Project Manager Soldier Weapons

Briefing

NDIA

May 2011

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PM Soldier Weapons Mission and Organization

PM SW Mission:

Ensure U.S. Soldiers have an overmatch in individual and crew served weapons capabilities on present and future battlefields.

Maintain individual and crew served weapons’ readiness for the Army through intensive management of the full acquisition life cycle.

Be Immediately Responsive to the Soldier’s wartime individual and crew served weapons, ancillary equipment and ammunition requirements.
PM Soldier Weapons Mission

Current
- M16A4 Rifle
- M4 Carbine
- M4/M203
- M107 Long Range Sniper Rifle
- M240B Medium Machine Gun
- MK19 Grenade Machine Gun
- M2 .50 Caliber Machine Gun
- M2A1 .50 Caliber Machine Gun
- M320 40mm Grenade Launcher
- M14 Enhanced Battle Rifle (EBR)
- M24 Mini Binocular
- M110 Semi-Automatic Sniper System (SASS)
- XM25 Stabilized Binocular
- M26 Modular Accessory Shotgun System (MASS)
- XM2010 Enhanced Sniper Rifle (ESR)
- M249 Squad Automatic Weapon (SAW)
- M68 Close Combat Optic (CCO)
- M145 Machine Gun Optic
- M153 Common Remotely Operated Weapon Station (CROWS)
- XM806 Lightweight .50 Caliber Machine Gun

Development
- XM25 Counter Defilade Target Engagement System
- M26 Modular Accessory Shotgun System (MASS)
- XM2010 Enhanced Sniper Rifle (ESR)

Future
- Carbine
- Precision Sniper Rifle

“Provide the best weapons to our Soldiers”
Lighten Soldier’s Load

<table>
<thead>
<tr>
<th>Rifles/Carbines *</th>
<th>Shotguns</th>
<th>Machine Gun Tripods</th>
<th>Medium Machine Guns</th>
<th>Heavy Machine Guns</th>
<th>Heavy Machine Gun Tripods</th>
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<td>M16A4, 8.13 lbs</td>
<td>M500, 7.7 lbs</td>
<td>M122A1, 18 lbs</td>
<td>M240B, 27.3 lbs</td>
<td>M2, 128 lbs</td>
<td>M3, 44 lbs (Including T&amp;E)</td>
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<td>17% (-1.38 lbs)</td>
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<td>36% (-6.5 lbs)</td>
<td>32% (-8.7 lbs)</td>
<td>18% (-5 lbs)</td>
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<tr>
<td>M4, 6.75 lbs</td>
<td>M26 MASS, 5.5 lbs</td>
<td>M192, 11.5 lbs</td>
<td>MK48, 18.6 lbs</td>
<td>M240L, 22.3 lbs</td>
<td>XM806 Lightweight .50 Caliber MG, 65 lbs</td>
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<td></td>
<td>M26 MASS Mounted on M4</td>
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<td>XM205, 31 lbs (Including T&amp;E)</td>
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* Weapon weight with empty magazine, no sling, no optic
Individual Weapons
Carbine Path Forward

Secretary of the army directed carbine competition

Army requirements approval

Release of draft RFP

Industry Day

Release of RFP

Full and open competition

Selection of new carbine

Carbine competition

Dual Path Strategy

M4 improvements

Collect Soldier feedback

Upgrade current M4 carbines

Phase I: M4A1 program expansion – heavy barrel, full automatic trigger assembly, and ambidextrous fire control assembly

Phase II: M4A1 Improvements – rail adapter system, bolt & bolt carrier

Phase III: M4A1 operating system evaluation

Outcomes

Increases effectiveness, reliability, and accuracy
### Integrated Program Summary

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<th>Key Events</th>
<th>Source Selection/EMD</th>
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<th>Full Rate Production/Deployment</th>
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#### Program Phases
- **Testing**: Phase I - 30 vendors, Phase II - Most Qualified Systems Bid Sample Testing, Phase III - 3 Vendors - Competitive OT/LUE, Report
- **OTC Reviews**: SRR, TRR, PDR, TRR, SVR, PER, CDIR, RA-C
- **SE Technical Reviews**: SRR, TRR, PDR, TRR
- **System Deliveries**: Awarded to 3 Contractors
- **Concurrent Contracting Activity**: Awarded to 3 Contractors

#### Contractor Events
- **BCA** Business Case Analysis
- **CDR** Critical Design Review
- **EMD** Eng’g Mfg & Development
- **EPR** Enhanced Projectile Round
- **FAT** First Article Test
- **FMR** Full Material Release

#### Key Events
- **MDD**: Material Development Decision
- **PBL**: Performance Based Logistics
- **PRR**: Production Readiness Review
- **PQT**: Production Qualification Testing
- **RFP**: Request for Proposal
- **SRR**: Systems Requirements Review
- **TRR**: Test Readiness Review

#### Phases
- **MDD** Business Case Analysis
- **MS-E** Full Rate Production
- **LFT&E** Live Fire Test & Evaluation
- **LFT&E I** LFT&E Limited Ballistic T&E
- **LFT&E II** LFT&E: Inclusive Ballistic T&E
- **LLD** Limited Logistics Demonstration
- **LUE** Limited User Evaluation
- **LAT** Lot Acceptance Test

#### Dates
- **2011**: Q1, Q2, Q3, Q4
- **2012**: Q1, Q2, Q3, Q4
- **2013**: Q1, Q2, Q3, Q4
- **2014**: Q1, Q2, Q3, Q4
- **2015**: Q1, Q2, Q3, Q4
M4 Carbine Improvements

Required Reliability
MRBS – 600
MRBF – 3,800

1991
Back up Iron Sight
1995
Improved Extractor Spring
1996
Improved Feed Ramps
1997
Improved Extractor Spring
1998
Picatinny Rail & Pistol Grip TC
1999
Advanced Combat Optic & Enhanced Stock
2000
Improved Butt stock
2001
Improved Bolt & Extractor Spring
2003
Improved Adapter Rail (prevents improper install)
2005
Improved Magazine Design Approved (Fielding JUL 2009)
2006
Multi Magazine Holder with Pouch
2007
Improved Magazine Design Approved (Fielding JUL 2009)
2008
Obtain Government Purpose Rights to Compete TDP
2009
Improved Magazine Design Approved (Fielding JUL 2009)
2010
Squad Designated Marksman Bipod
2011
Authorization to convert fielded M4’s to M4A1’s (incorporates M4A1 Barrel and Full Auto Trigger Assemblies.)

As of: 27-Jan-2011

Total: 63 ECPs to M4

PM Soldier Weapons’ Continuous Improvement Process
PHASE I

- Converts M4 Carbines to M4A1 Carbines via new production and Modification Work Order’s (MWOs) to fielded M4’s.
  - Incorporates the M4A1 Barrel Assembly and Full Auto Trigger Mechanism Assembly
  - Incorporates latest engineering change proposal (Ambidextrous Fire Control Assembly)

  - **Phase I Increment A** – contract modification with Colt LLC to deliver 9,582 M4A1 Carbines in lieu of M4 Carbines
  - **Phase I Increment B** – compete the M4/M4A1 TDP
  - **Phase I Increment C** – compete component parts for MWO to convert fielded M4’s to M4A1’s

PHASE II

- Solicit industry for improvements to specific weapon components
  - **Phase II Increment A** - Bolt and Bolt Carrier Assembly
  - **Phase II Increment B** - Forward Rail Assembly
M4 Carbine PIP
Significant Activities

- New Start Authority received – January 2011
- Phase I Increment A:
  - M4A1 with ambidextrous fire control deliveries begin - February 2011
- Phase I Increment B:
  - M4/M4A1 Acquisition Center transition to TACOM Warren
  - Solicitation issued – June 2011
- Phase I Increment C:
  - Three of five solicitations issued – February 2011
    - One of five awarded - March 2011
      (miscellaneous commercial hardware, i.e. pins, springs)
    - Two of five planned award – June 2011
      - Miscellaneous Barrel Components
      - Ambidextrous Fire Control Selector Assembly
  - Two of five solicitations to be issued – June 2011
    - M4A1 Barrel Assy and M4A1 Full Auto Trigger Assy
- Acq Plans approved by PMSW – March/April 2011
  - Staffing through PARC and PEO Soldier – May 2011

- Phase II Increment A:
  - Solicitation issued – April 2011 (closes August 2011)
- Phase II Increment B:
  - Synopsis issued – May 2011
Precision Weapon Portfolio  
Engagement Ranges & Dispersion

- **M14EBR** .308 Cal/.762mm NATO
- **M24 SWS** .308 Cal/.762mm NATO
- **M110 SASS** .308 Cal/.762mm NATO
- **XM2010 (M24E1)** .300 WinMag
- **SOCOM Mk13 Mod 5** .300 WinMag
- **Example** .338 Lapua Magnum Sniper Rifle
- **M107 LRSR** .50 Cal

**RANGE in METERS**

- **M118LR** (AA11) 7.62x51mm 175gr ~2600fps MV $0.57/rnd
- **M248 Mod 1 (AB43)** 7.62x51mm 220gr ~2900fps MV $0.87/rnd
- **Mk248 Mod 0 (A191)** 7.62x51mm 190gr ~2900fps MV $1.07/rnd
- **M24 SWS** .308 Cal/.762mm NATO
- **M118 LR** (.338 Lapua Mag) 8.6x70mm 300gr ~2800fps MV ~$5/rnd
- **CBA 2400m**

- **.338 Lapua Mag** 8.6x70mm 300gr ~2800fps MV ~$5/rnd
- **Mk211 (A606)** 12.7x99mm 671gr ~2900fps MV ~$9/rnd

**Extending Precision Fire**

- **0.8-1.0 MOA** ~11"
- **0.6-0.8 MOA** ~11"
- **0.8-1.0 MOA** ~25"
Description:
- M14 Enhanced Battle Rifle is a rack stock M14 rifle mated to an enhanced aluminum billet stock, tactical scope and cantilever mount. This weapon was built by Rock Island Arsenal in response to numerous Operational Need Statements requesting long range capability.

Capabilities:
- Accurate 7.62mm capability out to and beyond 600m

Status:
- M14 fully funded for 6,200.
- 5,441 built to date
M110, 7.62mm Semi-Automatic Sniper System (SASS)

**Description:**
- Effective against personnel targets and light materiel targets
- Supplements sniper’s role in combat operations
- Greater firepower & possible standoff ranges to improve sniper survivability
- 800 meter range
- 10 and 20 rd magazine

**Capabilities:**
- Rapid fire/rapid reload
- Suppressed sniper rifle
- Exceeds rate of fire and lethality of M24 SWS
- Primarily anti-personnel ranges > M24 SWS
- Enhanced sniper spotting scope (M151)
  And tripod

**Status:**
- Fielded 2727 of 2943
- FY11 last production year
XM2010 Enhanced Sniper Rifle (ESR)

**Description:**
- The ESR’s .300 Winchester Magnum chambering extends the weapon’s maximum effective range by 50 percent over the 7.62mm chambered M24
- Weapon system features include:
  - 5-round box magazine makes the system easier to load and reload
  - Rail endowed chassis and free floating barrel allow for easier mounting of weapon accessories and greater accuracy
  - Folding and adjustable stock includes comb and length-of-pull adjustments
  - 6.5-20x50mm extended range /tactical riflescope with an enhanced reticle within the first focal plane; fielded with the AN/PVS-29 clip-on sniper night sight
  - Quick attach/detach suppressor to reduce audible and visible signature with an available thermal sleeve that reduces mirage effect on heated suppressors

**Specifications**
- Caliber: .300 Winchester Magnum
- Operation: Bolt action
- Weight: 18.7 pounds (with suppressor)
- Length: 52.2 inches (with suppressor)
- Magazine: 5 round box
- Muzzle velocity: 2,985 feet per second
- Optics: Day - 6.5-20x50mm with Advanced scalable ranging and targeting reticle; Night - AN/PVS-29 clip-on sniper night sight

*Increased range, pinpoint accuracy*
Counter Defilade Target Engagement
Weapon System

System description:
- 3 Components that are highly integrated & optimized to produce noted P(effect):
  - Semi-auto, magazine fed, 25mm weapon
  - Programmable, low velocity, high explosive air burst (HEAB) ammo
  - Fully integrated day & thermal night sight w/ full solution target acquisition/fire control
- System weight: 12.0-12.5 lbs

System capabilities:
- Defeats defilade targets and exposed targets
- Point target range: 500 meters
- Area target range: 700 meters

Status:
- Government testing at APG: Sep 08 – present
- Limited safety release: 4QFY09
- MS B: 2QFY11
- 5 Gun FOA
- 36 Gun Build to Support ONS
- MS C: ~3QFY13

XM25 100-300% More Effective than Current Weapon Systems

Target Exposure Times: 3-8 Seconds depending on Range

Probability (Effect)
- 0%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%

Target Range
- 0m
- 100m
- 200m
- 300m
- 400m
- 500m

Current development
- XM25 w/ HEAB
- M16/M4 w/ CCO
- M203/M320

Future development
- High explosive
- Armor piercing
- Training
- Less-than-lethal (airburst)
- Less-than-lethal (blunt)
- Door Breaching

High explosive Air bursting
Armor piercing
Training
Less-than-lethal (airburst)
Less-than-lethal (blunt)
Door Breaching

25mm ammo
**Description:**
- A lightweight shotgun system that attaches to the M4

**Capabilities:**
- Provides the capability to fire lethal, non-lethal and door breach 12 ga. rounds
- Shotgun can be zeroed to the sighting system of the host weapon
- Provides the lethality equivalent of a Stand-alone 12 ga. shotgun
- Capable of being fired as A *stand-alone weapon
- Five round magazine / three round optional

**Status:**
- MS C/LRIP approved
- LRIP ongoing
M320 Grenade Launcher

**Description:**
- Grenade launcher
  (mounts to M16/M4 series of weapons)

**Capabilities:**
- Improves squad level indirect/direct grenade launching capability out to 400 meters
- Greater reliability and safety than M203
- Greater target acquisition (day and night)
- Capable of being fired as a *stand-alone weapon*
- Able to fire wider array of munitions

**Status:**
- In Production
- Fielded 14,000
- Planned future full and open competition based on TDP

*Stand-alone with day/night sight*
Description:
- The M68 CCO is a unity powered red dot sight allowing the Infantry Soldier to engage targets with both eyes open and eliminating the difficulty associated with aligning iron sights.

Capabilities:
- This unity powered, red dot sight allows the Soldier to engage targets with both eyes open while maintaining situational awareness out to 300m.

Status:
- In production
- Fielded 837,000
M150, Rifle Combat Optic (RCO)

**Description:**
- The RCO provides an improved capability to recognize and engage targets from 300 to 600m with the M4, M16A2 and M16A4 and M249. This optic will not degrade the Soldier’s ability to conduct reflexive fire techniques and will allow for the Soldier to transition rapidly between long-range and close quarters engagements.

**Capabilities:**
- The scope can be used to scan an area. When a target is acquired, the ranging reticle can be used to get an accurate range to the target. The range aiming point on the bullet drop compensator can then be used to engage target.

**Past Event:**
- BOIP waiver approved
- Full Materiel Release
- FUE

**Current Event:**
- Fielded 44,167
Crew Served Weapons
As of 7 Apr 11
M249 Improvements

**Past**
- Weight – 17 lbs.
- Bbl length – 20.50”

**Present**
- Weight – 16.48 lbs.
- Bbl length – 14.75”

**Future**
- Fires caseless ammo
- Lighter weight
- Increased reliability/durability
- Improved signature reduction
- Self lubricating surfaces
- Integrated sighting system
  - Optic
  - Laser range finder
  - IR designator

**PM Soldier Weapons continuous improvement process**

- Quick release swivel
- Sling mounting kit
- Welded bipod
- Compensator for standard barrel
- Forward rails
- Forward pistol grip
- Blank firing adaptor for short barrel
- 200 round soft pack
- Collapsible buttstock assembly
- FSIK dovetail support tool
- Take down pin
- Feed tray w/ pawls
- New barrel bag
- Light weight charging handle
- light weight top cover w/ light weight feed lever
- Short barrel
MK48 Lightweight Machine Gun

Description:
The MK48 was developed to meet a US Special Operations requirement for a lightweight medium caliber machine gun that would retain the intrinsic functionality and reliability of the standard M249.

Capabilities:
- Caliber: 7.62 mm NATO
- Barrel: 5.39 lbs.
- Overall weight: 18.37 lbs.
- Barrel length: 19.75 in.
- Rate of fire: 730 ± 50 rds/min (cyclic)
- Range: 3600 m (max.)
- 800 m (max. effective)

Status:
- 500 Fielded To Afghanistan
Description:
- This program will evaluate high performance, lightweight material alternatives and alternate manufacturing methods in fabricating major M240B components.

Capabilities:
- Reduces the Soldier’s combat load
- Allows easier handling and movement of weapon
- Reduces M240B weight: (27.6 lbs) by approx. 5 lbs
  - M240L total weight: approx. 22.3 lbs

Status:
- 1459 fielded
XM806 Lightweight .50 Caliber Machine Gun

**Description:**
- Lightweight, 2-man portable, vehicle and ground mounted .50 caliber crew served weapon system

**Capabilities:**
- 41-60% lower weight and 60-75% lower recoil
- Improved accuracy
- Quick change barrel with fixed headspace and timing
- Fires all .50 caliber service ammunition with M9 links
- Can be dismounted from vehicle platform and remounted on ground mount <30 seconds

**Status:**
- In Developmental Testing

Low recoil = more hits/less dispersion
M2E2 Quick Change Barrel Kit

System Description:
- Quick change barrel
- Barrel support
- Barrel extension
- Solid breech lock
- Flash suppressor*

Capabilities:
- Enhancement will increase readiness by providing a faster & simpler barrel change without the need to set headspace and timing
- Reduces training
- Includes flash suppressor

Status:
- 550 Kits delivered
- 464 guns delivered
- FUE Aug 2011
M153 Common Remotely Operated Weapon Station (CROWS) System Description

- **Weight (w/o weapon and ammunition)**
  - Above the roof: 325 lbs (w/o armor kit)
  - Total weight: 430 lbs
- **Supported weapons:**
  - M2 (400 rds) - M240 (1000 rds)
  - MK19 (96 rds) - M249 (1600 rds)
- **Reliability:** minimum of 1600 hrs MTBMA

- Four-axis targeting system
- Three-axis vector stabilization
- Day camera: 27X w/47 degree FOV
- Thermal: dual FOV (3° & 11°) w/ 2x e-zoom
- Auto focus (day and thermal)
- Laser range finder
- Auto tracker / auto lead / auto scan
- Target reference points scan
- Elevation: -20 to +60 degrees
- Traverse: 360 degrees continuous

**Potential Future Improvements:**
- Sniper detection capability
- Far target designation with handoff
- Additional weapons (LW50, MK47, M134, integrated javelin launcher)
- IR and visible pointers
- Enhanced image capability

8511 - delivered
5946 - fielded
CROWS Platform Integration Efforts

- RG31A1/A2/A3
- Buffalo A1/-1/A2
- M1151 FRAG 5/7

- JERRV
- RG33(SV)
- Dash

- BearCat
- M1A2 Abrams Tank
- MATV

- M93 FOX
- Caiman
- MaxPro/Plus

- Cougar
- RG33L /Panther
- M1116

- M1200 Armored Knight
- Joint Light Tactical Vehicle
- Specialized Reconnaissance Assault Transport System (SRATS)
Future CROWS Enhancements

Secondary Screen

*Driver's Vision Enhancement Screen*

**Capability:**
Provides a second set of eyes on the target to assist in verifying enemy combatants prior to engaging with lethal force.

**Fixed Site Application**

**Capability:**
Provides ability to monitor an area and target a threat remotely from inside a protected structure.

Escalation Of Force

**Green Laser**

**Capability:**
Green laser, provides Soldiers the capability to warn and hail as an alternative to deadly force while protected inside the armored vehicle. Includes an infrared marker (IR) for directing operations.

**Infrared Marker**

**360 Degree Camera**

Other Enhancements:
- Integrated Javelin Capability
- Enhancement Sensor Capability
- Integrated Slew to Cue
- Additional Weapon Integrations
- Integrated 360 Degree Situational Awareness

Expanding CROWS capability
M25 Day/Night Binocular

Performance Characteristics

- Magnification: 14X
- Objective lens diameter (mm): 41
- Field of view: 4.3°
- Resolution: < 4.3 sec arc
- Exit pupil diameter (mm): 3.0
- Eye relief (mm): 18
- Interpupillary distance (mm): 59-76
- Eyepiece focus: ± 5 diopters
- Weight – lbs. (Kg): 4.5 (2.04)
- Height – in. (mm): 3.5 (89)
- Width – in. (mm): 7.5 (190)
- Length – in. (mm): 8.25 (210)
- Parallax: < 2 mils
- Floatable

Stabilized for on the move observations

Fielded Over 13,500

Focused on today’s Army’s needs
M24 Mini Binoculars

M24 mini binocular vs. Army’s standard M22 binocular

- 100% Equivalent
- Performance in daylight
- 80% smaller in size
- 50% less in weight
- 0% difference in cost

Performance Characteristics

- Magnification 7X
- Objective lens diameter (mm) 28
- Field of view 7°
- Resolution < 9 sec arc
- Exit pupil diameter (mm) 4.0
- Eye relief (mm) 16
- Interpupillary distance (mm) 58-72
- Eyepiece focus + 4 diopters
- Weight – lbs. (Kg) 1.26 (0.57)
- Height – in. (mm) 5.31 (135)
- Width – in. (mm) 4.92 (125)
- Length – in. (mm) 2.68 (68)
- Parallax < 1.0 mil
- Operation temperature -40° F to 158° F
- Submersible 60 min @ 1 meter depth

Laser protected!
Fits in pocket of Army Combat Uniform (ACU)!
Fielded Over 165,500

Focused on today’s Army’s needs

* Anti-Reflection Device (ARD) available as an accessory
XM25
Counter Defilade Target Engagement Weapon System
PM Soldier Weapons / ATK -

26 MAY 2011
XM25 Overview

- Overview
  - System Overview
  - Operational Update
  - Next Steps
  - Program Status

- Forward Operational Assessment
  - FOA Highlights
  - NET

- FOA User Feedback
  - Proposed Employment
  - Capabilities Assessment

- Summary

- Questions/Comments
The XM25, Individual Semi-Automatic Airburst System (ISAAS), is a Counter Defilade Target Engagement (CDTE) weapon.

- Delivers a 25mm programmable high explosive airburst (HEAB) round to explode above or adjacent to a target significantly increasing Soldier survivability to defeat defilade targets out to approximately 600 meters.

- The XM25 includes an integrated, multifunctional, all environment, full-solution, day/night, target acquisition/fire control system.
System Overview

- The technology provides the Soldier a leap-ahead capability to defeat defilade targets while significantly reducing collateral damage without the use of indirect fire or close air support.

- The XM25 has been identified by the U.S. Army Maneuver Center of Excellence (MCOE) Joint Capabilities Integration and Development System (JCIDS) analysis as the number one materiel approach to mitigate the Counter Defilade Target Engagement (CDTE) gap (accurate and lethal engagement of defilade targets at the squad level).
XM25 Operation

1. Place LRF Aimpoint on wall in front of Target and Lase

2. TA/FC determines range to wall is 299 meters

3. TA/FC displays the adjusted Aimpoint to the correct location on DVO

4. User increments 1 meter to compensate for wall thickness. Round will now explode at 300 m

5. User raises XM25’s barrel, which moves Adjusted Aimpoint up. Explosion will occur where the Adjusted Aimpoint is pointing. User squeezes trigger.

6. Explosion of 25mm Air Burst round is past the 2’ thick wall & over the enemy’s head

A. Target behind 2 foot thick concrete wall

B. Target seeks cover behind wall

C. Target Destroyed

That’s All it Takes!
Operational Update

- Army is currently conducting a Forward Operational Assessment (FOA) of the XM25 System in Afghanistan.
- Test units arrived in theater Nov ‘10. PM Soldier Weapons personnel conducted New Equipment Training (NET) with select units and monitored use / performance during the assessment period.
- The weapons were carried on patrols, and at various combat outposts in areas that experienced high levels of enemy activity.
- The weapons were assessed in both mountainous and flat terrain.
- Soldier feedback is allowing the Army to make engineering refinements to the system and will assist in making future decisions regarding tactics, basis of issue, and other improvements in the weapon system.
Program Status

- Began 30 month EMD effort on 28 Apr 2011
  - Design will be finalized by month 9 and select facilization and manufacture will begin
- 36 FOA systems delivered beginning in month 24
- ATK will begin testing 10 systems approx month 8
  - Will conduct 6 months of testing on systems
- Systems will go through a variety of Tests
  - Environmental, life cycling, human factors, safety, etc. Similar to DT testing the Gov’t plans to perform
FOA Highlights

- Trained 18 total XM25 Gunners
- Had 9 total combat engagements, 55 HEAB rounds
  - All engagements resulted in expedited enemy disengagement
- Expended 620 TP rounds during NET
- Expended 120 HEAB rounds in NET and Demos
- Assessed in 3 different types of PLTs: Infantry, Infantry Heavy Weapons, and CAV Scout
New Equipment Training

Day 1
- Capability Class
- Disassembly and Reassembly Class
- Day Familiarization Fire – 4 TP, 4 HEAB
- Night Familiarization Fire – 4 HEAB

Day 2
- Qualification Fire – 40 TP
- Fire command execution
- 1 mag unsupported
- SPOR(T)S

CoC Validation

CoC observed the NET and determine if the gunner was ready to take the XM 25 on a combat mission
XM 25 Proposed Employment

- **Weapon Quantity Initial Feedback**
  - 1 per Squad or 2-3 per PLT, based on the type of PLT
  - Squad level - SDM carried

- **Basic Load Feedback**
  - The optimal basic load became 36 rounds; 9 mags – one in the weapon, 8 carried
  - Currently using 28 rounds; 7 mags – one in the weapon, 6 carried

Having the extra firepower of a semiautomatic “grenade launcher” – yeah, I would go with that for every section if possible. – 1LT Featherman
“I believe any time you are in an engagement on level terrain or anywhere where you have defilade for the enemy to [hide], it is 100% effective.” – 1LT Farazdaghi

“I think this weapon system is amazing. The scope, the optic itself is completely groundbreaking.” – SFC Shriver

“The XM 25 is the whole package weapon system. It definitely provides a lot of capabilities that we have to pull out multiple pieces of equipment to do.” – CPT Gold

“It is a lot harder for a 203 gunner to put a round in a specific grape row. So the airburst capability is definitely of use here.” – CPT Gold

“We have taken it on all patrols since contact. We have taken it on every single one and will continue to do so.” – 1LT Featherman
Summary

- XM25 has performed well in both mountainous and flat terrain – at both long and short ranges.

- There is a definite need for this capability in theater right now.

- The NET effectively prepared soldiers and leaders to successfully employ the weapon system in combat.

- The PM FOA was able to gather data on ergonomic changes, proposed doctrine and an overall assessment of the capability, which will be used to make the system better and more user friendly for soldiers on today’s battlefield.

“Our XM 25 gunners understood the capabilities employment – how to employ the weapon system. The leadership knew exactly how it was employed and what its capabilities were.” – SFC Shriver
“There have been multiple, multiple engagements where the enemy knows, ‘Hey, I’ll hide behind this giant boulder. No matter what you hit me with you can’t get through this boulder.’ With the XM25 you can hit anybody within range, behind anything.” – SFC Shriver
XM806 .50 Caliber Machine Gun

**XM806 Weapon**
- Weight 49 lbs requirement (current 45.0 lbs)
- Quick change barrel
- No head space or timing adjustment
- Dispersion < M2
- Low recoil
- Ability to mount optics on Picatinny Rail
- Additional MIL-STD-1913 rails for accessories
- Fires all M9 linked service ammunition
- 50K round receiver life (min)

**Cradle**
- Weight estimate 5.0 lbs
- Ability to mount XM806 to:
  - XM205 Tripod
  - M3 Tripod
  - Mk93 Cradle
- Government Design effort

**XM205 Tripod**
- Separate Non-Development Item Program
- Weight – 31.0 lbs

**Blank Firing Adapter**
- Ability to fire M1 blanks for Force on Force training
- Government Design effort