Tactical Wheeled Vehicle Conference

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U.S. Army Materiel Command
The Army Reserve

Forward Presence
- Peace Enforcement
- Humanitarian Support
- Domestic Support/Community Assistance
- Partnership for Peace
- Overseas Duty Training

Power projection
- Transportation Terminal Units
- Garrison support
- Installation medical support

Training readiness enablers
- Initial Entry Training
- Lane training/battle simulations
- Skill training/professional education/ROTC

Trained and ready
- Combat Support/Combat Service Support
- 424 Force Support Package units
- 73% of the forces deployed in Bosnia are RC

Joint Readiness Units – Troop Program Units
Individual Mobilization Augmentees - IRR

Unique Capabilities
- Transportation Terminal Units
- Garrison support
- Installation medical support

Ready, Relevant Responsive
Fully Engaged
Supporting the Nation and America’s Army

The Army Reserve
• Reduce strategic lift requirements
• Reduce logistics footprint in area of operations
• Reduce inventories through management of requirements; reduction in overhead and duplicative operations; and reduction in requisitioning, shipping and receiving errors
• Reduce costs through reduced inventories and force structure
• Optimize force structure
• Maintain readiness
• Single Theater CS/CSS (Theater Support Command)
• Split Operations
• Enhance science and technology application (strategic storage)
• Forward presence

42% of the Army’s CSS structure is in the USAR
**ENABLERS AND INITIATIVES**

- **Change logistics doctrine**
- **Optimize Logistics**
- **Change Business Processes**
- **Reduce Requirements**
- **Improve/upgrade/right-size Infrastructure**
- **Field Improved Logistics Equipment (enablers)**
- **Exploit Science and Technology**

**Logistic Enablers are the Key to Success**

- Common Unit Design
- Reach Operations
- Intermediate Staging (Support) Base
- Distribution Based Logistics
- Standardized Strategic/Mission
- Combat Configured Loads

- Cultural Change
- Update Planning Factor and Allocation Rules
- Identify and Validate ASOS

- Palletized Load System
- Containerized Kitchens
- Laundry Advanced Systems
- Family of Medium Tactical Vehicles
- Tactical Fire Fighting Truck
- All Terrain Lifter Army System
- M878 Yard Tractor
- Heavy Dry Support Bridge
- Rough Terrain Cargo Handler

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**Concept**

- Intermediate Staging (Support) Base
- Split-Based & Reach Operations
- Leverage Contractor/Host Nation Support

- National Maintenance Program
- Velocity Management
- Dollar Cost Banding
- Single Stock Fund
- Recapitalization
- Enhance Strategic Response
- Meet Deployment Timeline

- Depots
- Containment Projection Platforms

- Diagnostic and Prognostics
- Precision Munitions
- Fuel Efficient Systems
- Common Chassis
• New Procurement
  - Projected in Procurement-1R submission
  - Funded through Other Procurement, Army appropriation

• The Redistribution or Cascading of Equipment from the Active Component
  - The Army Reserve has 42% of the Army’s combat service support structure
  - As such, little combat service support equipment is cascaded from the Active Component to the Army Reserve
  - Likewise, little or no funding accompanies the equipment that is cascaded to restore it to the appropriate standards

• Recapitalization of Old (Legacy) Equipment
  - The rebuild and selected upgrade of currently fielded systems to a zero mile/zero time system

• Congressional Adds

• National Guard and Reserve Equipment Appropriation (NGREA)
  - Started in 1981, NGREA is congressional directed program providing funds to the Reserve Components to improve readiness.
  - It enables economical stewardship of resources by providing the Reserve Components with flexibility to acquire new equipment and rebuild/overhaul/refurbish existing systems.
ARMY RESERVE MODERNIZATION CHALLENGE

ARMY RESERVE PROCUREMENT

$Millions

FY94 FY95 FY96 FY97 FY98 FY99 FY00 FY01 FY02 FY03

P-1R NGREA Cong Adds Total

SOURCE: FY04 BES P-1R, dtd NOV 02

Army Reserve POM Target $400 Million Annually

The Army Reserve
# Army Reserve Top Ten Unfunded Modernization Requirements

## Total UFR = $3.1B

<table>
<thead>
<tr>
<th>Equipment Item</th>
<th>Total Req.</th>
<th>OH Hand</th>
<th>FY2000-2009</th>
<th>Short</th>
<th>Item Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family Medium Tactical Vehicle (FMTV) 2.5 &amp; 5-ton Trucks</strong></td>
<td>13296</td>
<td>392</td>
<td>1738</td>
<td>11166</td>
<td>167,967</td>
<td>$1,875,519,522.00</td>
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<tr>
<td><strong>High Mobility Multi-Purpose Wheeled Vehicle (HMMWV)</strong></td>
<td>17533</td>
<td>10795</td>
<td>1483</td>
<td>5275</td>
<td>127,000</td>
<td>$669,925,000.00</td>
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<tr>
<td><strong>High Frequency (HF) Radio</strong></td>
<td>1750</td>
<td>218</td>
<td>188</td>
<td>1344</td>
<td>42,514</td>
<td>$57,138,816.00</td>
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<tr>
<td><strong>All Terrain Lifting Army System (ATLAS) 10K</strong></td>
<td>946</td>
<td>415</td>
<td>470</td>
<td>61</td>
<td>100,199</td>
<td>$6,112,139.00</td>
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<tr>
<td><strong>Container Assembly Refrigeration 9K BTU</strong></td>
<td>312</td>
<td>108</td>
<td>56</td>
<td>148</td>
<td>58,326</td>
<td>$8,632,248.00</td>
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<tr>
<td><strong>Deployable Medical Systems</strong></td>
<td>361</td>
<td>240</td>
<td>8</td>
<td>113</td>
<td>3,000,000</td>
<td>$339,000,000.00</td>
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<tr>
<td><strong>M871A3 22.5 Ton Semi-Trailer</strong></td>
<td>1707</td>
<td>1266</td>
<td>420</td>
<td>21</td>
<td>35,000</td>
<td>$735,000.00</td>
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<tr>
<td><strong>Movement Tracking System</strong></td>
<td>10573</td>
<td>0</td>
<td>708</td>
<td>9865</td>
<td>12,000</td>
<td>$118,380,000.00</td>
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<tr>
<td><strong>Truck Rough Terrain Cargo Handler (RTCH)</strong></td>
<td>275</td>
<td>32</td>
<td>122</td>
<td>121</td>
<td>525,000</td>
<td>$63,525,000.00</td>
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<tr>
<td><strong>All Terrain Crane (ATEC) 25 Ton</strong></td>
<td>164</td>
<td>127</td>
<td>0</td>
<td>37</td>
<td>250,000</td>
<td>$9,250,000.00</td>
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<tr>
<td><strong>Total:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$3,148,217,725.00</strong></td>
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</tbody>
</table>

*ALL SOURCES = P1-R, NGREA, CONG ADDS*
The Army Reserve

ARMY RESERVE P-1R PROJECTIONS
(EXCLUDES AMMUNITION)

HISTORICALLY, FMTV FIELDING TENDS TO SLIP TO THE RIGHT

<table>
<thead>
<tr>
<th>FY00</th>
<th>FY01</th>
<th>FY02</th>
<th>FY03</th>
<th>FY04</th>
<th>FY05</th>
<th>FY06</th>
<th>FY07</th>
<th>FY08</th>
<th>FY09</th>
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<tbody>
<tr>
<td>FY01 PB P-1R</td>
<td>$214</td>
<td>$174</td>
<td>$200</td>
<td>$747</td>
<td>$481</td>
<td>$206</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>FY03 PB P-1R</td>
<td>$142</td>
<td>$158</td>
<td>$173</td>
<td>$567</td>
<td>$353</td>
<td>$374</td>
<td>$182</td>
<td>$137</td>
<td>N/A</td>
</tr>
<tr>
<td>FY03 PB FMTV</td>
<td>$32</td>
<td>$34</td>
<td>$38</td>
<td>$309</td>
<td>$165</td>
<td>$214</td>
<td>$34</td>
<td>$33</td>
<td>N/A</td>
</tr>
<tr>
<td>P-1R W/O FMTV</td>
<td>$110</td>
<td>$124</td>
<td>$135</td>
<td>$258</td>
<td>$188</td>
<td>$160</td>
<td>$148</td>
<td>$104</td>
<td>N/A</td>
</tr>
<tr>
<td>P-1R FY 04 BES</td>
<td>N/A</td>
<td>$127</td>
<td>$125</td>
<td>N/A</td>
<td>$151</td>
<td>$206</td>
<td>$395</td>
<td>$230</td>
<td>$204</td>
</tr>
<tr>
<td>FY04 BES FMTV</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>$82</td>
<td>$42</td>
<td>$167</td>
<td>$35</td>
</tr>
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</table>
## Army Reserve Equipment

<table>
<thead>
<tr>
<th>ITEM</th>
<th>*EUL</th>
<th>HALF LIFE</th>
<th>AVG AGE</th>
<th>MOD ITEM</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5 Ton Truck</td>
<td>20</td>
<td>10</td>
<td>31</td>
<td>LMTV</td>
<td>RED</td>
</tr>
<tr>
<td>5 Ton Truck</td>
<td>22</td>
<td>11</td>
<td>24</td>
<td>MTV</td>
<td>AMB</td>
</tr>
<tr>
<td>M915 Line Haul Tractor</td>
<td>20</td>
<td>10</td>
<td>16</td>
<td>M915A3</td>
<td>AMB</td>
</tr>
<tr>
<td>20 Ton &amp; 5 Ton Dump Truck</td>
<td>15/22</td>
<td>11</td>
<td>24</td>
<td>M917A1</td>
<td>RED</td>
</tr>
<tr>
<td>40 Ton Crawler Crane</td>
<td>15</td>
<td>10</td>
<td>42</td>
<td>ENGR CRANE</td>
<td>RED</td>
</tr>
<tr>
<td>CUCV</td>
<td>12</td>
<td>6</td>
<td>16</td>
<td>HMMWV</td>
<td>RED</td>
</tr>
<tr>
<td>5 Ton Yard Tractor Truck</td>
<td>10</td>
<td>5</td>
<td>21</td>
<td>M878A2</td>
<td>RED</td>
</tr>
<tr>
<td>HMMWV</td>
<td>15</td>
<td>8</td>
<td>10</td>
<td>HMMWV</td>
<td>AMB</td>
</tr>
</tbody>
</table>

*EUL = Economic Useful Life

**Notes:**
- RED = Inadequate
- GRN = Adequate
- AMB = Border Line
In-lieu-of items indicate a skipped generation of equipment.

- **Technology: 1990s**
  - LMTV
  - REQ 4512

- **Technology: 1960s**
  - 2.5T
  - SUBS/ILO 4270

- **Current Inventory:** 242 LMTVs

- **Substitution Examples**
  - HDSB (2000)
    - REQ 28
  - MGB (1972)
    - SUBS 12
  - Bailey (1942)
    - ILO 5

- **Subs/Ilo**
  - 95%
  - 60%

- **Elimination of ILO Bridges**
  - 35% of Army Bridge Units
  - $28 million

- **Counterattack Corps**
  - Supported with 30-50 year old bridges

- **Transformation Goals**
  - Reduced Log footprint

- **Lack of common chassis and spares delays**

- **In-lieu-of items** indicate the older item will be designated as in-lieu-of the new item for USR purposes. (AR 220-1)
**FAMILY OF MEDIUM TACTICAL VEHICLES**

- REQ: 13,296, ON-HAND: 392, SUB/ILO: 12,904
- 2 ½ Ton ESP Program terminated to fund FMTV
- Only 414 FMTV received to date
- Older vehicles = Increased Operational & Sustainment cost

**HIGH MOBILITY MULTI-PURPOSE WHEELED VEHICLE**

- REQ: 17,533, ON-HAND: 10,795, SUB/ILO: 3,494
- CUCV exceeds Economic Useful Life (EUL)
- Any reduction will impact systems interchange requirements (i.e., other weapons platforms)
The Army Reserve

OLDEST IN THE FLEET
IN FIRST

COULD BE USAR ASSET

RECAP PROGRAM

EXTEND SERVICE LIFE

IMPROVES RELIABILITY

REDUCES O&S COST

RECAPITALIZATION

Goal is to maintain average fleet age at half of a system’s expected service life.

Systems on current recap plan

1. M1 Abrams Tank
2. AH-64 Apache
3. UH-60 Blackhawk
4. CH-47 Chinook
5. AVL (35 Yrs Old)
6. M9 ACE
7. M88 Recovery Vehicle
8. M2/M3 Bradley
9. MLRS
10. Patriot
11. M113 FOV
12. HEMTT
13. SEE/HMEE
14. ESV
15. Firefinder
16. M992 FAASV
17. HMMWV

Recapped asset
Reissued to highest priority unit

Not necessarily original owning unit
<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMMWV</td>
<td>528</td>
</tr>
<tr>
<td>5-Ton Cargo</td>
<td>131</td>
</tr>
<tr>
<td>34-Ton Trailer</td>
<td>122</td>
</tr>
<tr>
<td>5-Ton Tractor</td>
<td>71</td>
</tr>
<tr>
<td>5-Ton Dump Truck</td>
<td>32</td>
</tr>
<tr>
<td>Lube &amp; Service Unit</td>
<td>61</td>
</tr>
<tr>
<td>HEMTT Fuel Tanker</td>
<td>6</td>
</tr>
<tr>
<td>HEMTT Cargo</td>
<td>4</td>
</tr>
<tr>
<td>Tactical Fire truck</td>
<td>19</td>
</tr>
<tr>
<td>Yard Dog</td>
<td>18</td>
</tr>
<tr>
<td>4K Forklift</td>
<td>250</td>
</tr>
<tr>
<td>10K Forklift</td>
<td>47</td>
</tr>
<tr>
<td>25-Ton Crane</td>
<td>25</td>
</tr>
<tr>
<td>Chemical Alarms</td>
<td>855</td>
</tr>
<tr>
<td>Watercraft</td>
<td>$10.3M</td>
</tr>
<tr>
<td>Commo</td>
<td>$3.3M</td>
</tr>
</tbody>
</table>
• Unit Readiness Reporting only reports 9% of total equipment. OR rates for non-reportable equipment is a challenge for the USAR because of the age of the non-reportable fleet.

• The USAR Depot Maintenance Program is funded at $48mil in FY03, this is 71% funded of a $68mil total requirement. The funding for FY04 is at 73% and 85% for FY05. Additional funds are needed to support aging USAR equipment.

• The MDEP AMTV exist to bring cascading equipment from FORSCOM to 10/20. The USAR funded for FY03 at $4.8 mil, this is 28% of a $17mil requirement. Additional funds are needed to support the maintenance of cascading equipment.
SUMMARY

- Lack of acquisition funding stream to purchase or upgrade equipment

- Reduced system quantities and delayed fieldings impacts the ability of the Army Reserve to meet Transformation goals.

- Aging equipment is expensive and labor-intensive to maintain and sustainment dollars are declining/decremented

- Substitute or in-lieu-of items perpetuate incompatibility and interoperability issues. These incompatibility issues create impediments to supporting the digitized force

- Limited benefit from Recap program for Army Reserve

- USAR is trying to help itself (strategic storage) but danger is “real good, real old” equipment

BOTTOMLINE:

- Shortage of new procurement (P-1R) makes funding provided through NGREA and support of Depot Maintenance Programs vital to the readiness of the Army Reserve