

**Small Arms System
2008
Symposium**

**Small Caliber Ammunition
Industry Capability Evolution
And
Readiness**

Panel Discussion

21 May 2008

- **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**

- 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 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

<u>Name</u>	<u>Position</u>	<u>Organization</u>
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- **Dave Broden (Moderator)**

- **Keith Enlow**

ATK—Lake City

- **Steve Torma**

GD-OTS

- **Bruce Webb**

Nammo USA

- **Alan Serven**

Remington

- **Dave Council**

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

- 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

- **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**

- **“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**

- **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**

- **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?**

- **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?**

- **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**

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

- **Open Format Questions From Attendees**
 - **Following Written Questions**

- 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*

- **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**