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

Name	Position	Organization
• Dave Broden (Moderator)		
• Keith Enlow		ATK—Lake City
• Steve Torma		GD-OTS
• Bruce Webb		Nammo USA
• Alan Serven		Remington
• Dave Council		Olin

Panel Members

Name	Position	Organization
• Pierre Lemay		GD-OTS Canada
• Paul Shipley		Textron-AAI
• Nick Malkovich		Mac Ammo
• Sy Wiley		Polytech

Topic Categories

- 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

Topic Categories

- 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***

Closing Remarks---Technology/Integration/Application

- **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—Indentified 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**