Small Arms System
2008 Symposium

Small Caliber Ammunition
Industry Capability Evolution
And
Readiness

Panel Discussion

21 May 2008
Panel Topic Theme

- **Small Caliber Ammunition Industrial Base Overview**
  - Status 2008
  - “Lesson Learned”
  - Significant Demonstrated Response to Needs
  - Vision For Future—Ensuring Readiness
  - Technology Evolution– Achieving Insertion
  - Challenges Re:
    1. Maintaining Industrial Base Readiness
    2. Selective Introduction of Technology etc.
  - Risk Management

- **A Discussion of the Small Caliber Ammunition Industrial Base – Past--Today--Future**
Panel Objectives

- **Overview** Status of Small Caliber Ammunition Industrial Base

- **Address** Response to Increased Capability Needs Since 2001
  - Impact on Future

- **Address Small Caliber Ammunition** Industrial Base Capability Vision
  - Current Technology and Products
  - Introduction of Evolving Products

- **Outline** Challenges for Technology Base and Production Base

- **Define** Risks Path Forward Visions, Opportunities
Panel Format and Process

- Panel Opening Comments/Format Description  Moderator
- Panel Member Remarks  Each Member
- Panel Dialogue—Lead by Moderator  All
- Questions from Attendees  Panel Members
  - Written Questions
  - Open Format Questions (As Time Permits)
- Concluding Summary Comments  Panel Members
- Wrap-Up Summary  Moderator
## Panel Members

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<tr>
<th>Name</th>
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<td>Keith Enlow</td>
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<td>ATK—Lake City</td>
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<td>Steve Torma</td>
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<td>Bruce Webb</td>
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• Small Caliber Industrial Base Status –2008

• Small Caliber Industrial Base Response to Need Since 2001

• Key “Lessons Learned” and Impact on Future

• Vision for Industrial Base Future
  • Capability Level Base etc.

• Concerns Regarding Future

• Barriers to Future Responsiveness and Readiness

• Impact of Technology —Configuration Change on Industrial Base Readiness
Topic Categories

• Tech Base and Related New Technology Funding Addressing User Challenges/Needs vs. Compatibility with Production Resources

• Component Supply Chain Readiness

• Commodity/Material Supply Chain Readiness
  • Sources
  • Availability
  • Cost—Commodity Price Increases/Fluctuations
  • Lead Times

• Critical Items, Barriers etc. To Achieving and Maintaining Desired Readiness
Topic Categories

• “Lessons Learned” – Technology, Configuration, and Process Needs to Ensure Meeting Warfighter Needs
  – *What are the key improvement needs of current products or production? Addressed Yes/No?*

• “Green Ammunition” Maturity and Production Integration Status

• Are Production TDP Improvement and *Industrial Base Readiness Considerations Effectively Addressed by Tech Base etc.?*

• Component and Commodity Readiness and Availability
Technology and Configuration Change Insertion

- **Objective:** Provide the Warfighter Small Caliber Ammunition Advanced Technology and Configurations which offer:
  - Operational Superiority
  - Address Specific Needs
  - Production Quality, Reliability, and Affordability
  - Logistically Supportable

- **Challenges:**
  - Technology/Configurations Proven Ready for Production
    - Performance
    - Producibility
    - Affordability
  - Industrial Base Planning Addressing Changes
    - Facility Flexibility and Adaptability
• New Small Caliber Technologies

• New Small Caliber Configurations

• Considerations Impacting Introduction of Product Changes
  • Type of Technology
  • Facility/Tooling Limitations and/or Costs
  • User Acceptance
  • Risks

• “Green” Ammunition Considerations and Impact

• Related Facility Modernization
  • Current vs. New Technology/Cartridges etc.

• Large Primary vs. Small/Specialized Sources
Panel Topics and Questions

• 1. Panel Member Overview of Company Capability and Role In Small Caliber Industrial Base.

• 2. Impact of Need Response 2001-2008 and Future on the Company

• 3. What are the Key Benefits Realized by the Industrial Base?

• 4. What are the Challenges Ahead in Current Small Caliber Ammunition?

• 5. Impact of Potential Production Adjustments?

• 6. Concerns for Future?
Panel Topics and Questions

• 7. What are the New Technologies Evolving?
  • When Available for Production Introduction?

• 8. What are the New Configurations Evolving?
  • When are will New Configuration be Considered?

• 9. Barriers to Introduction of New Technology or Configuration?
  • Technology
  • Existing Tooling/Facility Limitations
  • Costs
  • User Factors

• 10 What Path can Enable New Capabilities?
Panel Topics and Questions

• 11. Impact of “Green Ammunition” Initiatives
• 12. Plant/Facility Modernization Considerations
• 13. Number of Sources
• 14. Role of Small Quantity/Specialized Sources
• 15. Tech Base Funded Technology/New Responding to User Challenges vs. Production Introduction/Compatibility
• 16. Supply Chain
  • Component Supply
  • Material Supply
Symposium Attendee Questions

- Written Questions Prepared During Panel Member Remarks
  - Moderator will Select and Ask Questions

- Open Format Questions From Attendees
  - Following Written Questions
Wrap-Up Comments

• Panel Members Present Wrap-Up Remarks
  - Identify Top 2-3 Focus Priorities

• Focus on Key Topics
  - Status Today
  - Evolving Technology Integration
  - Challenges
  - Barriers
  - Opportunities
  - Maintaining Readiness and Evolving Change

• DOD and Service Objectives, Focus, and Plans—Challenge and Opportunity for Industry

• Industry Focus Thrusts to Enable Current and Future Small Caliber Ammunition Industrial Base Readiness
Wrap-Up Comments

• **Observations:**
  – Government and Industry Partnership Has Responded Effectively Establish Industrial Base Capacity and Readiness
  – Vision Forward Must Address “Lesson Learned” to Ensure Responsiveness and Readiness
  – Manufacturing Capability and Resource Modernization must be Central Focus
  – Integration of New Advanced Technologies and Configurations must be Factor in Industrial Base Vision Planning

• **Continued Integration of the User, Developer, and Industrial Base Government and Industry Team is Essential to Enable and Ensure Small Caliber Ammunition Readiness**
• Moderator Summary Comments

• Thank Panel Members for Participation and Candid Comments

• Panel Members will be Available for Discussion

• Panel Has Effectively Described Status of Small Caliber Ammunition Technology and Production Readiness—Identified the Needs—Challenges and Opportunities

• Partnership of DOD and Industry is Key to Evolving the Capability

• NDIA Offers a Forum for Exchange of Information and Networking to Enable Technology Capability and Readiness Evolution