cover under this assessment



Hypersonics Industrial Base Assessment (cont.)





The DCMA-IAG Hypersonics study will identify issues in the Defense Industrial Base with respect to capability and capacity, and any efforts needed to continue development and to transition hypersonic technology to production. Areas of focus include:

Industrial Capacity Capability Base Bottlenecks Technical Materials Manufacturing Workforce Need for Investment R&D Support **Prototyping** Needs Designs



TMIB Support to Hypersonics Tech Development Strategy





TMIB is developing a strategy to ensure sufficient domestic manufacturing and industrial base capacity exists for production of Hypersonics systems

- Phase 1: TMIB is conducting a review of existing reports to provide a comprehensive view of Hypersonics manufacturing and industrial base concerns, risks and opportunities
 - TMIB is coordinating with all stakeholders to compile and review previous reports; including DCMA-IAG study results

Phase 1: Assess

Consolidate prior reports

- Concerns
- Risks
- Opportunities

Evaluate

 Need for follow-on assessments or studies

Phase 2: Promote and Protect

Promote national competency in Hypersonics technologies

- Materials
- Capacity
- Skilled workforce
- Manufacturing
- Infrastructure

Protect

- IP tech-transfer and export controls
- Committee on Foreign Investment in U.S.

Implement Strategies

Leverage DoD and USG tools

Phase 3: Monitor

Coordinate with stakeholders

 Ensure continued evaluation of US-peer capability (IB studies, site-visits, contract compliance, etc.)

Report

 Measure the effectiveness of the strategies

Evaluate

- Additional assessments
- Modifications to strategies



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Questions