

TODAY'S CAPABILITY AND NEXT STEPS FOR MODERNIZATION

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VP, Next Generation Interceptor

Ms. Debbie Barnett, [Boeing](#)
VP, Strategic Missile and Defense Systems



RAYTHEON

Ms. Jennifer Hubbard

A technician wearing a white lab coat, hairnet, and face mask is working on a complex electronic assembly. The assembly is mounted on a black frame and features various components, including blue and red wires, a circuit board, and a small display screen. The background is a cleanroom environment with other equipment visible.

Advanced Engineering and Manufacturing



Integrated, Layered Solutions

Modeling & Simulation and Digital Engineering



PARSONS

Mr. James Lackey

OUR NATIONAL SECURITY CHALLENGES

- Space as front line of battle; Great Power Competition
- Contested & Congested Environment
- Demands for Resilience, Affordability, Adaptability
- Adversary Kill Webs; Working faster than their Speed of Action
- Fusion of *Cyber, Data, AI enabled C2*
- COTS based Agile, Offsetting Capabilities
- Rapid Acquisitions; risk tolerance, capability trades
- Rise of Mid Tier LSI, Solution Provider: Parsons



PARSONS PRODUCTS AND SOLUTIONS

SV Ground Ops as a Service

- **Parsons mission planning and control COTS products, Parsons staff, and facilities at all classification levels**
 - Cloud, Hybrid-Cloud, On-Prem
 - Modernization and Innovation - Automation and AI to reduce staffing
- **Leveraging commercial partner antenna networks, and cloud provider capabilities**
 - Reduces ownership and development costs, helps avoid infrastructure obsolescence
- **NOAA POES in December 2022 and DARPA Blackjack 2023**

Assured PNT

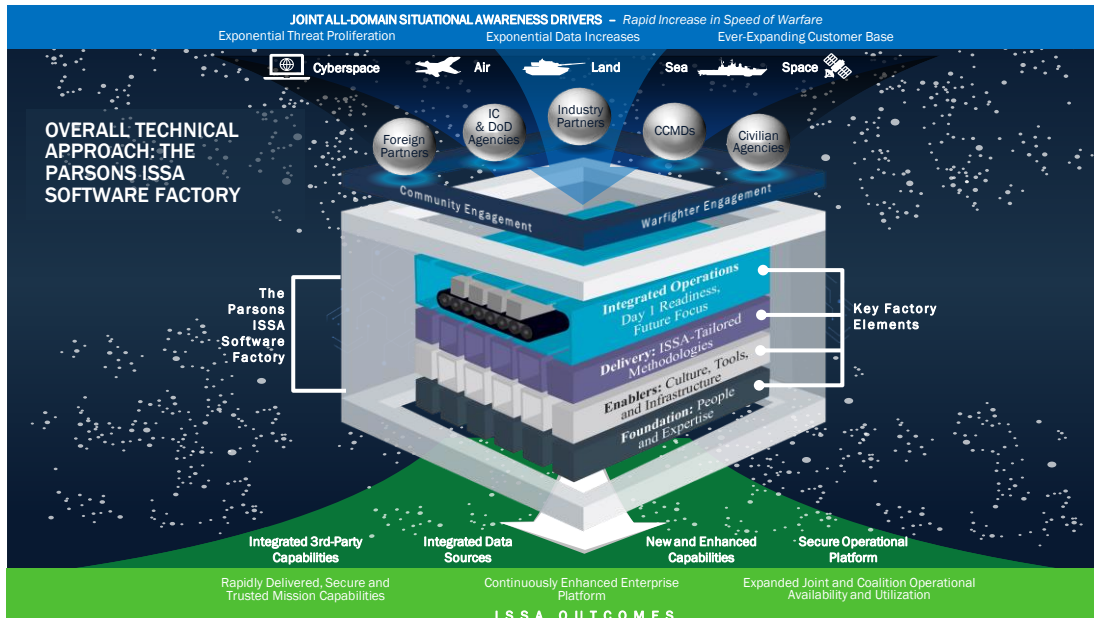
- **Limitation of fixed L-band PNT signals**
 - Combating with software defined radio (SDR) agility and integration with all source PNT
- **ER310 Handheld SDR – 2x2 RF Transceiver**
 - Tx and Rx RF pre pre-selection filters, 70 MHz to 6 GHz frequency range, up to 56 MHz instantaneous bandwidth
- **Field tested signal capabilities with multiple RF sources**
- **Building low SWAP for mounted and munitions integration**



PARSONS SERVICES AND SUPPORT

Space Situational Awareness

- Integrated Solutions for Space Situational Awareness (ISSA)
- Customers include both operational and analytical
- Provide integrated knowledge (past, current, and predictive) of space events, domain awareness, threats, activities, and conditions/contextualization.
- All of software source code and end-to-end technical baseline are owned by the U.S. government



Integrated C2

- Command Post Computing Environment – enabler for both modernizing AFATDS and JTICS
- Geospatial solution and common data services, including an extensible database and data persistence.
- Firestorm AI-enabled “sensor to shooter” decision aid for Project Convergence
- Systems and software support for Next Gen Intelligent Fire Control (NGIFC)



NORTHROP GRUMMAN

Ms. Lisa Brown

The Threat Continues to Advance in Quality & Quantity

Drone Strike Kills American Contractor in Northeast Syria

By The Associated Press • March 24, 2023

News | Nuclear Weapons

North Korea warns US of nuclear retaliation as tensions rise

MISSILE DEFENSE

Evolving Threats Require New Approaches to Defending Installations

North Korea fires 2 short-range missiles into the sea as US docks in South Korea

World Africa Americas Asia Australia China Europe India Middle East Unit

North Korea said it fired a Hwasong-18 intercontinental ballistic missile on Wednesday

Second Consecutive Flight Test Success Brings North Korea's Hwasong-18 ICBM Closer to Deployment

US Defense Officials: China Is Leading in Hypersonic Weapons

Ukraine war: Russia targets Odesa with missile and drone attacks

Iran's ballistic missile capabilities are a growing threat to Europe

CLIMATE

Iran unveils what it calls a hypersonic missile able to beat air defenses amid tensions with US

Key Missile Defense Challenges and Opportunities

Today's Rapidly Evolving Threats...

- Hypersonics
- Emerging Rogue State ICBM Threats
- Cruise Missile Threats from Land, Sea, and Air
- C2 and Space-Based Systems
- Missile Defense Countermeasures
- UAVs and Small UAS
- Cyber Attack

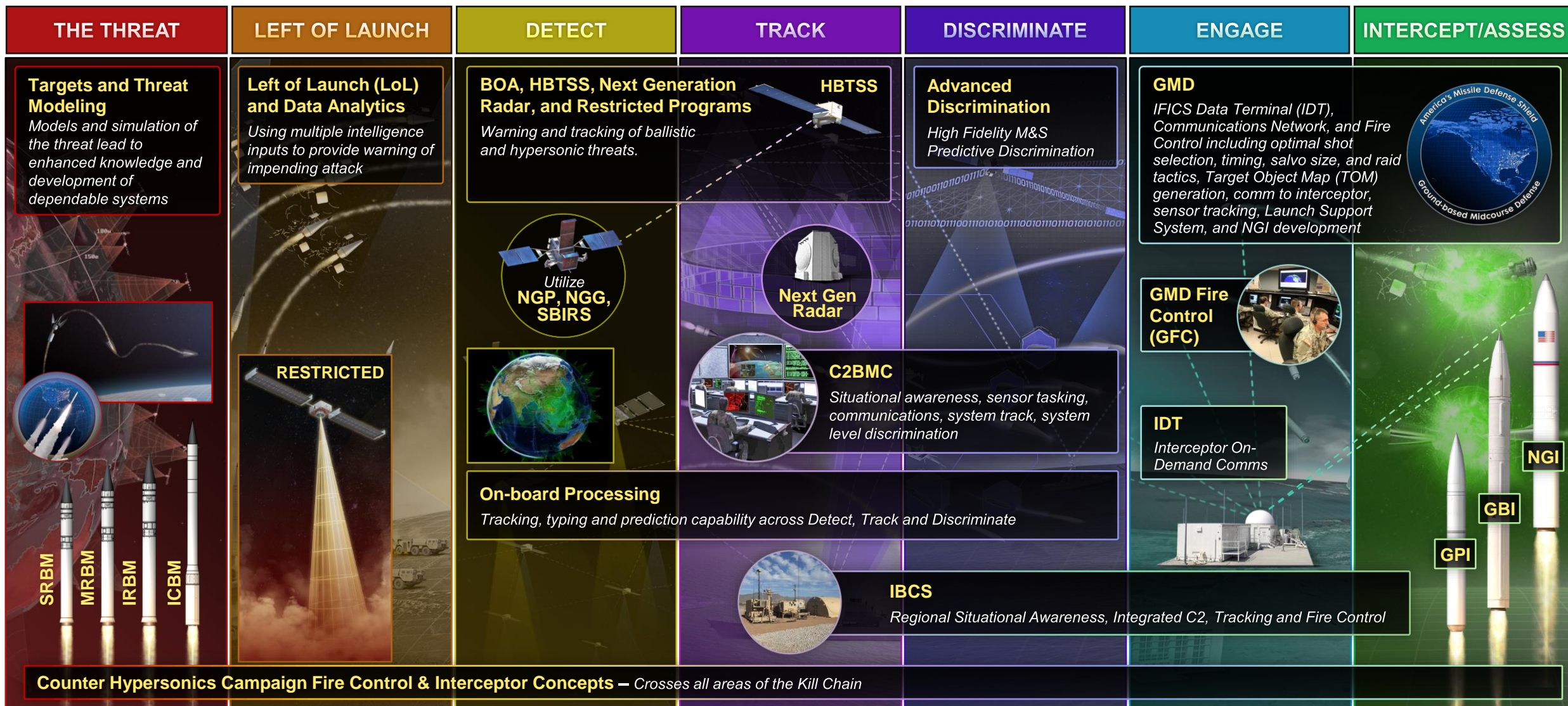


Demand Next Generation Warfighting Capabilities:

- Integrated Joint Sensor Networks
- Next Generation Battle Management
- Cyber Resiliency
- Next Generation Kinetic Effectors
- Non-Kinetic Effectors
- International Cooperation



Northrop Grumman's Kill Chain Integration

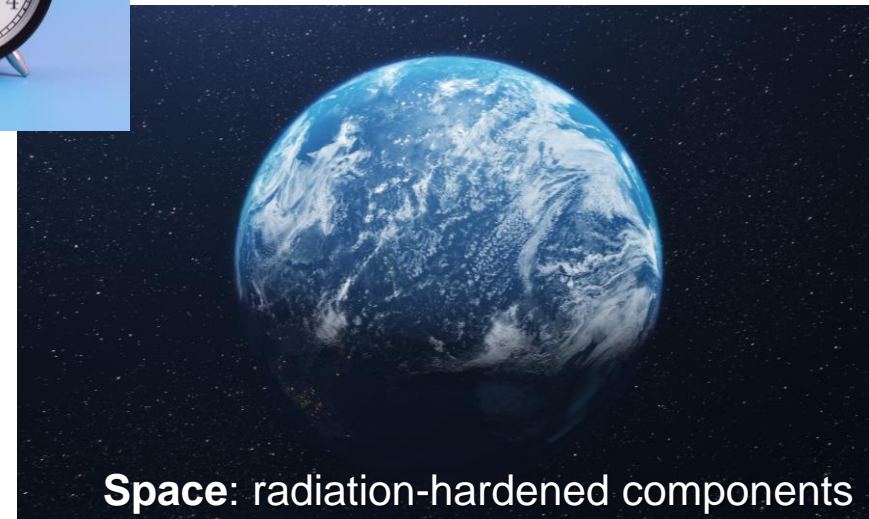




LOCKHEED MARTIN

Dr. Sarah Hiza

Our Shared Challenges

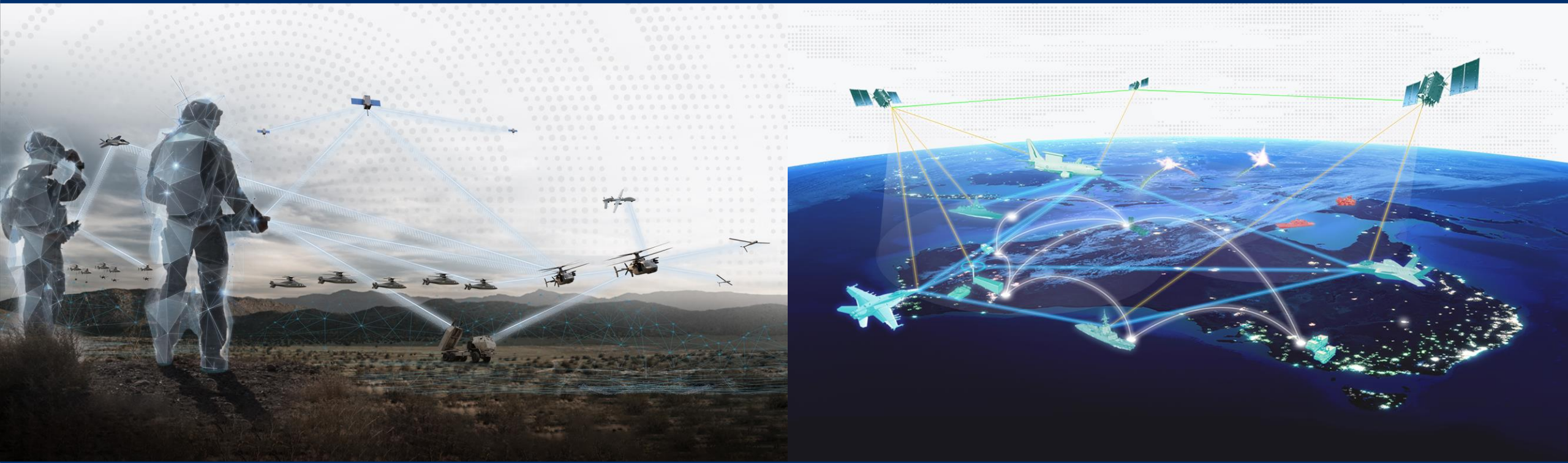


Solutions for Missile Defense Missions



Lockheed Martin brings decades of experience and expertise supporting the missile defense mission, across the product lifecycle and all phases of flight.

AI, Digital Technologies & Enablers



LEIDOS

Dr. Arthur (Artie) Mabbett

OUR MISSION

Leidos makes the world safer, healthier, and more efficient through technology, engineering, and science.

OUR VISION

Become the global leader in the development and application of technology to solve our customers' most demanding challenges.

Engage, develop, and empower our diverse and valued people to foster a culture of creativity and growth.

Strengthen our communities through volunteerism, sustainable operations, and the advancement of equality.

OUR VALUES



INTEGRITY



INNOVATION



INCLUSION



AGILITY



COLLABORATION



COMMITMENT



SMD

Industry Panel

Dr. Artie Mabbett, Aug 2023

Innovating at the “Speed of the Mission”

Speed and Agility to meet our Peer Adversary Capabilities

- Foundational Crosscutting Innovation for Competitive Advantage

Innovation in Business Constructs to allow Speed and Agility

- Emphasis on Rapid, Innovative Solutions for New Threats

Better Collaboration across the Defense Ecosystem

- Fostered by Acquisition, Requirements and Budgeting Communities

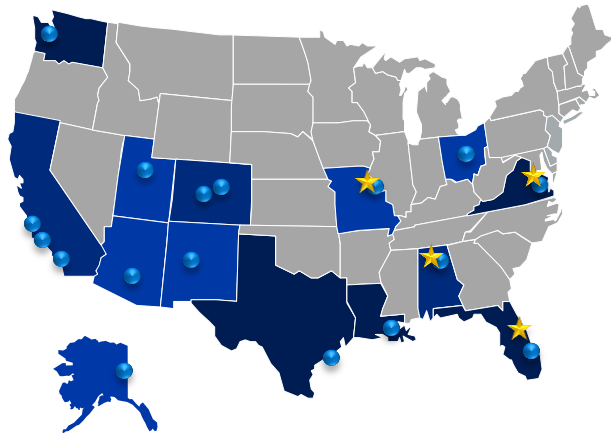


BOEING

Ms. Debbie Barnett



Space, Intelligence & Weapon Systems



**20 PRIMARY
LOCATIONS
SUPPORTING SPACE &
WEAPON SYSTEMS**



GROUND-BASED
MIDCOURSE DEFENSE



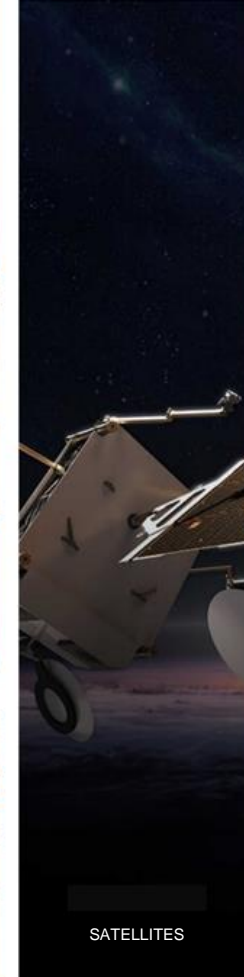
PATRIOT ADVANCED
CAPABILITY-3



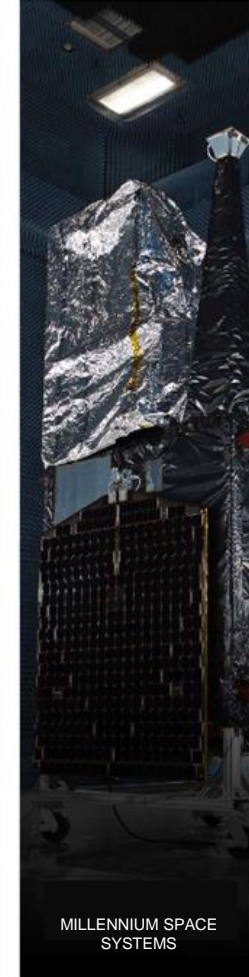
AEGIS BALLISTIC
MISSILE DEFENSE



DIRECTED ENERGY



SATELLITES



MILLENNIUM SPACE
SYSTEMS



ADVANCED WEAPONS

STRATEGIC MISSILE & DEFENSE SYSTEMS

PRECISION
ENGAGEMENT
SYSTEMS

SPACE MISSION SYSTEMS

PHANTOM
WORKS





**DIGITALLY ADVANCED.
SIMPLY AND EFFICIENTLY PRODUCED.
INTELLIGENTLY SUPPORTED.**

QUESTIONS?