IM PLANS AND JIMTP FUTURE IN THE UNITED STATES

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Joint Insensitive Munitions Technology Program

Mission - Develop, mature and transition Joint Insensitive Munition science and technologies to improve the response of the DoD munitions portfolio to threats from combat, terrorists, and accidents.

Purpose – to provide a Science and Technology base to support the Secretary of Defense in ensuring that munitions under development or procurement are safe throughout their lifecycle when subjected to unplanned stimuli to the maximum extent practicable.

Why the "J"? (Historically)

- **Historical incidents and existing vulnerabilities dictate need to improve the response of our DoD-wide munition portfolio**
- **Technology gaps and potential solutions cut across services/agencies and specific munitions**
- **Addressing/evaluating munitions on an item-by-item basis resulted in an inefficient investment of both intellectual capital and $**
- **Combination of JIMTP and IM Strategic Plans (IMSPs) represents a Departmental strategy to invest in a combination of priority critical technologies and munition response improvements**
- **Ensure and increase combat capability through increased safety, reduced shipping and storage burdens, and increased force protection/survivability**

NATO STANAG 4439 DEFINITION

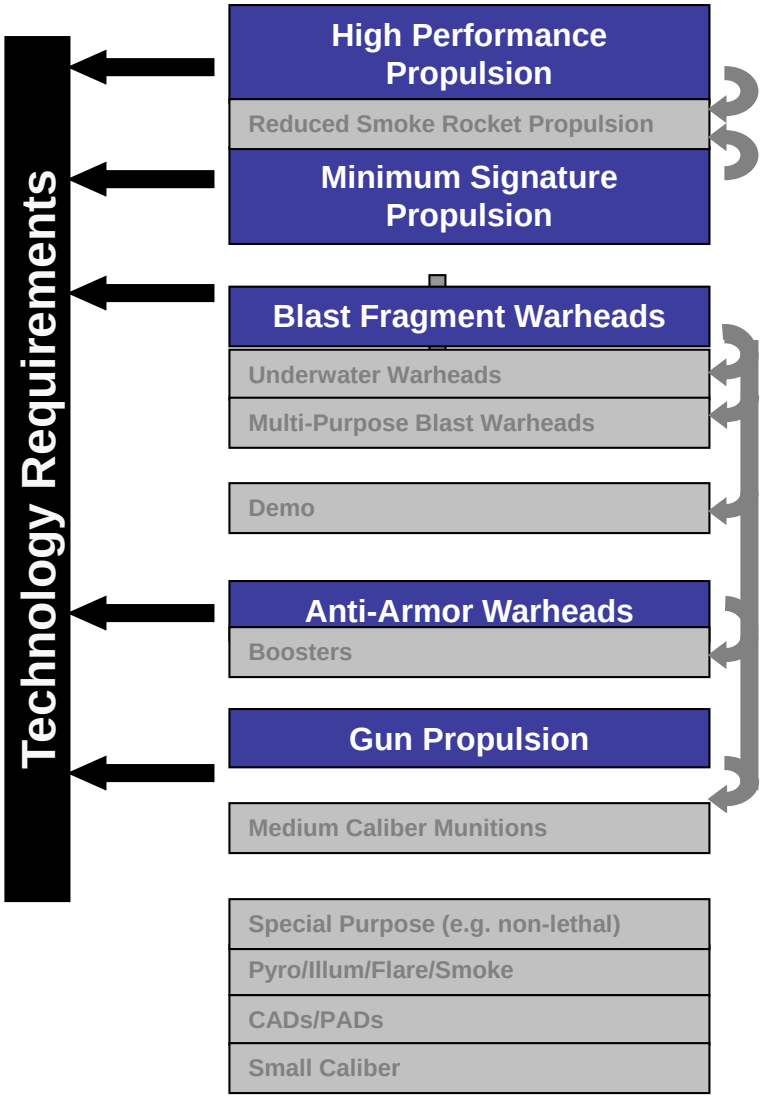
Munitions which reliably fulfill their performance, readiness and operational requirements on demand and which minimize the probability of inadvertent initiation and severity of subsequent collateral damage to weapon platforms, logistic systems and personnel when subjected to unplanned stimuli.

USC, Title 10, Chapter 141, Section 2389 December 2001

"§ 2389. Ensuring safety regarding insensitive munitions. The Secretary of Defense shall ensure, to the extent practicable, that insensitive munitions under development or procurement are safe throughout development and fielding when subject to unplanned stimuli."

JIMTP S&T Focuses on DoD Munitions Portfolio

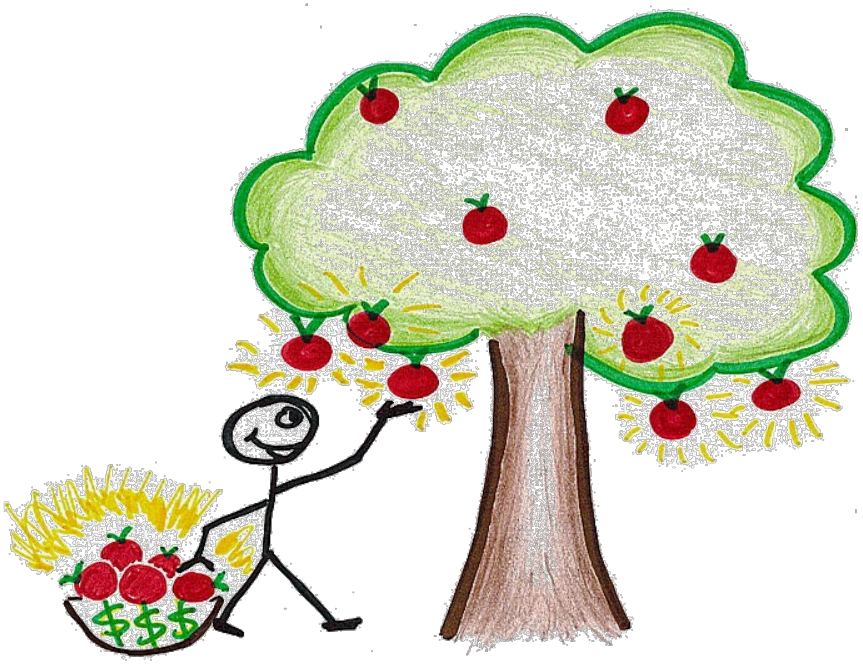
Munition Area Technology Groups (MATG)



- **DoD Portfolio contains five primary areas where Non-compliant munitions are identified for procurement**

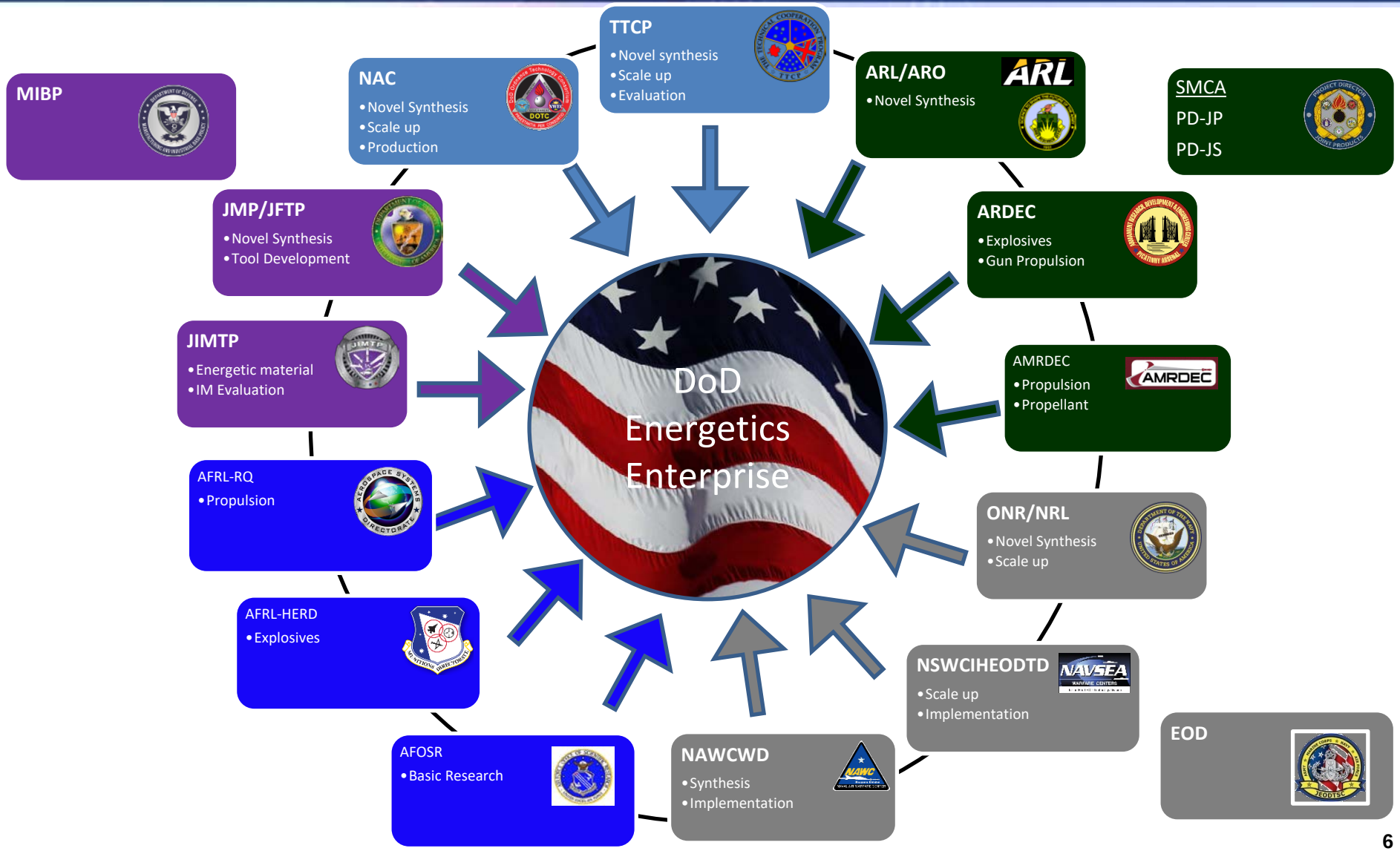
IM Success

- 60mm mortar
- 81mm mortar
- 120mm mortar
- 105mm Artillery
- 155mm Artillery
- Air-to-air weapons
- 500lb general purpose bomb
- 1000lb general purpose bomb
- Demolition charges (2 sizes)

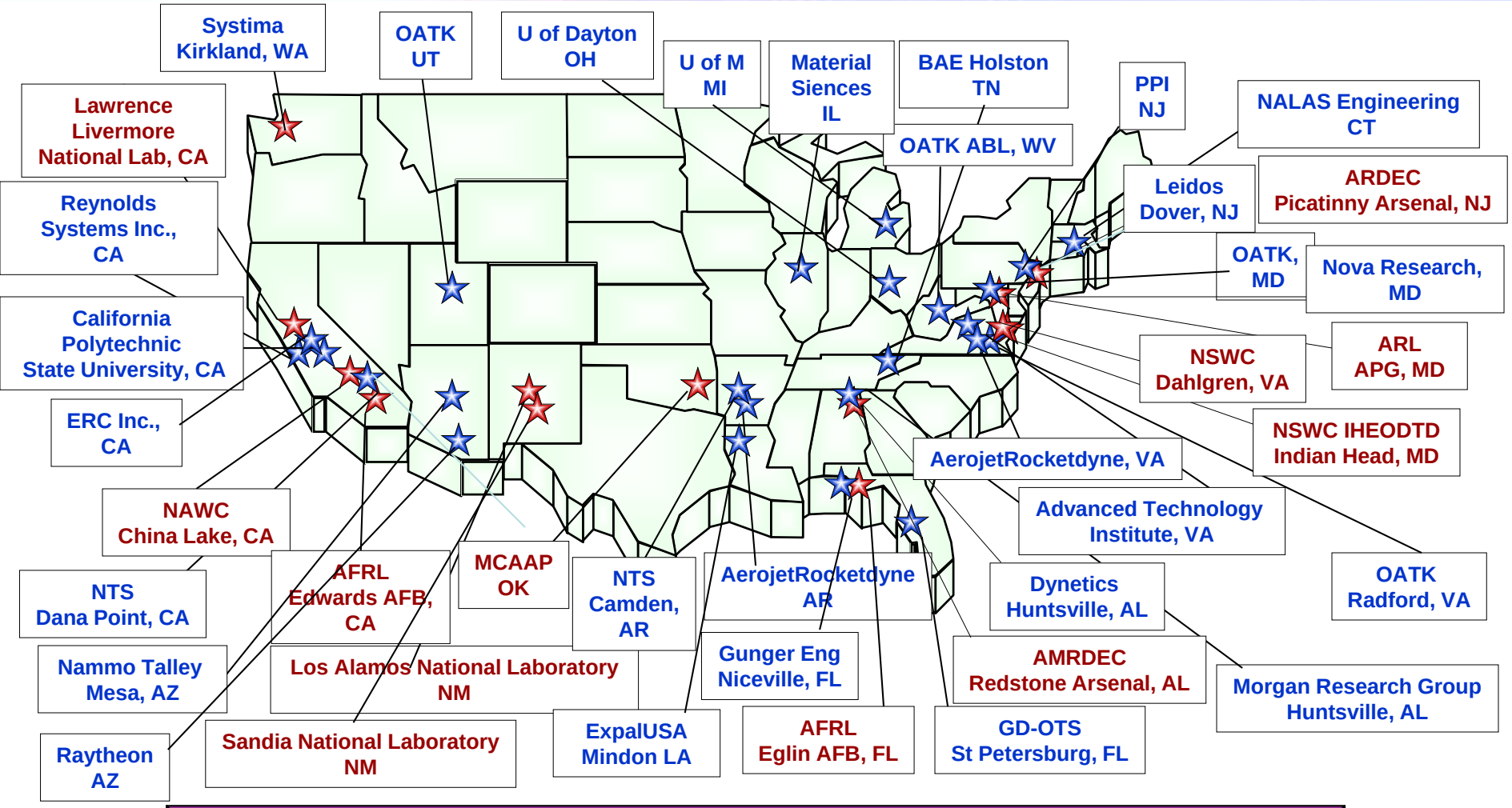


- Future will focus on the acquisition cycles and strategies of new weapons
- "Fixing" legacy systems was step 1
  - Addressing the challenges of "TBD" systems requires broad research

Energetics Enterprise



FY16/17 Joint Munitions Technology
- Performers -



JIMTP is strengthening government-industry partnerships

Challenges

- **Range extension in multiple systems**
- **Understanding of relationship between short duration shock vs long duration shock (HJ criteria vs wedge test)**
- **Understanding “damage” (cracks, voids, porosity, thermal) generation and propagation during insult**
- **Understanding the science behind SCO/FCO challenges**

Summary

- **Technology and capability gaps continue to drive our focus**
  - **JIMTP mission remains with dynamic weapon portfolio**
- **Fundamental understanding challenges remain**
  - **Trying to address highest priorities with Directed Studies and partners (labs, SBIR, DOE etc.)**
- **Transition environment is complex and applicable technology is available for integration**

Questions