Lightening the Soldiers Load
For Mounted Systems

James Murtaugh & Anthony Piccolo
16 May 2012
A crew-served weapon is any weapon system that requires a crew of more than one individual to function at optimum efficiency due to its operational complexity, such as requiring one person to load while another fires.
CREW Served Weapon Mounts

Weapons

• M249
• M240
• M2
• MK19

Mounts - Tripods

• M122A1
• M192
• M3
• XM205
Soldier’s Load

• Soldiers often carry over 100 pounds of equipment.

• Weapon and mounting system are in addition to these items.

• Constant goal is to reduce the weight a soldier may carry while maintaining or improving the performance of the product.
Limitations:

- T&E is cumbersome to acquire targets
- T&E and Pintle are detached from tripod and may be lost
- Training to use T&E is lengthy and may be confusing to soldiers
- Weight
- No traverse stop for field of fire
- Tripod maintains length for storage
Creation of M192 Tripod

- Research and development contract with Capco, Inc. in 2004
- Initial production and fielding in 2005
- Currently over 40k units have been produced
- Continuing to phase out M122A1
- Winner of 2005 Army’s Top Ten Greatest Inventions award
M192 Lightweight Ground Mount (LWGM)

- Weapon Bracket
- Stowage
- Compact Size
- Traverse & Elevation (T&E) Mechanism
- Stability
- Traverse Limit Stop
• The M192 provides an improved platform for the M240B 7.62mm Medium MG and M249 5.56mm Light MG

• M192 currently weighs 11.5 lbs - Approx. 6.4lbs, (34%) less than the M122A1 Tripod

• M192 weapon cradle includes a deflector for ejected M240B cartridge cases during operation
M192 Replaces M122A1

- The Traverse and Elevation (T&E) mechanism improves flexibility for traverse, elevation, depression and facilitates one-hand manipulation.

- M192 includes a stop screw that sets the limit of traverse.

- The M192 tactical carry configuration has a collapsed length of 24 inches - 6 inches less than the M122A1 Tripod.
Limitations:

- T&E is cumbersome to acquire targets
- T&E and Pintle are detached from tripod and may be lost
- Training to use T&E is lengthy and may be confusing to soldiers
- Weight
- No traverse stop for field of fire
- Legs cannot be locked while collapsed
Creation of XM205

- Non-developmental item program that began in 2008 with Capco, Inc.
- Testing is now complete
- Program Manager anticipates a Milestone C decision this summer
- Production schedule to begin fall/winter of 2012
- XM205 will phase out M3
XM205 Lightweight Tripod for Heavy Machine Guns (LTHMG)

- Weapons Interface
- Lightweight Pintle
- Front Leg
- Traverse and Elevation (T&E) Mechanism
- Compact Size
- Pintle Storage
- Traverse Limit Stop
- Stability

DISTRIBUTION STATEMENT A: Approved for public release.
The XM205 provides an improved platform for the M2 .50 Cal Heavy MG and MK19 Grenade Machine Gun.

The XM205 has a collapsed length of 47 inches and width of 12 inches, including a captured leg feature that is unavailable on the M3.
XM205 Replaces M3

- The Traverse and Elevation (T&E) mechanism improves flexibility for traverse, elevation, depression and facilitates one-hand manipulation.

- XM205 includes a stop screw that sets the limit of traverse.
XM205 Replaces M3

- XM205 currently weighs 34 lbs - Approx. 16.3 lbs, (33%) less than the M3 Tripod
- XM205 has a new lightweight pintle that reduces the weight and increases the elevation and depression capability of the M3 pintle
- XM205 has a stowage place for the lightweight pintle so it can remain attached while it is being transported

![XM205 Weight Diagram]