## **Ogden Air Logistics Center**



#### Winds of Change

Feb 8, 2006

Major General Kevin Sullivan
OO-ALC/CC



#### **Overview**



- Introduction
- Quality -- Medium Caliber Ammo "The Bad Boy"
- Industrial Base
- Winds of Change
- Summary





#### Introduction



- Sustainment from IOC to the grave
  - Maintain it breaks, we fix it
  - Restock it gets used up, we buy more
  - Distribute get it to wherever & whenever needed
  - Work Problems Too much effort in this area
- Reactive vice active sustainment





# Medium Caliber Ammunition "The Bad Boy"



- Med Cal a history of problems
- Lots of Competition for Title
  - Fuzes
  - Countermeasures
  - Others





## **Fuze Safety Device Defect**





Correctly applied epoxy on set screws



No epoxy on set screws – fuze failed critical safety requirement



## FZU-55 A/B Lanyard Defect





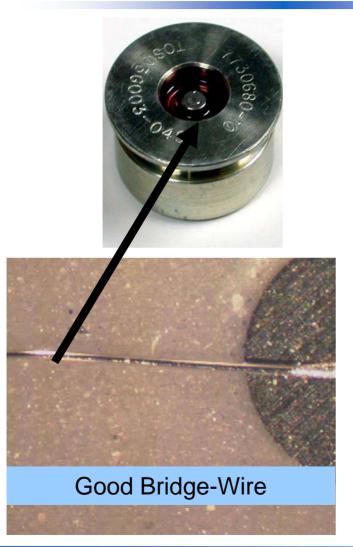
Improper Routing of Lanyard

Correctly Routed Lanyard

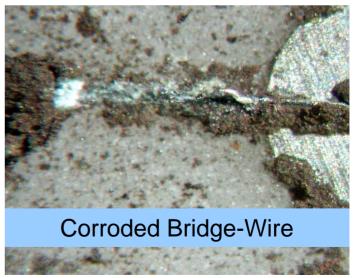


## **BBU-36 Impulse Cartridge**





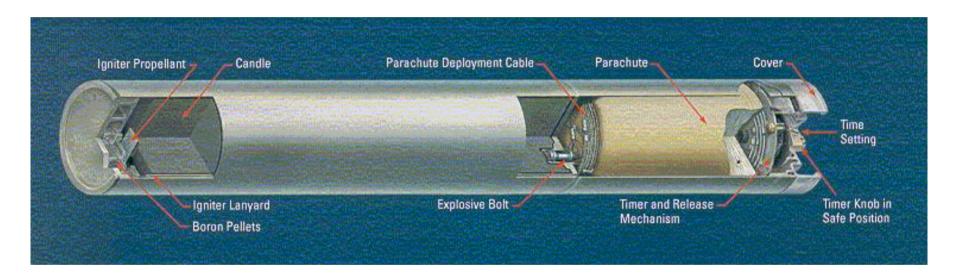






### LUU-2C/B ILLUMINATING FLARE

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#### LUU-2C/B ILLUMINATING FLARE



## LUU-2C/B ILLUMINATING FLARE VIDEO







#### JAU-8



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**JAU-8** Initiator





#### Medium Caliber Ammunition "The Bad Boy"



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- Med Cal a history of problems:
  - 4 stockpiles suspended for design/production flaws

•PGU-38/U (twice) \$52M; PGU-28/B \$100M; 30MM combat mix

(Honeywell design) \$1B

- 4 propellant problems
  - Improper blending,
     separation after blending,
     missing component, wrong propellant
- 3 primer problems
  - Primer integrity, contamination, improper installation
- Stuck in a "reactive cycle" of problem test—fix—test—ECP—buy new/suspend old new problem...



#### Medium Caliber Ammunition "The Bad Boy" Video







#### Medium Caliber Ammunition "The Bad Boy"



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- Reality check
  - Wasted resources large dollar losses (\$1B+)
  - Ammo shortages 30MM TP at 20% of objective
  - Warfighting impact F-15, F-16 & AC-130 reverted to using less capable ammo
  - Result

    gear-up landings, fragged airplanes, aircraft fire, blown barrels
- Lagging indicators of systemic quality problems

Or leading indicators of munitions enterprise frailty?





#### Munitions Enterprise Frailty



- "Frail"
  - Capacity down 68% in last decade
  - Sustaining Engineering Funds Reduced
    - Limits Aging/Surveillance Testing
  - Decreased engagement with Industry
- 2+ primes for each end product not necessarily an indicator of health
  - Numerous sole sources exist at component level
    - Limited capacity
    - Age/condition of facilities, equipment and personnel
    - Technology stagnation



#### Munitions Enterprise Frailty



- Little awareness of industrial base frailty
- Two prime suppliers is not a guarantee of health
- Crisis management not a viable approach





#### The Winds of Change



- Industrial base preparedness a team effort
- Air Force perspective
  - Services provide better long-range forecasts
    - Advise industry of potential for profitability
  - Services/suppliers jointly review supply chain and production line health annually
    - Better understand program costs
  - Assess risks and identify areas needing attention
    - GOCO government action; Private industry action



#### The Winds of Change



- Air Force on a new path
  - Medium Caliber quality engineer initiative
  - Technical issue industry days PGU-15 & FMU-143
    - Technical spec reviews/re-writes
  - Conduct Requirements symposium biennially
    - Project needs through FYDP
  - Prime contractor production
    - Sub contractor reviews
    - Working closer with DCMA





#### The Winds of Change



- Active participant in procurement process
  - Better risk assessment
    - Which proposal has the best likelihood needs
    - How well has this supplier done in the past
  - Quality supplier preference
    - Best-value
    - Quality history





#### **Summary Thoughts**



- "Reactive vs. Active"
  - Air Force is committed to a landscape quality change – across the munition enterprise
  - A capable industrial base is essential to the Air Force – team effort required
- Quality products in the hands of our warfighters is our top priority





## **QUESTIONS?**



