

“Exploiting Gun & Missile Capabilities in Tomorrow’s Operating Environment”

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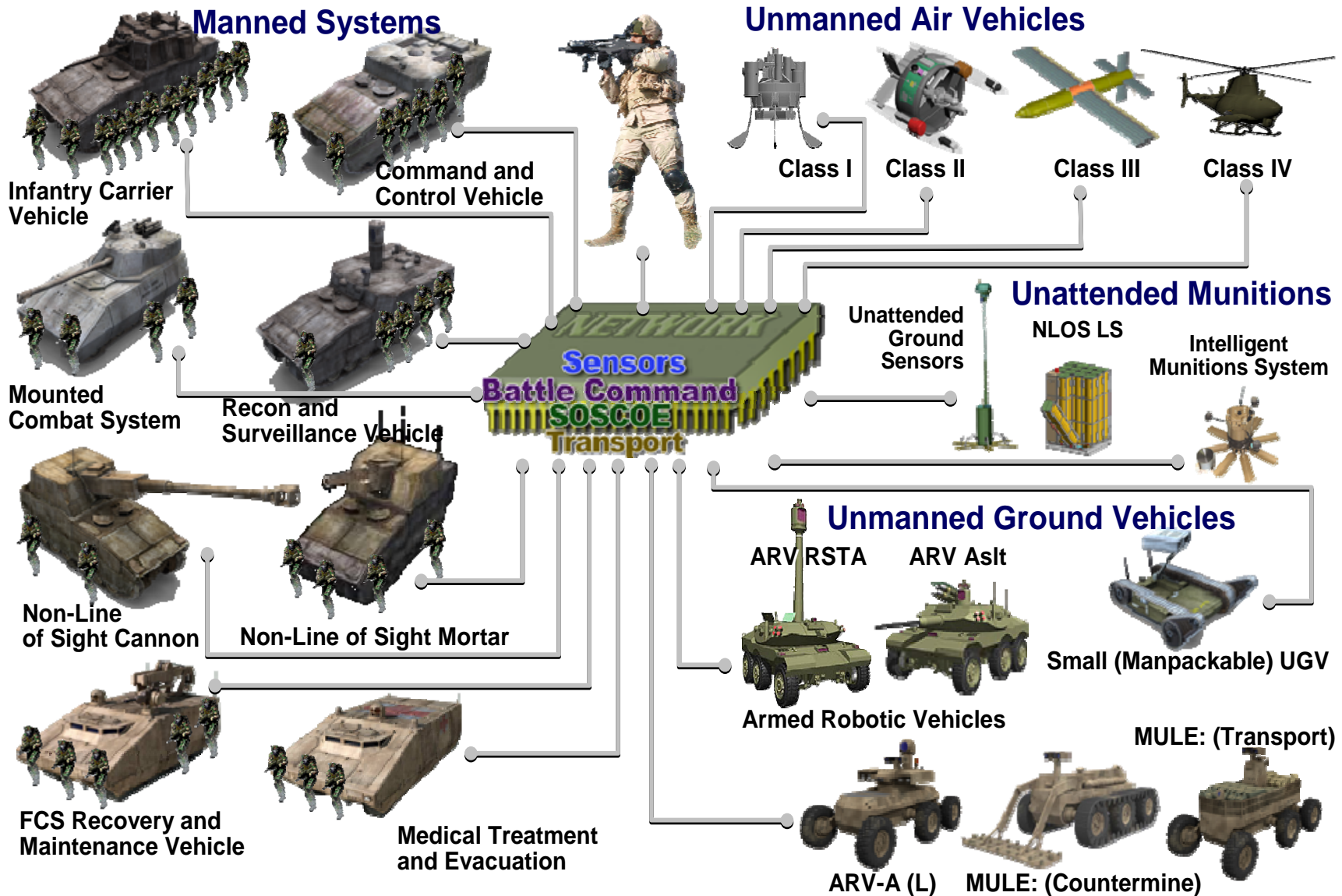
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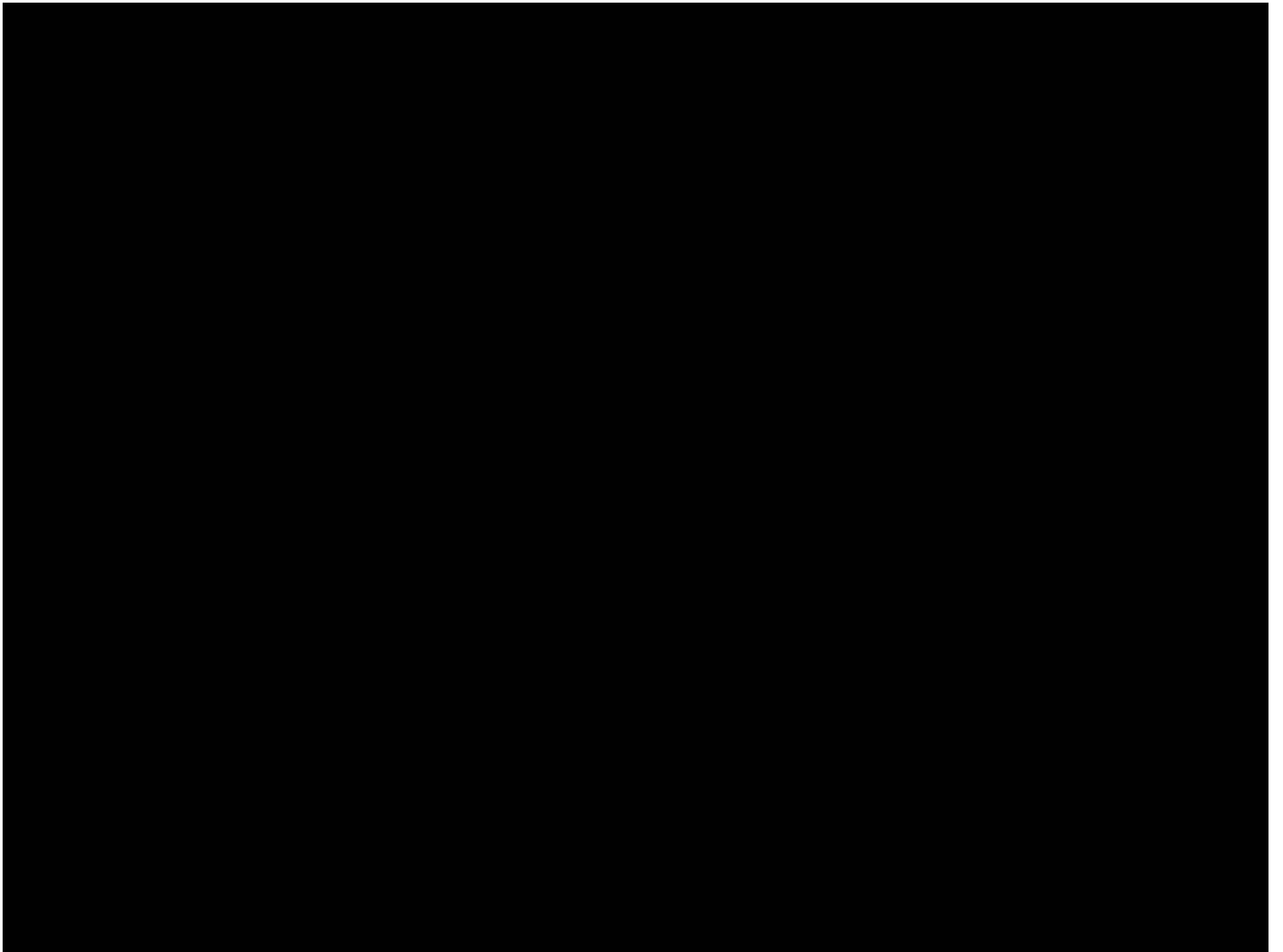
973-724-4938

29 March 2006

Focused on the Soldier

18 Integrated Systems + Network





Outline of NDIA Brief

- “The Network”
- Describe Notional Network (w/FCS Example)
 - Benefits/Unique Opportunities
 - How to take full advantage
 - Impediments to Utility

- The Single Biggest Change in the Future Battlefield will be the Availability of the Network and Networked Information
- Guns and missiles are part of this Network
- Conventional Munitions still an integral part of the Force, but increasing reliance on synergies with network
- We had done this with single platforms (airburst, beam riders, etc.)
- Rudimentary with multiple actors (laser designation,

What Does This Mean?

- Increased awareness of Friendly Forces
- Improved ability to leverage Joint Assets
- Increased proliferation of sensors and sensor information at all levels
 - Better target location
 - Acquisition of targets at increased ranges
- Narrowing of times from target identification to realization of optimum effects
- Increased OPTEMPO

- Numerous Nodes on Network
- Missiles, Projectiles, Guns
 - Nodes – provide information
 - Nodes – receiving information
 - From Sensors on the host vehicle
 - From sensors on other vehicles
 - From Joint, Interagency or Multinational assets

How Can/Will Guns And Missiles Synergize With This Development?

- Increased Accuracy
 - Availability of MET data from numerous assets
- Increase Target Detection
- Unique Capabilities
 - Additional Sensor Information
 - Leveraging of Existing Information
 - Ability to Execute New Capabilities (e.g. BLOS)
 - Individual Munitions can be smarter because they can use the knowledge of the network
 - Increased lethality
 - Tailored effects
 - Improved flexibility
 - More timely servicing of targets
 - Reduced countermeasure susceptibility
 - Reduced cost

What are Impediments to Implementation?

- Inordinately Long times of flight
- Inability to alter/update target location
 - Prior to launch
 - While in flight
- Need to lock on before launch
- Inability to capitalize on target identification / designation
- ???

There will always be a place for 'conventional' munitions however a munitions which exploit the Network's capabilities will proliferate