

# **Program Executive Office, Ground Combat and Support Systems**

**Leading the Army Transformation  
Through Technology**



**Presented To:  
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Army Transformation  
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# How We Got Here

Always Built Iron Mountain to Win – Civil War ® Today



Why:

- Warms Industrial Base
- Successful Because We Could Afford to Outspend Foes

*Evolutionary changes gives us continuous improvement*



# Path Forward



- **US Defense Industrial Base**
  - Take a hard lesson from Auto Industry
  - Implement Lean Thinking & Six Sigma...or perish
- **Best Value Partnering**
  - On & Off Shore
- **Government Labs:**
  - Balance Innovative “Out of the Box” thinking with Disciplined, Process Oriented Implementation



# International Partnerships




**UK**

- LCCM



**Sweden / France**

- 155mm TCM
- Bonus



**Germany**

- Smart 155
- SDF

**Israel**

- SDF

**South Africa**

- Extended Range / Lethality  
105mm / 155mm





# Disciplined Process Control - In Development!

- How Does GIWS Get 100% Reliability on LAT?
- How Do BOFORS/GIAT and GIWS Get Quicker Product to Market?
- How Did SADARM Grow Reliability by 75% & Fulfill 140% of Requirements in 15 Months?
- Lean Thinking and Six Sigma
  - Do Not Just Apply to Production
  - Applies to Government Agencies as Well
- LAP Facilities: Line Change over must occur in minutes – not hours/days/weeks





# Customized Munitions

Studies Show Overwhelming Wins with Smart and Precision Munitions, but..... **AFFORDABILITY ISSUES!!**

What are Customized Munitions = Evolutionary Acquisition

- Ultra reliability – Approaching 100% (moving to expensive projectiles - that may sit in a bunker for 20 years before use)
- Modular Payloads (to preclude starting over with projectile, cannon, propellant, handling systems redesign)



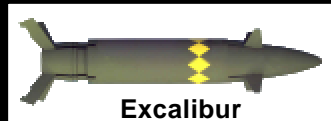


# Impact on Customer - User

- Understand Your KPPs – Be Realistic
- Take Performance That You Get for Your Initial Investment – Then Grow Capabilities
- Smart/Precision Ammo Held for Two CINCS – Not Open for ARMY Use
- Build Closer Ties with Log Communities



BONUS



Excalibur



SADARM



SMART



M119



M198



Paladin



JLW 155mm



Crusader



# Impact on Contractors

- **Defense Contractors: Reverse your track record of over promising and under delivering**
- **Get into lean thinking and Six Sigma in development – so you can get products to Market quicker (Defense has a one year product to market cycle because we must defend budget every year)**
- **LAP Facilities – Get Lean – Get Flexible – Ammo investments are what they are**
- **Learn Faster to Survive**



# Impact on Developers

Old Way: Gun Hardening / Ammo Business  
Government Engineers Trying to Train Industry  
Rather than working with them

Path Forward: Work more efficiently with Industry

- Focus on Industry Processes & Discipline
  - Get to 100% Reliability
  - Plan better – make less design changes
- Partner w/ Best Value Contractors and OGAs On & Off shore



# Final Thoughts



**Solving the Road  
to Transformation  
Puzzle**