

Advanced Technology Overview for the Huntsville Aerospace Marketing Association



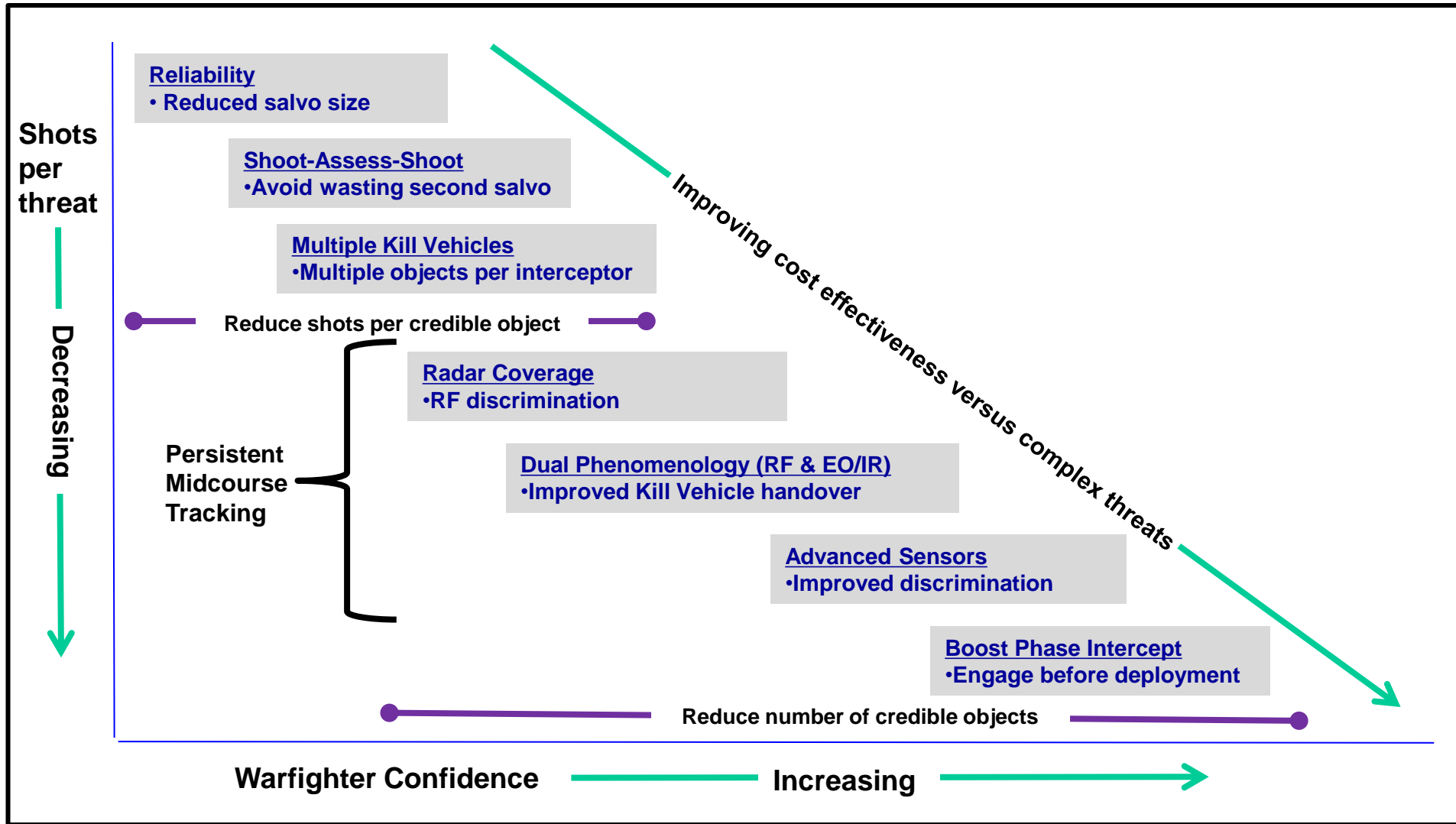
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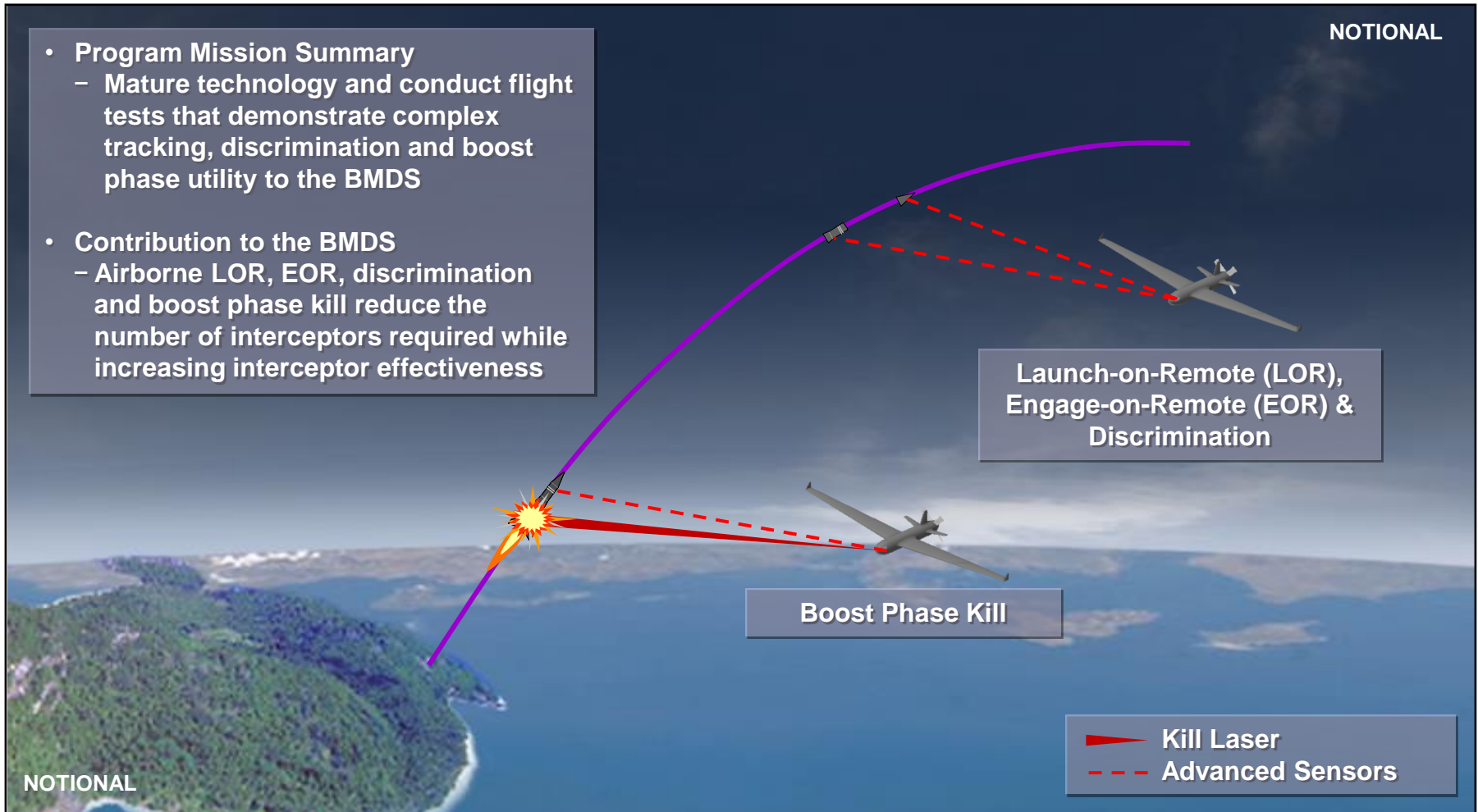
Warfighter Confidence & Shot Doctrine





Technology Maturation Initiatives Contribution to the BMDS

- Program Mission Summary
 - Mature technology and conduct flight tests that demonstrate complex tracking, discrimination and boost phase utility to the BMDS
- Contribution to the BMDS
 - Airborne LOR, EOR, discrimination and boost phase kill reduce the number of interceptors required while increasing interceptor effectiveness





Technology Maturation Initiatives

- **Discrimination Sensor Prototype Demonstrator – FY17 Plans**
 - **Flight test prototype airborne sensor system**
 - **Design and develop airborne advanced sensor upgrades**
 - **Advanced sensor prototype build**
- **Directed Energy Prototype Demonstrator – FY17 Plans**
 - **Award dual contracts for preliminary design of a Low Power Laser Demonstrator**
 - **Contractor demonstrations of key subsystems**



Advanced Sensor Testbed

**MQ-9 Reaper with Sensor
Airborne, quick reaction capability**



Low Power Laser Demonstrator

**High Altitude Platform
Critical step in return to Boost Phase Kill**



Advanced Sensor Development Path

Ground → Flight Demonstrations → Operational Capability

2015

2020

2025



Ground Demonstrators



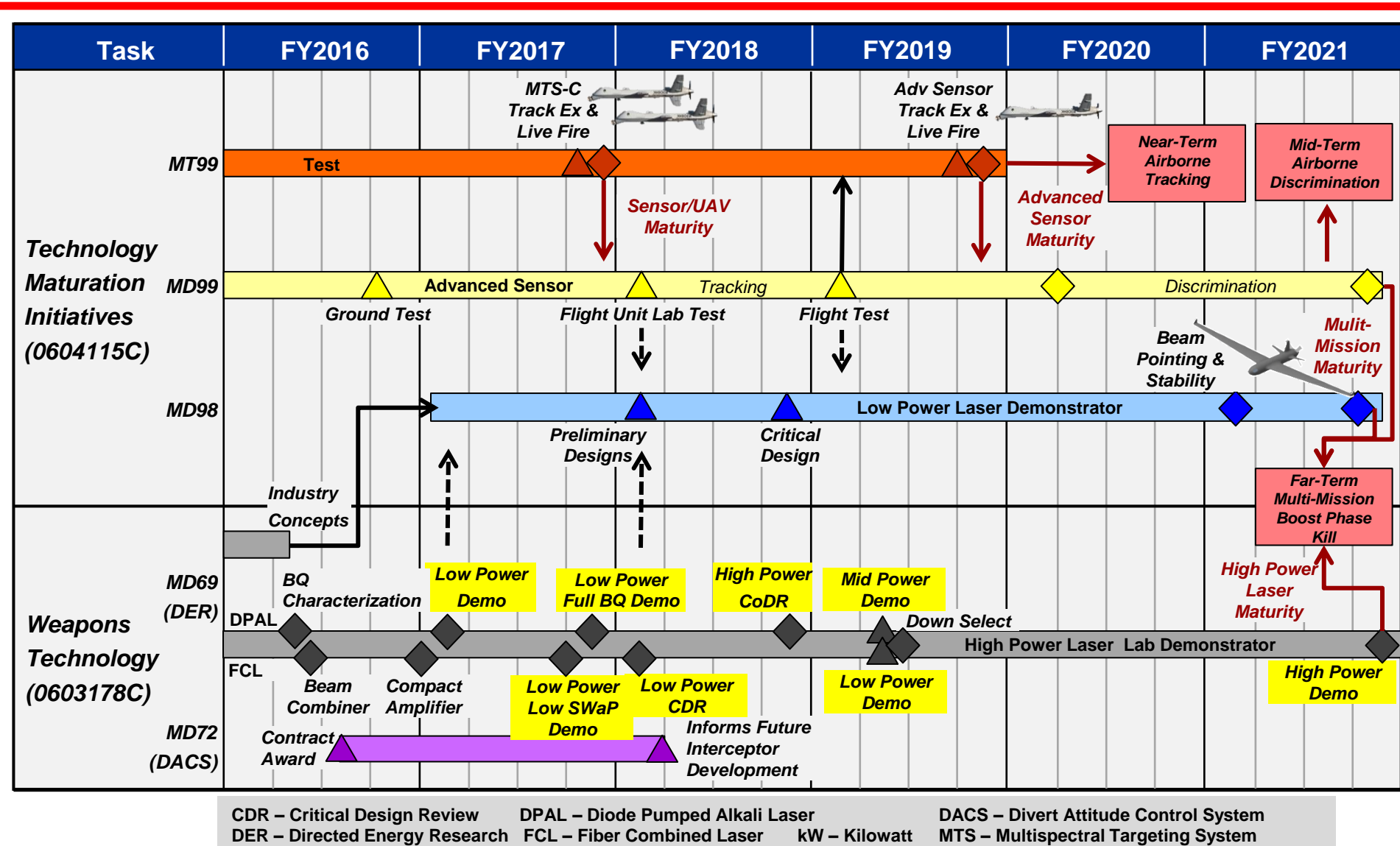
Reaper-based Airborne Demonstrator



Space-based Demonstrator



Technology Roadmap





Missile Defeat Project

- **Counters the growing global advancement and proliferation of road-mobile ballistic missile threats**
- **Coordinates and integrates DoD and Intelligence Community**
- **Leverages existing test and simulated environments to analyze concepts and architectures**
- **FY 2017 focuses on development, integration, and testing in five key areas**
 - **Dynamic command and control**
 - **Intelligence, Surveillance, and Reconnaissance**
 - **Responsive conventional counterforce**
 - **National missile defense**
 - **Enduring demonstration and experimentation capability**

