Implementation
Constraints/Opportunities

Constraints
- Lead time for equipment
- Funding for equipment
- Installed base of equipment
- Capability view vs separate equipment and facilities
- The Depot of 2020 will have most of the equipment today’s depot has

Opportunities
- Partnerships - Integration of capabilities and strengths
- DoD Depots - Integration of capabilities
- The successful Depot of 2020 will be more integrated

Examples Of Implementation
- IFDIS
- DMT
- HVOF
- Laser De-paint
- Rapid Prototype
Intermittent Fault Detection and Isolation System

- What – IFDIS detects and precisely isolates intermittent connectivity problems in LRU chassis
- How Funded – Partnership with Supply Chain, Depot MX, and Industry
- Results – F-16 MLPRF (Radar System LRU)
  - Recovered 118 “unrepairable” units ($36M)
  - Intermittence detected in 68% of IFDIS tested MLPRFs
  - Increased MTBF from 289 hours to 729 hours ($4M/yr)
  - Improves mission effectiveness, operational readiness, and reduces field maintenance (priceless)
- The Future – Expanded Applications
Dual Mode Transmitter (DMT) Public Private Partnership

- What – Partnership With Lockheed Morristown To Repair Dual Mode Transmitters At OO-ALC Through Direct Commercial Sales
  - First direct commercial sales partnership within the OO-ALC
- How Funded – Revenue Based On Sales
- Results
  - Increased production hours to offset fixed AF costs
  - Potential for second source of parts
  - Potential for engineering support
  - Improved repair capability for foreign military customers
- The Future – Consider Additional Partnerships
High Velocity Oxygen Fuel (HVOF) – Thermal Spray

- **What** – Process for Depositing Hard Coatings on Metal Components to Improve Wear Resistance

- **How Funded** – Hill AFB has 6 operational booths
  - Three purchased with transformational dollars
  - One purchased with pollution prevention funds from HQ, one purchased with CMXG funds, one provided by Boeing in anticipation of C-17 workload

- **Results**
  - Reduce the amount of hexavalent chrome usage
    - 40% of exterior surface chrome plating has been transitioned to HVOF
  - Reduces process time from three days to one day

- **The Future** – 3” Inside Diameter Capability
Laser De-Paint

- How Funded – Internal Depot Mx Funded
- Results
  - F-16 Radome
    - Reduced chemical waste stream from 15 Gallons Hazwaste to 1 pint of soot
    - Processing time reduced from 19 hours to 3 hours
- The Future
  - F-22 and B-2 components
  - Whole aircraft
Rapid Prototype

- What – Build 1-off or Small Run Parts Rapidly
  - Build to fit/print to meet time critical needs
  - Integrates modeling, part printing, and manufacturing capabilities
- How Funded – Internal Depot Mx
- Results
  - A-10 Speed Brake reverse engineered
  - F-16 “Bathtub” doubler from plaster mock-up
- The Future
  - Improve modeling to production integration to reduce part delivery time
Conclusion

- We Have Most Of The Equipment We Will Have In 2020
  - Funding and time to field are constraints
- We Need To Leverage Industry Partnerships To Maximize The Effectiveness Of Our Capabilities
  - Leverage Industry Core Competencies
    - Lean, efficiency studies, maintenance, minor upgrades
  - Defer fixed costs over more work
- We Need To Leverage Existing DoD Capabilities Before Investing In Redundant Capabilities

BOTTOM LINE – BETTER USE WHAT WE (DoD) HAVE INVEST IN CAPABILITIES THAT WILL HAVE A SIGNIFICANT IMPACT!