

Overview

Precision Engagement Future Operations

An Industry Perspective

Challenges and Opportunities

Providing the Warfighter timely, effective and affordable Mission Solutions that span the breadth and depth of the Battlespace

Kevin Peppe 520.794.5919

Raytheon







Access

Locate

Identify







Track

Navigate

Communicate





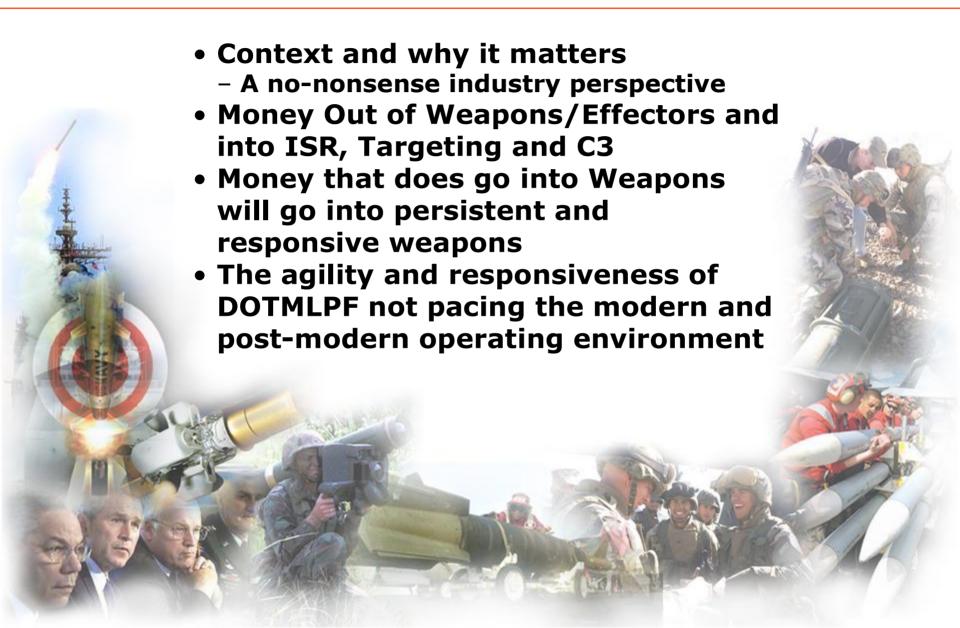
PSTS 2005

Attack

Assess

Outline and Overview: Three Macro-Trends







Context: Ways, Means & Ends

DEPARTMENT OF DEFENSE



Training Readiness





Weapons Stockpiles



Operational Availability



Qualified Personnel

DEFENSE INDUSTRY

Certainty Valued Over "Irrational Exuberance"

Shareholder Value = (Growth x Margin x Cash Conversion)^{Goodwill}

PRECISION ENGAGEMENT STRATEGIC BUSINESS AREA



- Focus on the Warfighter as Customer 1
 - Turn 80% Mission Solutions fast
- Functionally span ISR, Targeting, C3 and Effects

Ends: Ensure the strength & security of the United States through Global Stability

Goodwill

- Goodwill is defined as the value of the business in excess of its owner's equity
 - The value placed on intangibles assets, such as people, knowledge, relationships and intellectual property, is now a greater proportion of the total value of most businesses than is the value of tangible assets, such as machinery and equipment
 - The creation and management of intangible assets is often essential to long-term success
- Necessary but not sufficient components of Goodwill
 - Reliability

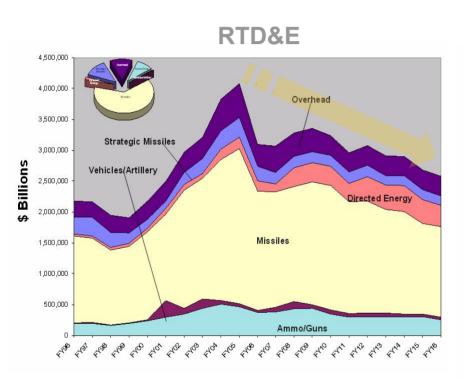
Predictability

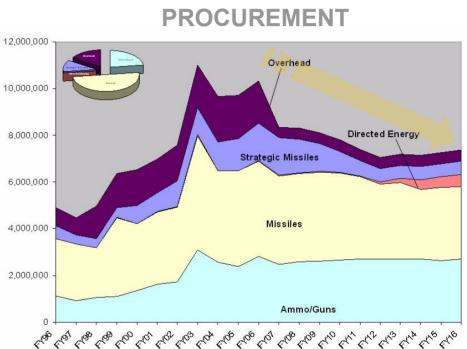
Reputation

Ethics at the bottom line

Empirical Data: Less for Weapons, More for the Rest





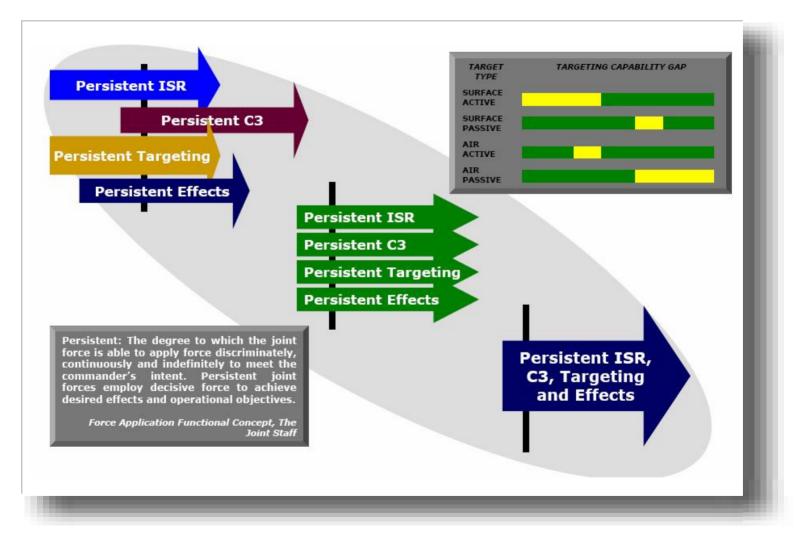


Growing Gap Between DOD TOA and DOD Weapons Acquisition and RDT&E

A Shift of DoD Resources From Effectors to ISR, Targeting & C3



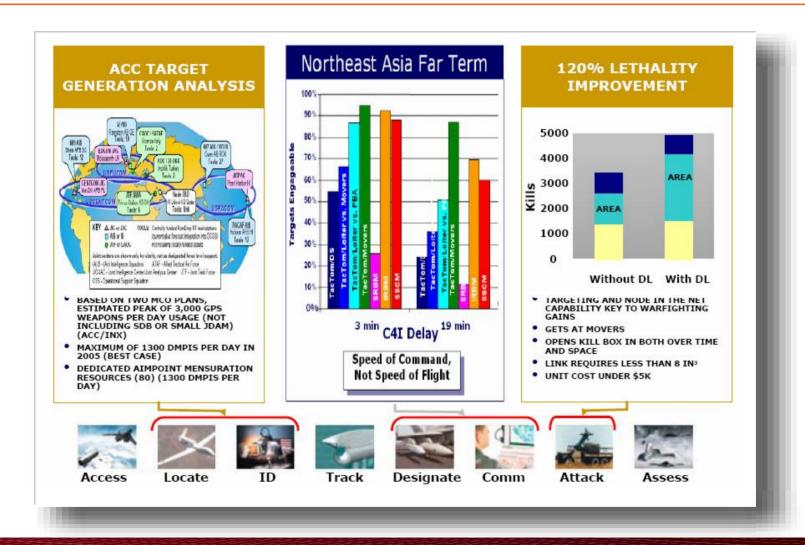
Customer Success Is Our Mission



Analysis, M&S Demonstrations and Real-World Ops Confirm



Customer Success Is Our Mission



Significant Per-Round Lethality Improvements



- Generate targets in theater and in volume
- Process and distribute those targets fast and forward
- Act on those targets with immediacy

Persistent ISR, C3, Targeting and Effects



SENSORS AND WEAPONS THAT ARE TRULY 'Nodes-in-the-Network'

Bottom Line: Spend 'The Next Dollar' on ISR&T, C3 & Weapons Mods to Exploit

Raytheon Customer Success Is Our Mission

Growth Through ISR, C3 and Targeting: Implications for Industry

- Position based solely on weapons portfolio increasingly risky
- Even an enterprise focus might risk not bringing 'Best-of-Breed-Across-the-Effects-Chain' to the Warfighter
- As most significant M&A opportunities already realized, might be entering an era of global partnerships
- Cost per round must decrease (or at least level off) to reflect investment in networks

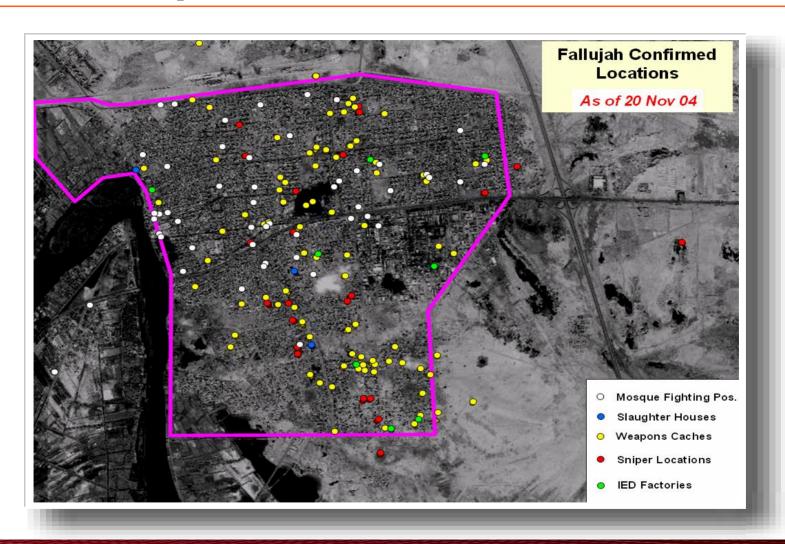
Move to Responsive PE Mission Solutions



Warfighter Capability Gap

"Precision cannon artillery delivered munitions to attack hostile forces in urban areas/complex terrain while minimizing collateral damage."

The Battlespace

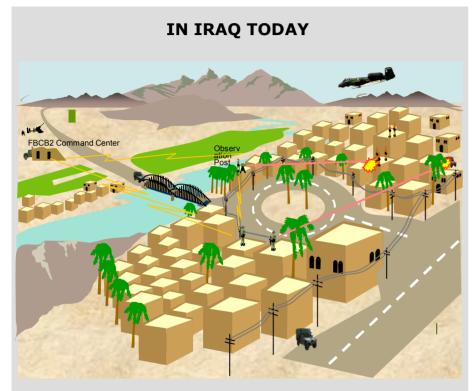


Non-linear, Non-contiguous Challenge

Fire Support Opportunity: Alternatives Examined



Customer Success Is Our Mission



- 1. A/C precision fires for the majority of operations
- 2. Weather and A/C availability control Timeto-Kill
- 3. Extended execution timelines from sensor to shooter between 20 to 30 minutes.
- 4. No persistent and precise indirect fires capability.

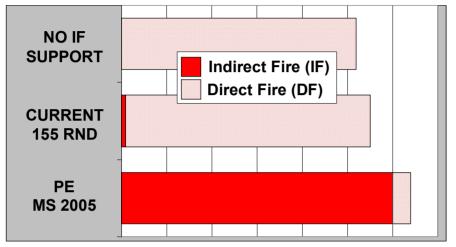


- 1. Long range precision fires in adequate volumes to support real-world USMC operations.
- 2. Target coordinates transferred by machine to machine interface within seconds.
- 3. Execution timelines from sensor to shooter greatly compressed.
- 4. Connected to AFATDS fires network.

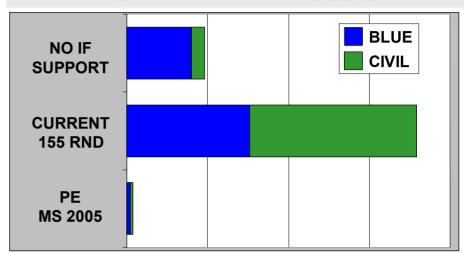


Results Summarized





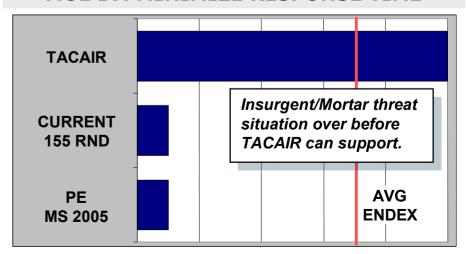
MOE II: MINIMIZE LOSSES



MOE III: MINIMIZE COLLATERAL DAMAGE



MOE IV: MINIMIZE RESPONSE TIME



Responsiveness Through Enhanced Persistence: Implications for Industry



- Precision
 - Decreasing Opportunities
- Measured
 - Smart fusing and in-flight re-programming
- Persistence through loiter
 - Pace advances in ISR, Targeting and C3
 - Significant third-party issues
 - Significant technical challenges
- Persistence through being there
 - Land-based focus
 - Re-think effective and affordable volume fires

Challenges are Evolving: Requires a Going Forward Perspective

DOTMLPF: Unsynchronized Transformation

Customer Success Is Our Mission





Government Contracts

Navigating through the complexities of government contracts requires more than a good compass and a little luck. It takes a team of attorneys with experience in representing companies in government contract matters, like the lawyers of Nelson Mullins.

The Nelson Mullins Government Contracts Group works with clients to ensure successful government contracting. The skills of Nelson Mullins attorneys are not restricted to a particular type of government or company, and firm attorneys have represented a variety of vendors in venues throughout the United States.

It is a rare opportunity for a company to spend its legal fee budget to grow revenue, but the goal at Nelson Mullins is to represent clients in their quest for more government contract awards. Group attorneys learn the strengths of a client's business in order to offer more valuable assistance. They review solicitation documents, proposals and bids for responsiveness, and assist in negotiations when such assistance would likely enhance a client's chance for receiving a critical and profitable contract. Additionally, Nelson Mullins attorneys assist in negotiation and litigation when necessary to protect and serve client interests. Group attorneys serve as national counsel to clients, retaining local counsel only when necessary to protect the best interests of those clients. With a comprehensive database of state procurement laws and regulations, Nelson Mullins attorneys often provide prompt responses to client needs and inquiries. With a

The Trailing Edge of Transformation

Doctrine, Organization, Training, Materiel, Leadership And Education, Personnel And Facilities

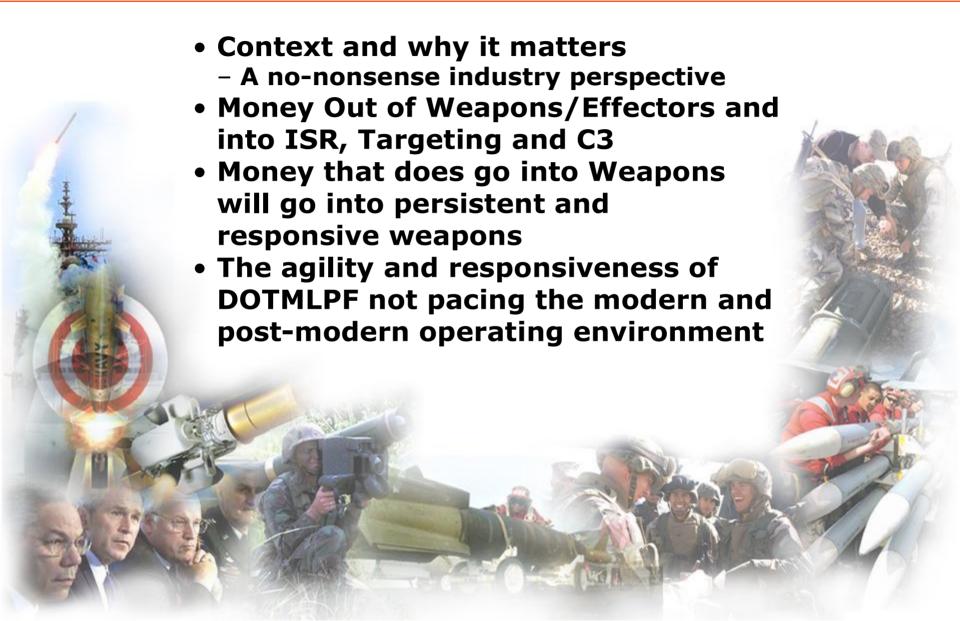
Unsynchronized Transformation: Implications for Industry



- Opportunities
 - Performance Based Logistics (+)
 - Fee for Service
- Challenges
 - Services & Contractor: Seam between required competencies
 - Fee for Service Value Stream

Operators & Industry Partners May Have to 'Lead-Turn' The Money

Summary





Overview

Precision Engagement Future Operations

An Industry Perspective

Challenges and Opportunities

Providing the Warfighter timely, effective and affordable Mission Solutions that span the breadth and depth of the Battlespace

Kevin Peppe 520.794.5919

Raytheon







Access

Locate

Identify







Track

Navigate

Communicate





PSTS 2005

Attack

Assess