















JSSAST MCoE David Libersat June 3, 2015



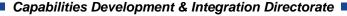


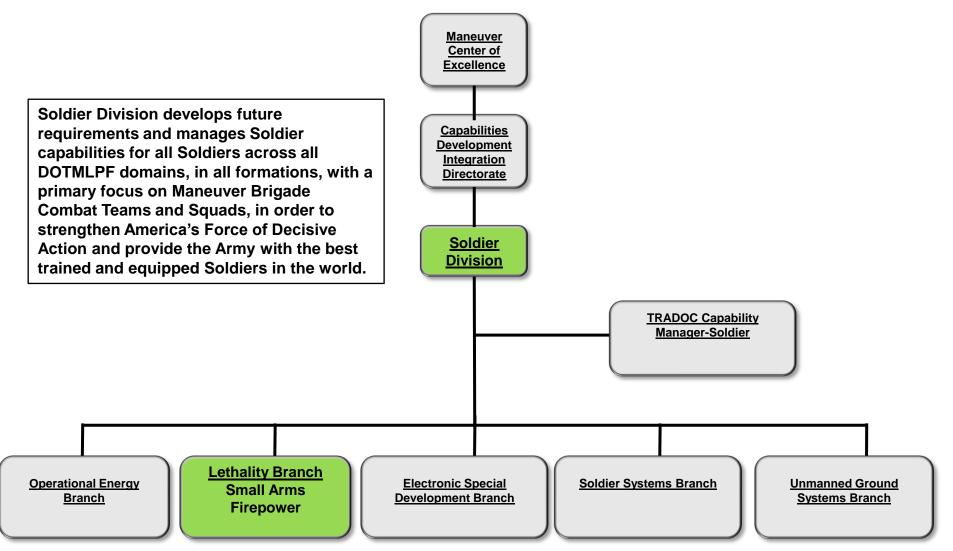




Soldier Division





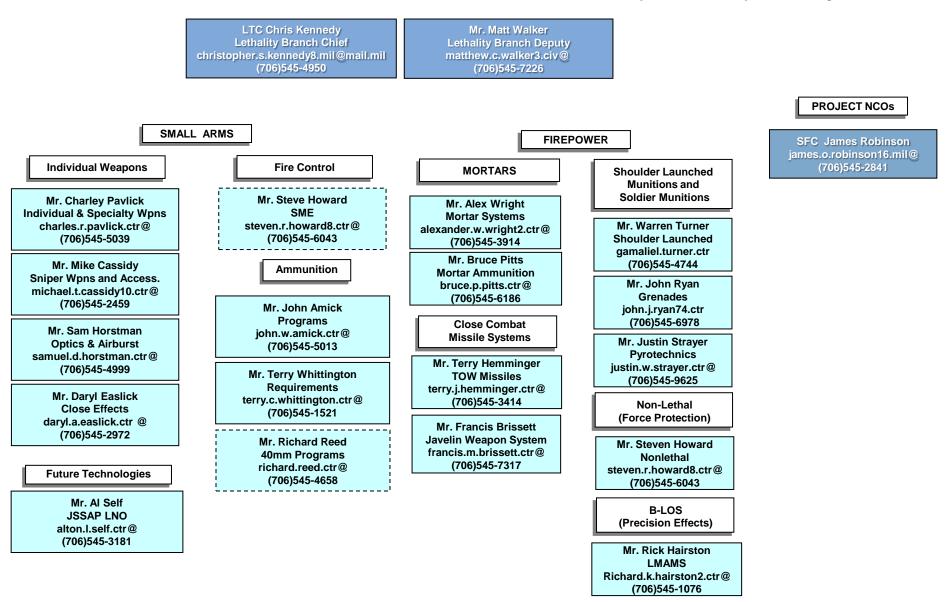




Lethality Branch



Capabilities Development & Integration Directorate





Soldier Division Focus Areas (Requirements)



Capabilities Development & Integration Directorate

S/D Focus Areas: Advance Fire Control, Weapons, and Ammo for Squads to improve ability to ID targets, improve P(h)/reduce Soldier induced error, reduce engagement time, and increase leader situational awareness and ability to direct the effects of his squad and external/joint enablers. Improve individual weapons portability/mobility, reliability, and lethality while reducing recoil and firing signature.

Acquire and ID personnel (assess intent/activity and/or behavior) 1200m day/960m night in all conditions Determine range to and location of, capture unique signature of, tag, track, and target handoff of stationary or moving targets 600 Tm, 1200 Sq, 2400 Pl Improve engagement time and P(h) for individual weapons 0 to 600m in all environments while reducing Solider induced error (no degrade 0-50) Improve terminal effects against protected threats at small arms ranges up to 1200m

Suppress wpns firing signature to limit enemy combatant's ability to visually, acoustically, and thermally classify at 30m Suppress wpn acoustic signature to limit enemy combatant's ability to localize at 125m

Suppress pointing/ illuminating signatures from 50-1200m during day/night conditions Reduce weapon recoil to allow constant sight picture during engagement

Increase weapon and enabler durability and power efficiency



Summary of Small Arms Section Desired Capabilities



Capabilities Development & Integration Directorate

Individual/Speciality Weapons

 Carbine Product Improvement, multi-phase: Increased ROF; Improved full-auto standard trigger; Improved FWD Rails; Improved maintainability (lubricious & protective coatings), predictive failure/preventive maintenance (round counter); signature reduction, B-U sights; recoil mitigation; match-grade trigger; operating system study

Sniper Weapons/Accessories

- Precision Sniper Rifle (PSR) CPD: At HQDA
- "Compact" Upgrade to M110 Semi-Automatic Sniper System (CSASS): Formal RFP closed Source Selection in Process

Pistols/Suppresions/Shotguns

- Modular Handgun System (MHS)
- Signature Suppression capabilities for both visual and aural signatures
- Tactical Compact Shotgun (TCS) Standardize M500 (CPD in progress)

Crew Served Weapons

- Mounted optics for Combat Service and Combat Service Support units
- Recoil-reducing mounts



Summary of Small Arms Section Desired Capabilities (continued)



Capabilities Development & Integration Directorate

Optics

- Mounted Machinegun Optic (MMO)
- Small Arms Fire Control (Squad, Precision, Crew Served)

Small Caliber Ammunition Reduced weight

- Reduced signature
- Reduced fouling and contaminants
- Improved terminal performance
- Improved intermediate barrier performance

40mm Ammunition Increased Lethality, Range, Improved Accuracy and Counter Defilade capability

- Door Breaching capability
- Enhanced Short-Range Anti-Personnel Lethality
- Extended Range capability
- Extended Duration for Flare and Smoke



Summary of Small Arms Section Desired Capabilities (continued)



Capabilities Development & Integration Directorate

Next Gen Squad Automatic Rifle

- Lightweight Weapons
- Lightweight Ammo
- Improved Probability of Hit
- Improved Probability of Incapacitation
- Addresses SA CBA/Squad Gaps (precise fire, volume fire, improved operation and maintenance, avoid detection, improve Soldier mobility)



Summary of Firepower Section Desired Capabilities



Capabilities Development & Integration Directorate

Mortars Precision Mortar Capabilities

- Lightweight and Automated systems
- Extended range (All calibers)
- Precision
- Enhanced lethality across all calibers
- Early entry platforms (LEMS)

Nonlethal Munitions

- Mounted platform capabilities
- Munitions with marking capabilities
- Extended range beyond current capabilities (Standoff)

Shoulder Launched and Soldier Munitions

- Multi-target confined space capability
- Lightweight Systems
- Family of Systems
- Increased Ph and Pi at extended Ranges
- Multi-Colored Signal Hand Grenade
- Improved Tactical Hand Grenade



Summary of Firepower Section Desired Capabilities



Capabilities Development & Integration Directorate

Close Combat Missile Systems (TOW/ITAS and Javelin)–Multi-target

- Enhanced Portability for Dismounts
- Dominant Lethality Overmatch
- Networked Interoperability
- Beyond Line of Sight
- Next Generation Missile compatibility

Lethal Miniature Aerial Munition System (LMAMS)

- Organic lightweight, man-portable, day/night guided munition system that is capable of Line of Sight and Non-Line of Sight engagements through the use of live video feed from the munition to the fire control system.
- Target Wave-Off: Man-in-the-loop capability allows the operator to abort and/or redirect the munition if target parameters change
- Single Operator: Three distinct mission phases are mission preparation, fly out, and terminal engagement
- Soldier-operated munition will provide the capability to engage targets out to 10 kilometers and loiter for up to 15 minutes





Capabilities Development & Integration Directorate

Questions?