



US Munitions Industrial Complex – Readiness and Resource Perspectives



The “Theme”

Perspectives on the US Munitions Industrial Complex as they apply to readiness issues from an enterprise viewpoint.



Panel Members

Mr. Donald Chrans, HQDA DCS G-8

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CSM David Puig, JMC, Command Sergeant Major

Mr. Bill Sanville, Deputy PM, PM MAS



The Customers Perspective



Bottom Line Up Front



- **Our Service Members have faith in the ammunition and ordnance that they carry and use.**
- **I never once doubted that when I engaged the enemy, the ammunition that I used was going to be effective and lethal.**



The Korengal Valley





SFC Monti Medal Of Honor





Readiness Risks



- **Our Service Members hold faith they will always receive the ammunition and ordnance they need, on time, every time.**
- **We owe it to our customers to never break that faith.**



The Project Management Perspective

Project Manager Maneuver Ammunition Systems

Munitions Executive Summit



DPM MAS
William Sanville





New Administration Thrusts

- **Push to achieve greater competition**
 - Less Sole Source contracts
 - NTIB restrictions still OK
 - Opportunities for new sources
 - With more competition – Good proposals will be key
- **Aggressive auditing by DCAA**
 - Auditors are no longer accepting issues as they have in the past
 - Auditing is taking far longer than in the past
 - IB: Needs to listen carefully to the DCAA and pay more attention to detail
- **Risks PM's will be facing:**
 - New Sources
 - Changes in contract types
 - Unlimited or Government Purpose Rights



What's Next



- **Ammunition Inventories Replenished**
 - **Stockpiles full and in some cases more than full leading to reduced buys in FY12-17**
 - **In general look for smaller buys**
 - **Exceptions: High Priority Items like 30mm M789 & 40mm M430A1**
 - **Some buys will be made to protect the IB but the IB must change to reflect the new warfighting reality.**
 - **The Cold War IB is morphing to reflect today's realities.**
 - **Continuous to Batch Processing**
 - **Significant improvements in effectiveness, reliability, etc can be reason to build additional rounds. Opportunities exist for improved munitions to fill a new War Reserve requirement**



Older Requirements



- **Old Requirements**
 - 20-85 Years old and some cases non-existent
 - Leads to inefficiency and in some cases inability to meet mission requirements
- **Current requirements don't always require defeat of modern well equipped forces**
 - No modern body armor defeat requirement
 - Current requirements don't take advantage of current technologies
 - Lightweight cases
- **PIPS vice new start R&D programs**



Government Ammunition Industrial Base Perspective

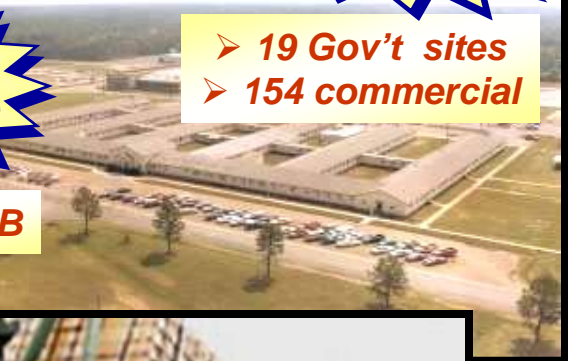
Joint Munitions Command's Mission

Make it



➤ \$2.9B in FY08

Manage it



➤ 19 Gov't sites
➤ 154 commercial

Store it

➤ Value = \$42.1B

Train

➤ 35,000 annually
➤ distance, on campus and on-site

Demilitarize it



➤ 50,000 tons annually

Transport it



- Road
- Rail
- Air
- Sea

Support it

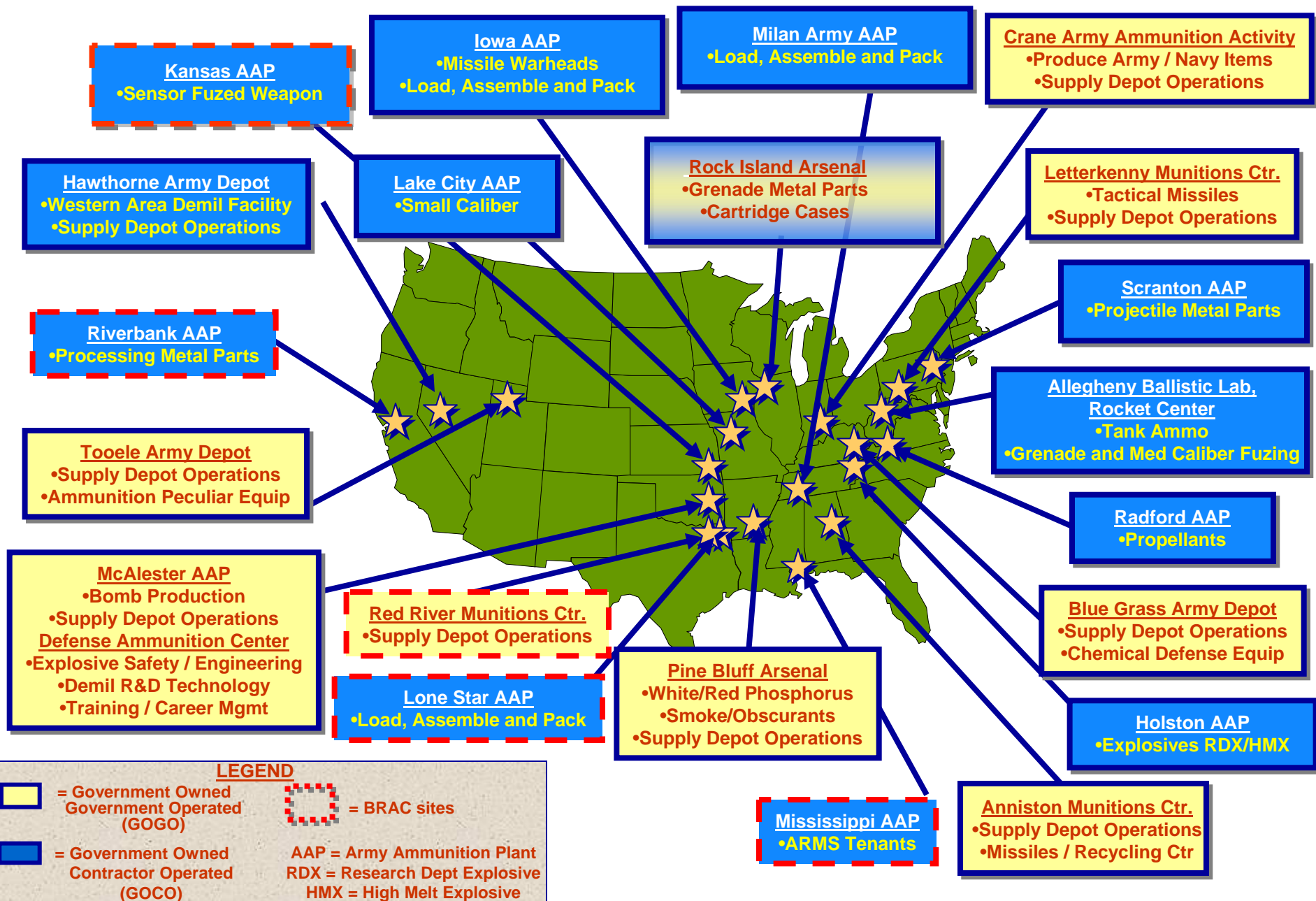
➤ 6,000 Gov't personnel
➤ 7,285 commercial

Inspect it

➤ 135,000 inspections



Government-Owned Facilities





Government Ammunition Industrial Base



Strategy:

- ✓ Continued modernization is critical to meeting National Military Strategy
- ✓ A steady state of resourcing avoids catastrophic production failures, supply disruptions, and improves operating efficiencies

Two imperatives:

- Steady-state funding for modernization
- Consistent workload, sufficient to sustain capabilities



Organic Base Logistics Capabilities



Ammo Power Projection Platform

Installations

Ammunition Logistics Mission

	Storage	Daily outload
Blue Grass AD	1.8M sq ft	320 containers
Crane AAA	4.9M sq ft	302 containers
Letterkenny MC	1.7M sq ft	111 containers
McAlester AAP	5.2M sq ft	434 containers
Tooele AD	1.8M sq ft	338 containers

- Joint Service contingency ammunition outload mission
450K tons in 16 weeks (approx 45 ships)
- Support Air Force, Marine Corps, Navy, SOCOM training missions
- Support 78 Army CONUS training installations
- Store training and War Reserve ammunition
- Explosives safety and security

Must be sustained to Support the National Military Strategy

Logistics Base Facts

11,000 ammo magazines built in WWII \$10B replacement cost



No commercial ammunition logistics capability close to this order of magnitude

Demil capacity 66k – 136k tons per year
Store 1.8M tons

Maintain/Renovate training and War Reserve ammunition
Unique explosives safety and security requirements

Anniston MC	1.7M sq ft storage
Hawthorne AD	5.6M sq ft storage

- Primarily deep stowage of excess/unserviceable ammo

Total: 22.7M sq ft = 473 Football Fields



Summary

Situation:

- Critical Capabilities are At-Risk
- National Military Strategy objectives will be at risk

What We Are Doing For Ourselves:

- Modernizing with available funds
- Using Lean Six Sigma Principles
 - Competitive Acquisitions
 - Strategic Planning
 - BRAC Implementation
- Optimizing ammo supply network

What We Need:

- Steady State of Funding to modernize
- Increased Funding for Demilitarization efforts
- Adequate Operations and Maintenance, Army Funding (vice Supplemental)
- Consistent Levels of Ammunition Procurements

Outcome:

Responsive, Reliable and Efficient Facilities that Provide Quality Ammunition that Meet the Joint Warfighter's Requirements



The Resource Management Perspective



Modernization Projects Notional "1-to-N" Process



Factor Weighting
X
Evaluation Score: 1-3-9
X
Probability Score: 1-2-3
Project Priority

PRIORITIZATION FACTORS

- Operational Continuity & Quality 35%
- Safety 25%
- Environmental 15%
- Financial Benefit 15%
- Strategic Initiatives & Programs 10%

**Highest Priority
Projects Done First**

Facility A
#1
#2
#3
#4
...
#N

Facility B
#1
#2
#3
#4
...
#N

Facility C
#1
#2
#3
#4
...
#N

Facility D
#1
#2
#3
#4
...
#N

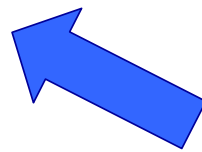
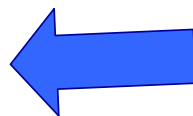
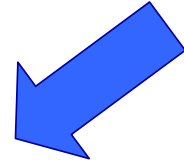
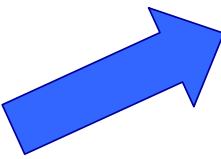
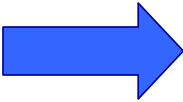
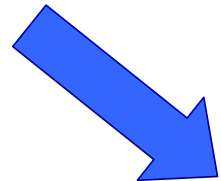
Facility E
#1
#2
#3
#4
...
#N

Facility F
#1
#2
#3
#4
...
#N

Which projects are
the most critical?



JMC + PEO AMMO





Modernization Example

Lake City Army Ammunition Plant

5.56, 7.62 and .50 cal Small Arms Ammo



Output to the Warfighter !!

BEFORE – 400M rounds/yr

AFTER – 1.6B rounds/yr



\$219.2M funded (FY05-09)
Remaining Requirement \$114.1M (FY10-15)

Vintage 1970s equipment
Buying replacement parts on Ebay
Quality limitations
Lack of safety equipment
WWII Final Inspection Equipment (Gage and Weigh)
Inefficient & unable to meet war fighter requirements

Updated equipment
Enhanced quality
Safer operations
New test/inspection equipment
Improved efficiency and capacity



The Civilian Ammunition Base Perspective

**2010 Munitions Executive Summit
February**

**U. S. Munitions Industrial Complex
- Readiness and Resouce Issues
“an industry perspective”**

Presented by

Paul Heidenreich

VP/GM - Esterline Defense Technologies

Readiness and Resource Issues

“an industry perspective”

KNOWLEDGE and
CAPABILITIES

Tribal Knowledge
Retention

Critical Technical Capability

Increased R&D funding

Product Improvements

FORECASTS

2010 blind spot

Critical to planning

Critical to investing

DATABASE USAGE

IBAT/MSR, etc.

Next Step –

SMCA budget review

Today is better
than the 1990's

Better Prepared
ICAP, MIBTF,
IBAT, MSR, etc.
Ammunition
Readiness
Rating, etc.

Industry/Gov't
needs to work
together

TEAMWORK/CULTURE

Ever Vigilant

IPTs, Teams

What is Next?

FLEXIBILITY

“Monuments”

Partnering/JV's, etc.

A bridge too far?

Long term commitment

BUDGETS, BUDGETS, BUDGETS

201x? – it will happen

Soft Landing or Hard Fall?

Running out of time



Questions or Comments?