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M483 Re-Use Program



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Outline



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- **M483 Re-Use Program Overview**
- **M483A1 Exploded View**
- **Initial Download Process**
- **Soft-touched Download Process**
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M483A1 DPICM Projectile



M42/M46 DPICM Grenades



BLUF



- The M483 Re-Use Program is a PM CAS managed effort that utilizes recovered projectile metal parts (MPTS) from the download/demil of the M483A1 Dual Purpose Improved Conventional Munition (DPICM) Projectile
- The linchpin of the program is joint PM CAS/PdM Demil agreement formalized into a Plan of Action that documents the details of a MPTS recovery strategy
- The program results in a family of extended range High Explosive Training, Illumination and Smoke projectiles that leverages existing payload designs and technologies and loads them into M483 Projectile bodies
- **The M483 Re-Use Program will achieve >\$100M cost avoidance over the POM!!**

It's a WIN-WIN program:

- The ammunition inventory is reduced of cluster munitions
- The Army fields five new extended range projectiles at lower cost than the existing projectiles



Background



- **As recently as August 2012, there were 3.6M M483A1 Projectiles remaining in the World Wide Inventory**
 - ✓ All eventually slated to undergo demil
 - ✓ Existing “grip-n-rip” demil process inflicted damage to metal parts (MPTS)
 - ✓ Scrap projectile MPTS sold for \$3.25/round

- **PM CAS initiated M483 Re-Use Program in 2008**
 - ✓ New artillery rounds would utilize M483A1 MPTS leveraged from demil
 - ✓ McAlester Army Ammunition Plant (MCAAP) was utilized for recovery of MPTS
 - ✓ Recovery rates were low due to download process inflicting damage
 - ✓ Robotic Projectile Download Work Cell (PDWC) was used, but rates were slow

- **In early 2015, PM CAS funded both MCAAP and Crane Army Ammunition Activity (CAAA) to soft-touch existing manual lines**
 - ✓ MCAAP now downloads 640 rounds on a 10-hr shift
 - ✓ CAAA now downloads 360 rounds on a 10-hr shift

- **In July 2015, PM CAS and PdM Demil agreed to an M483 Re-Use Program Plan of Action for recovery of MPTS**
 - ✓ Details quantities, lots and locations for download at either MCAAP or CAAA
 - ✓ As of November 2015, there are 1.8M M483A1s remaining worldwide; ALL will be set aside for recovery of MPTS in support of the M483 Re-Use Program



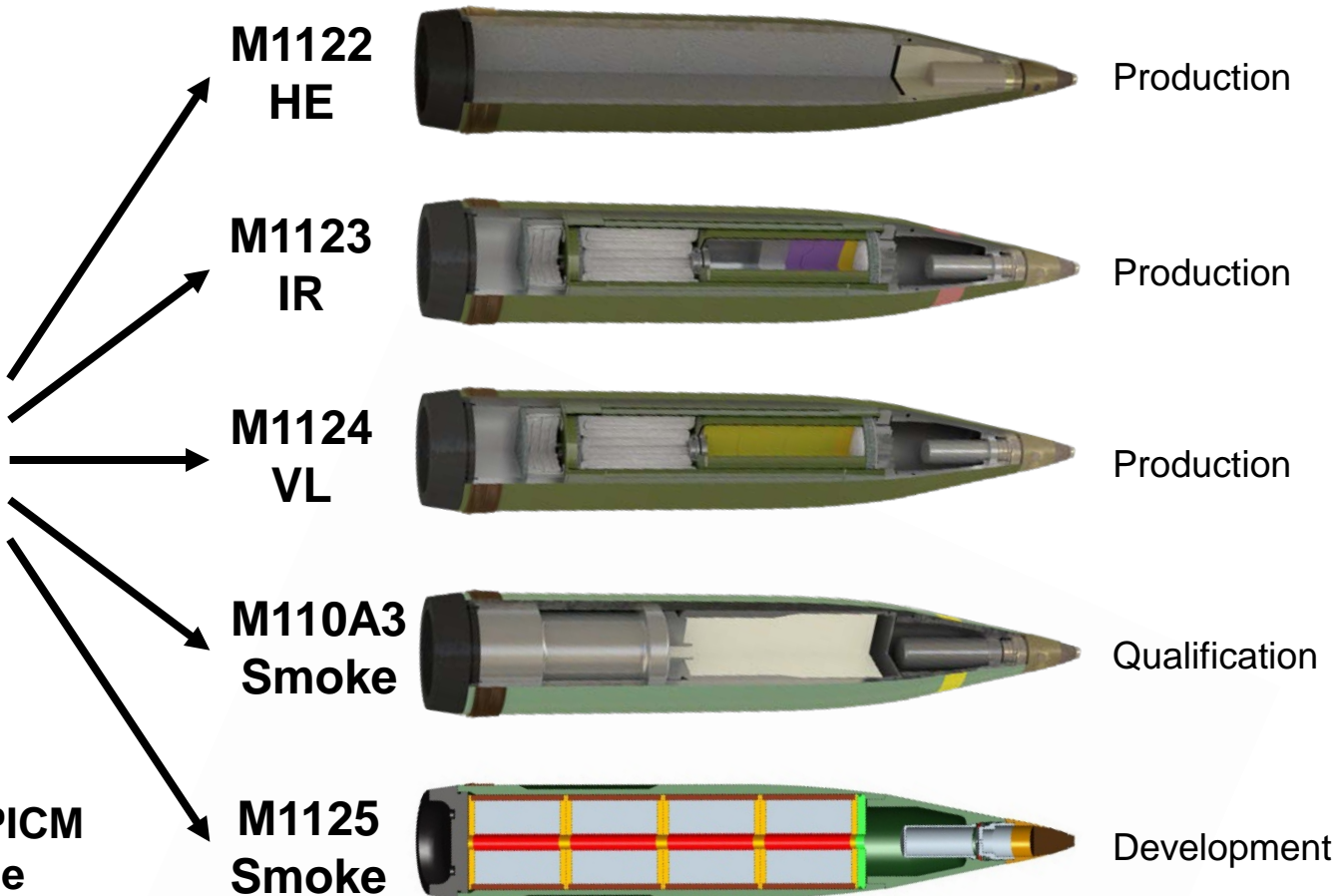
M483 Re-Use Program Overview



Downloaded M483A1 Projectile Metal Parts are used to create five new projectiles



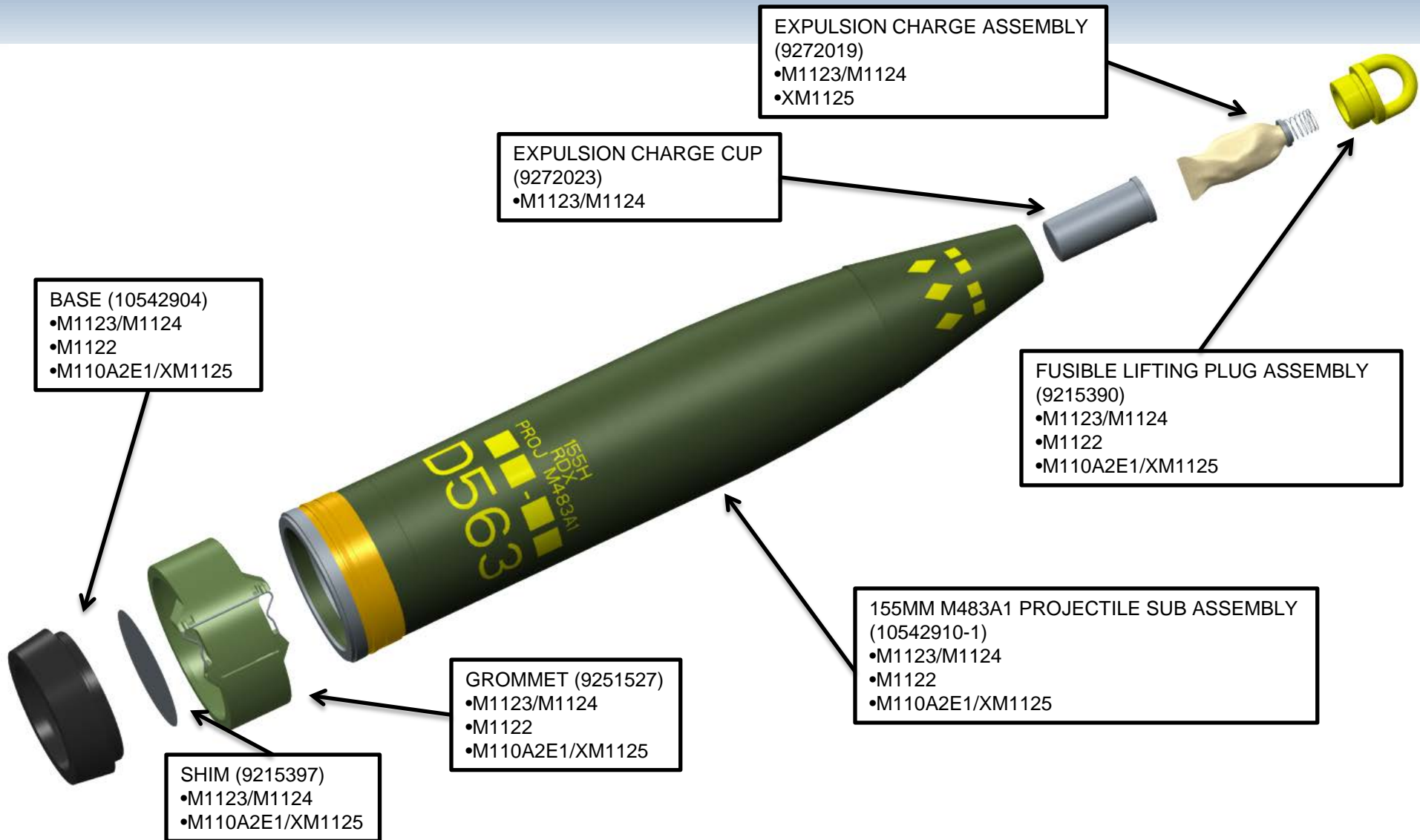
**M483A1 DPICM
Projectile**



Provides extended range at lower cost than existing projectiles!



M483A1 Exploded View





Initial Download Processes



Until 2015, PdM Demil and PM CAS funded separate M483 download efforts at MCAAP

- PdM Demil used a manual “Grip-n-Rip” line
 - ✓ Downloads 648 per 12 hr shift
 - ✓ Inflicted damage to MPTS
 - ✓ Emphasis on speed and generating scrap
- PM CAS used a PM JS/PM Demil provided robotic Projectile Download Work Cell (PDWC) line for soft touch MPTS recovery
 - ✓ Downloaded 150 per 12 hr shift
 - ✓ Process was slow
 - ✓ Little-to-no damage incurred
 - ✓ Required selection of MPTS with good pedigree prior to download



- **While M483 download was also performed at CAAA, Hawthorne and GD-OTS (Joplin, MO), MCAAP was the only facility capable of MPTS recovery**



Soft-touched Download Process



- In 2015, an agreement was reached to soft-touch the MCAAP and CAAA lines in which:
 - ✓ PdM Demil would continue to fund download of M483s and demil of grenades
 - ✓ PM CAS would fund any difference in cost due to changes in rate, as well as facilitate soft-touch effort
- PdM Demil agreed to no longer use Hawthorne and GD-OTS sites for M483 download and demil



Soft-touching the de-basing operation was key!



Summary



- The M483 Re-Use Program is a PM CAS managed effort that utilizes recovered projectile MPTS from the download/demil of the M483A1 DPICM Projectile
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