



RDECOM-ARDEC Smart/Precision Munitions

Current Trends & Objectives

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08 July 04

Smart/Precision Munitions

Must Be:

Low Cost

Inexpensive

LETHAL!

Affordable

HASC Committee Report

“The Committee is concerned that the Army has paid insufficient attention to the projected cost of its precision guided indirect fire munitions. *The Committee cannot justify artillery rounds costing \$25,000 to \$35,000 per round given the number of rounds the Army needs for training and for the war fight.* At these costs, the Army will never be able to integrate precision guided munitions into its warfighting doctrine and tactics for anything more than “silver bullet” extraordinary requirements.”

Robust Lethality is Key

World Wide Employment

- Adverse Weather
- High Clutter Environments

Wide Spread Employment of Countermeasures

- Terrain Masking & Natural Cover
- Movement Discipline
- Signature Suppression
- Jammers/Decoys
- Active Protection Systems



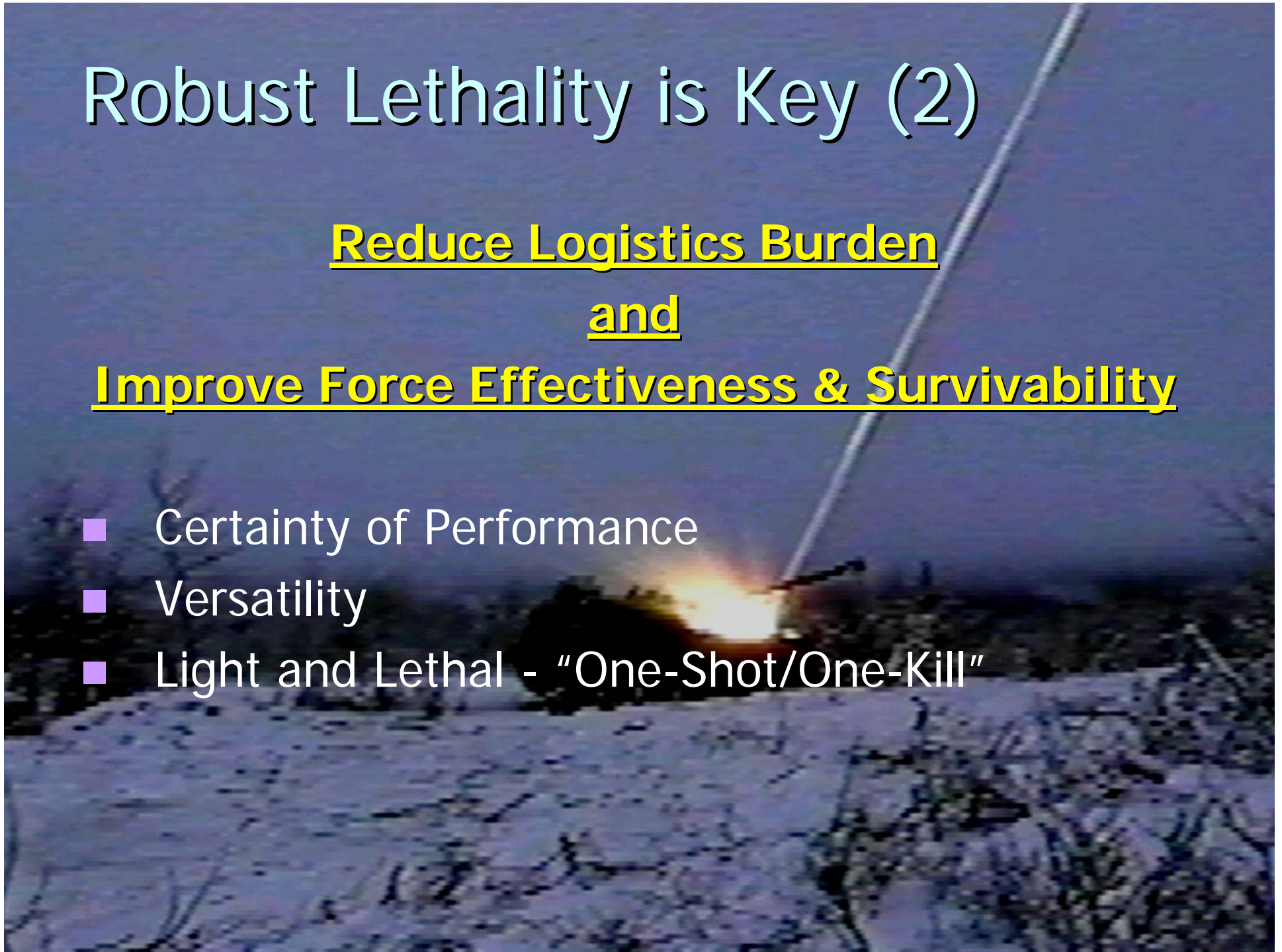
Robust Lethality is Key (2)

Reduce Logistics Burden

and

Improve Force Effectiveness & Survivability

- Certainty of Performance
- Versatility
- Light and Lethal - "One-Shot/One-Kill"



Key Trends & Objectives

- **Technology is Improving**
 - Design Tools (Faster Development Cycle)
 - Digitized Battlefield (Reduce TLE and Response Time)
 - Lower Cost Components
- **Don't Neglect Man-in-the-Loop**
 - Still Superior in Many Ways
- **System Solutions not just the Bullet**
 - New Designator -> New Seeker and vice-versa
 - Smaller Seeker Footprints?
- **Focus on Performing in Challenging Environments**

Common Smart Submunition (CSS)

“Affordable, Multiple Application Precision Munition”

OBJECTIVE: Build an affordable, smaller, and lethal smart submunition applicable for the Army’s Indirect Fire projectile and missile artillery platforms; and utility for potential Air Force and Navy carrier applications.

APPROACH: Use “Common Guidance/Common Sense” paradigm in system design to force commonality and modularity of components. Leverage New Technology to Reduce Size & Cost and Improve Performance. Defeat multiple Target Types.

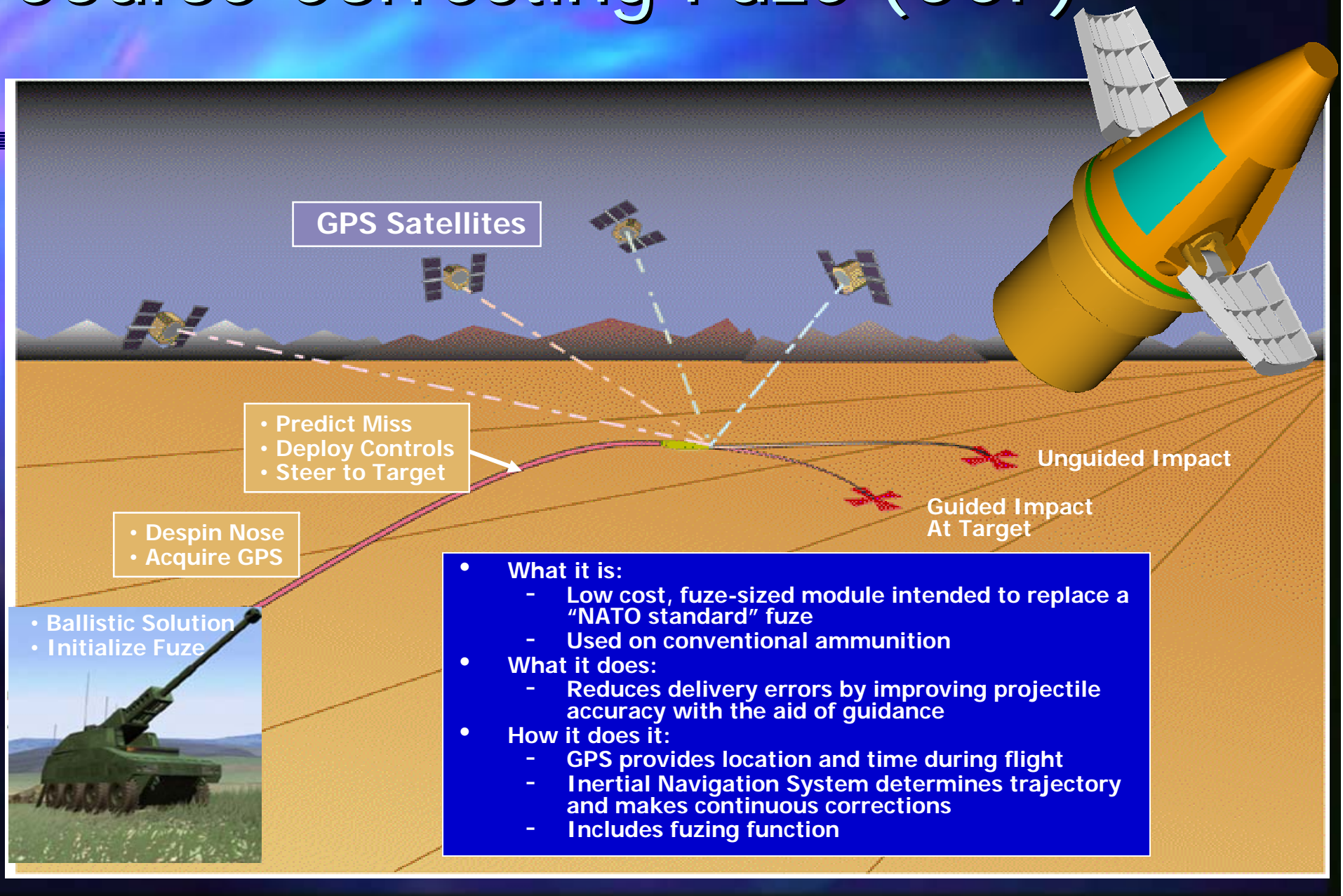


TECHNOLOGY

LADAR/IR Sensors
Next Gen EFP
Novel Decelerators
Microprocessors
Accurate Delivery



Course Correcting Fuze (CCF)



Summary

- Affordability & Performance Challenges
- System & Joint View Offer Opportunities
- CAIV & Mindset are Critical to Success

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