



## SOLDIER AS A SYSTEM Program Ensures Soldier Modernization

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Soldiers continue to be our most deployed system during this Global War on Terrorism (GWOT). As such, we must ensure Soldiers deploying into harm's way are properly equipped and trained for the missions they must execute. To accomplish this, the Army has embraced the Soldier as a System (SaaS) integration concept and management strategy to ensure Soldier modernization. SaaS includes everything worn, carried, or consumed by the Soldier to include man-portable crew-served weapons and unit radios. The Soldier as a System program is recognized as the most important Soldier modernization effort in the U.S. Army's Training and Doctrine Command (TRADOC).

Today, more than 300 separate requirement documents drive the acquisition process for Soldier equipment. This is a sharp contrast to the current acquisition of major weapons systems. In July 2003, General Kevin P. Byrnes, the commanding general of TRADOC, directed a series of briefings to get his arms around Soldier requirements. The SaaS Integrated Concept Team (ICT) is depicted in Figure 1 and is comprised of representatives from Army organizations and sister services. The SaaS ICT prepared a series of briefings to the TRADOC commander resulting in the consolidation of Soldier requirements into six Soldier

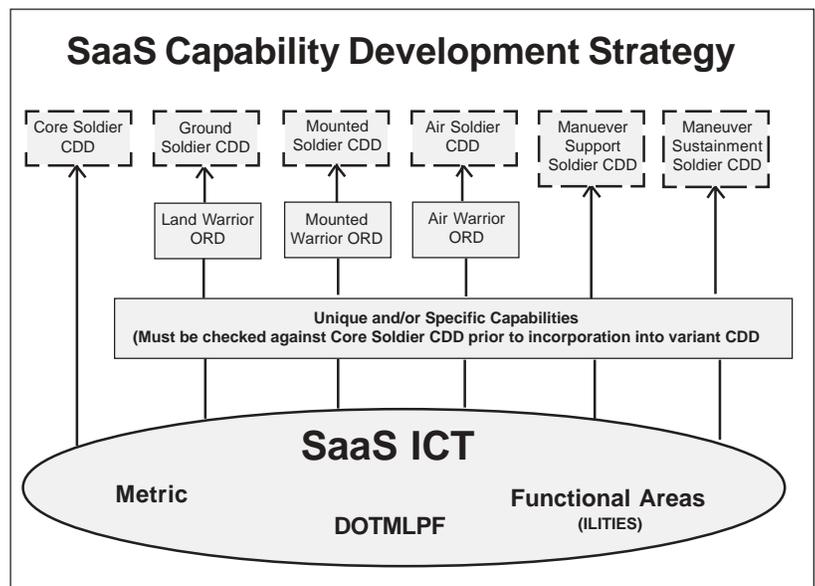


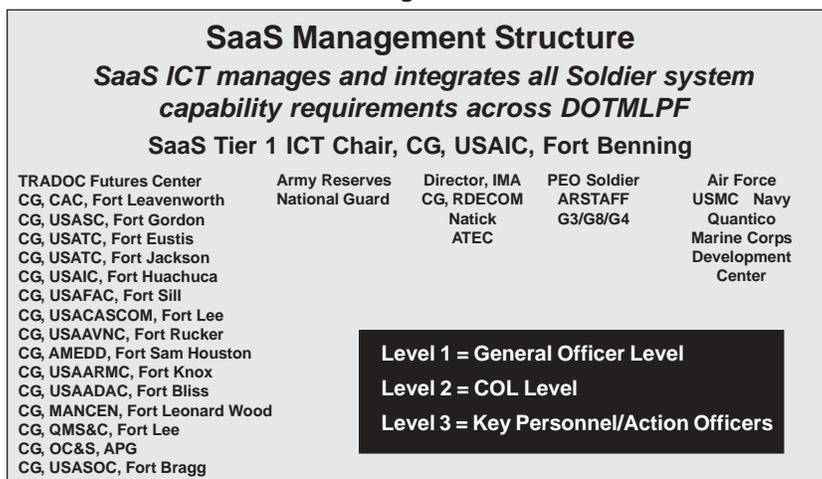
Figure 2

capability development documents (CDDs) named: **Core Soldier**, **Ground Soldier**, **Air Soldier**, **Mounted Soldier**, **Maneuver Support Soldier**, and **Maneuver Sustainment Soldier**.

This new process is a paradigm shift from the old requirements development process for Soldier modernization. The Core Soldier CDD captures the requirements for all Soldiers all of the time and establishes a foundation from which to add unique specific requirements for Ground, Air, Mounted, Maneuver Support or Maneuver Sustainment Soldiers. The ICT works through three levels of teams from action officer to general officer. Figure 2 depicts the role of the ICT and relationship to the Soldier CDDs.

The SaaS ICT began work to consolidate and align all current Soldier programs into each of the six CDDs. There are several efficiencies gained by this consolidation. First, it ensures that all Soldier requirements are aligned and integrated. The SaaS ICT developed three detailed matrices that achieved the following efficiencies:

Figure 1



■ Cross-walked military occupational specialties (MOSs) to key performance parameters (KPPs) and attributes across each CDD;

■ Alignment of Soldier equipment to KPPs and attributes within each CDD and thereby establishing a proponent lead and consolidation of Soldier equipment; and

■ Cross-walked the CDDs against each other to prevent duplication of effort and to identify capability gaps not yet captured.

A secondary benefit of this approach is the consolidation of all Soldier equipment funding lines. Historically, Soldier programs competed with each other for funding in addition to competing with other weapon systems. This resulted in underfunded Soldier programs and equipment. This new approach makes it more difficult to use Soldier programs as bill payers for other weapon systems or programs. The goal of the Soldier as a System approach is to consolidate program management and funding of the entire system, similar to the acquisition strategies used for the Future Combat Systems (FCS) and Stryker.

The SaaS ICT is committed to remain connected to the Operational Army in order to identify Soldier requirements. Soldier feedback comes through several mediums to include direct e-mail from Soldiers deployed in the area of operation (AO), feedback from Soldier after action reports (AARs), and post-combat surveys from units returning from the AO, to name a few. The SaaS ICT validates these requirements and they are incorporated into one of the six Soldier CDDs. These requirements and capabilities are organized in the following six domains:

**Lethality** — The capability to detect, identify, counter, kill — or achieve desired effects against selected targets throughout the full spectrum of military operations, under all climatic conditions and in all operational environments.

**Survivability** — Provision of effective protection, countermeasures and survivability in the full spectrum of military operations under all climatic conditions in all operational environments. All Soldiers must be capable of defending themselves while doing their jobs, even if their jobs do not involve direct combat.

**Mobility** — Enhancement of movement, both mounted and dismounted,

maneuvers and performance of individual tasks across the full spectrum of military operations under all climatic conditions in all operational environments. This includes efforts to reduce the Soldier’s load to the maximum extent possible.

**Sustainability** — The maintenance of healthy Soldiers, both physically and mentally, and the provision of equipment that is reliable and durable, enhances the autonomous ability to sustain effectiveness across the full spectrum and duration of military operations. When required, Soldiers must be resupplied under all climatic conditions and in all environments. This includes all the supplies, services, and maintenance required for Soldier care, use, or consumption.

**Battle Command** — An increased ability to receive, understand, and use information provided by the full spectrum of Battle Command tools and project possible outcomes or solutions is required. Improved Battle Command will provide an enhanced knowledge of individual tasks and missions, a more complete picture of the battlefield, and the ability for rapid exchange of pertinent information across the full spectrum of military operations under all climatic conditions and all environments.

**Training** — Soldier systems must incorporate an individual and collective training capability that supports live, virtual, and constructive training environments in the threshold and an embedded individual and collective training capability that supports live, virtual, and constructive training environments in the future force.

**Rapid Fielding Initiative**

The Global War on Terrorism (GWOT) created another paradigm shift in the manner in which we equip Soldiers. Historically, a Department of the Army Master Prioritization List (DAMPL) prioritized units for fielding of new equipment based on available funding. This created a cascading effect of equipping Soldiers. Soldiers who were the “first responders” were equipped first. Over time, this resulted in a huge gap between the “haves” and “have nots.” This became a critical issue with the call up of Army Reserve and National Guard forces in support of the GWOT. As a result, senior

Figure 3

**FY04 TF Soldier List**

**Soldier Mission Essential Equipment**

- Black Fleece Bibs
- USSOCOM Silk Weight Underwear
- Hydration System
- Wiley-X Goggles
- Glove System
- Cold Weather Cap
- MOLLE and accessories
- AF Desert Flyers Boot
- Standard Army Desert Boot
- Individual Combat Shelter
- Multipurpose Tool
- COTS Socks (4 per)
- Coolmax/Polormax t-shirts
- Combat Belt

**Force Protection/Mobility**

- Advanced Combat Helmet (ACH) and Accessories
- MICH Comms Systems and Accessories
- ICOM Repair Parts Kits
- Knee and Elbow Pads
- Haligan Tool
- Grappling Hooks
- Door Ram
- Battle Axe
- Fiber Optic Viewer
- Quickie Saw and Replacement Blades
- Modular Entry Tools
- Double Key - Cuff

**Lethality**

- Weapon Light
- 249 Rails
- 240 Rails
- M122/A1 Tripods
- Small Binoculars
- Viper (VECTOR 21/ Mark Vii)
- Shotgun (Lightweight Shotgun System)
- Assault Ladder
- MBITR
- Light Weight GPS
- M4/M16 Magazines
- M249 Ammo Soft Pack
- M240 Combat Ammo Pack

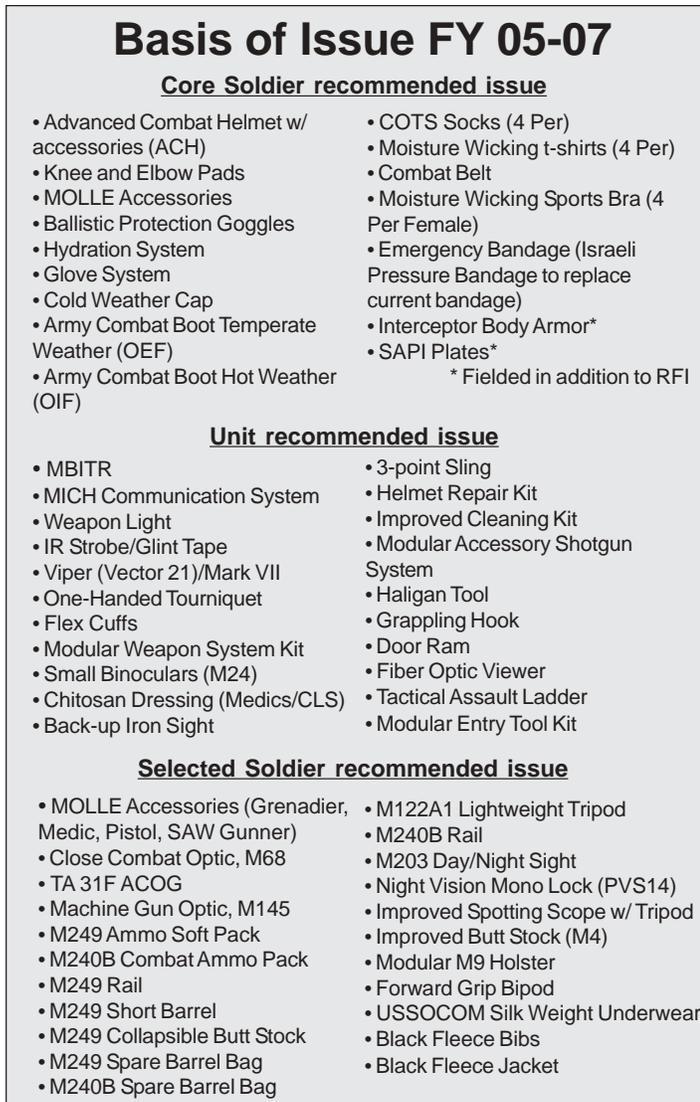
**Individual Weapons Optics**

- Close Combat Optic (M68)
- ACOG (TA31F 4X)
- Machine Gun Optic (M145)

Army leadership sought ways to expedite the fielding of Soldier equipment.

The SaaS ICT, in coordination with Program Executive Office – Soldier (PEO-Soldier) validated Soldier requirements based on lessons learned in the AOR. Congressional support in the form of supplemental dollars provided the funding to procure and expedite fielding of Soldier equipment. This process is known as the Rapid Fielding Initiative or “RFI.” The SaaS ICT continues to validate new

Figure 4



requirements and make adjustments to the RFI list as capability gaps or new requirements are identified. PEO Soldier coordinates the funding, production, and fielding of equipment to our units and Soldiers. In total, PEO Soldier will field 840,000 sets of equipment to the operational Army by the end of FY 07.

There are currently two RFI lists approved. The FY 04 list will continue to be fielded until the second quarter of FY05 and is depicted Figure 3. During the second quarter of FY 05, PEO Soldier will begin fielding the RFI list recently approved by the Army Requirements Oversight Council (AROC). We call this the Basis of Issue FY 05-07 List and this list is described in Figure 4.

Units that have already been fielded RFI will only receive that which was not originally fielded should they be called upon to redeploy. RFI does not field a system. It fields equipment based on production capability and availability. RFI is an interim solution to fielding the Soldier as a System. It is the intent of Soldier as a System to institutionalize RFI through the approval and funding of the six Soldier CDDs.

As leaders, we must set expectations for our Soldiers. Properly equipping Soldiers is a delicate balance between needs and wants. No one wants to tell an operational commander “no.” However, we must acknowledge the second and third order effects caused by the purchase of commercial off-the-shelf technologies to meet a perceived need. The SaaS ICT process, shown in Figure 5, ensures we capture and validate Soldier requirements through Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facility (DOTMLPF) analysis. This process helps to distinguish between the need and want.

Soldier requirements are captured through the mediums identified on the left of the chart. They are then categorized into capabilities we call “ilities” found in the left cylinder. The ICT then evaluates the requirement against the “metric” in the center cylinder. Finally, the capability requirement is aligned with one of the six Soldier CDDs in the right cylinder. The end result is an integrated Soldier System.

In closing, the SaaS ICT continues to identify and validate Soldier requirements. Currently, the Core Soldier CDD is at TRADOC for staffing and approval. The Ground Soldier is at HQDA in preparation for Joint Requirements Oversight Council (JROC) approval. The Mounted Soldier ORD was approved by the Army Requirements Oversight Council (AROC) and is currently pending JROC approval. The Air Soldier ORD is JROC approved and is currently in fielding. The Maneuver Support and Sustainment CDDs are in development. The SaaS ICT anticipates forwarding these CDDs to TRADOC by first quarter FY 05.

Soldiers are the center piece of our formations and are the most deployed system in the Army. We must continue to upgrade and modernize our Soldiers as we do major weapon systems and platforms. The Soldier as a System integration concept and management process will ensure that no Soldier goes into harm’s way without the proper equipment.

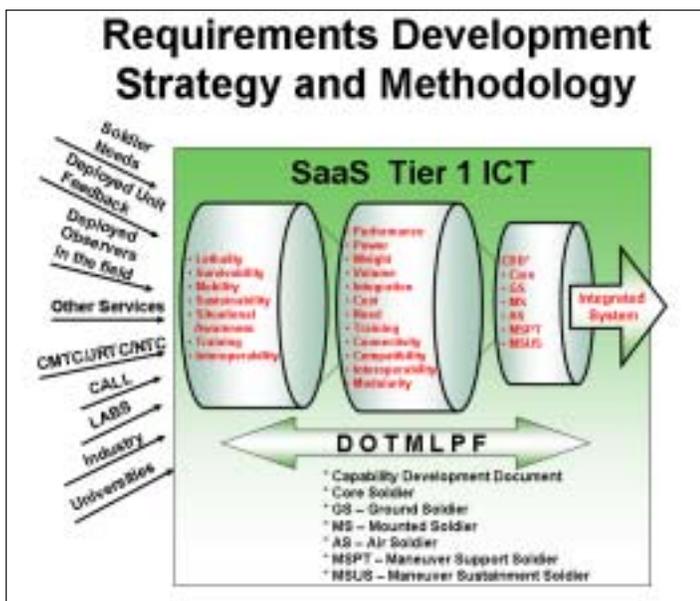


Figure 5

**David J. Libersat** is currently employed by SYColeman as the project officer for the Soldier as a System program with the U.S. Army Infantry School's Directorate of Combat Developments, Fort Benning, Georgia. Libersat retired from active duty as a command sergeant major in September 2000. His last assignment was as the top enlisted Soldier of the U.S. Army Infantry School.