



ARMY LOGISTICS

Quick Reference



The **Official Army Smartbook** for understanding Army Logistics from factory to foxhole, including the role of logistics units and their responsibilities and interconnectivity



This page left intentionally blank

Table of Contents

Purpose & Introduction.....	5
Major Logistics Players.....	9
Evolution of Modern Army Logistics.....	12
Birth of Army 2020 Logistics.....	14
Reserve Reliance and the Active Component/Reserve Component Balance	16
Logistics from the Soldier to Echelons above Brigade	18
Tactical Logistics	
Forward Support Company.....	18
BSB/ASB.....	21
Distribution Company.....	24
Forward Maintenance Company.....	26
Forward Support Medical Company.....	27
BCTs (including S-4)	28
Divisions (including G-4)	28
Corps (including G-4)	30
Contract support (AFSBn).....	32
Brigade Logistics Assistance Team (BLST).....	33
Echelons above Brigade.....	34
Combat Sustainment Support Battalion.....	
Composite Truck Company (Light & Heavy).....	36
Support Maintenance Company.....	37
Composite Supply Company.....	37
Field Services Company.....	38
QM Supply Company.....	38
Modular Ammunition Company.....	39
POL Truck Company (7.5K EAB Linehaul).....	39
POL Truck Company (5K EAB Linehaul).....	40
POL Truck Company (5K Tactical).....	40
Medium Truck Company (EAB Linehaul).....	40
Medium Truck Company (EAB Tactical)	41
Medium Truck Company (PLS).....	41
Light/Medium Truck Company.....	42
Heavy Equipment Transport Company	43
Inland Cargo Transfer Company	43
QM Water Purification and Distribution Company.....	44
Mortuary Affairs Company.....	44
Force Provider Company.....	45
Theater Aerial Delivery Company.....	45
Rigger Support Team.....	46
Aerial Delivery Support Company.....	47

Petroleum Supply Battalion.....	48
Petroleum Support Company	48
QM Base Petroleum Lab Team.....	49
Petroleum Pipeline and Terminal Operating Battalion.....	50
Pipeline Terminal Operating Company.....	50
Transportation Motor Transport Battalion.....	51
Trailer Transfer Point Team.....	52
Ordnance Battalion (Ammunition).....	52
Ordnance Battalion (Ammunition) (WHNS)	52
Ordnance Company (Ammunition) (WHNS).....	53
Sustainment Brigade.....	54
Human Resources Company.....	57
Financial Management Company.....	57
Operational Logistics.....	59
Expeditionary Sustainment Command.....	59
Petroleum Group.....	61
Petroleum Liaison Team.....	62
Movement Control.....	63
Movement Control Battalion.....	63
Movement Control Team.....	65
Expeditionary Railway Center.....	67
Theater Logistics.....	67
Theater Sustainment Command.....	67
TSC Support to Special Operations Forces.....	69
Expeditionary Sustainment Command.....	70
Movement Control Battalions.....	70
Petroleum Pipeline and Terminal Operating Battalions.....	71
Petroleum Group.....	72
Human Resource Sustainment Center.....	72
Financial Management	73
Medical Logistics Management Center.....	73
Army Field Support Brigade.....	74
Logistics Support to Army Special Operations Forces.....	78
Sustainment Brigade (Special Operations) (Airborne)	79
Group Support Battalion.....	79
Support to Ranger Battalions.....	80

Theater Opening.....	81
Theater Sustainment Command Role.....	81
Expeditionary Sustainment Command Role.....	82
Sustainment Brigade Role	82
Transportation Theater Opening Element.....	83
Port Opening.....	85
Military Surface Deployment and Distribution Command.....	86
Rapid Port Opening Element.....	87
Transportation Brigade (SDDC Terminal Brigade).....	88
Transportation Battalion (SDDC Terminal Battalion).....	89
Joint Task Force-Port Opening (Air Port of Debarkation).....	90
Joint Task Force-Port Opening (Sea Port of Debarkation).....	90
Sustainment Brigade Role.....	90
Transportation Brigade (Expeditionary).....	91
Transportation Terminal Battalion.....	93
Logistics Support Vessel.....	94
Heavy Boat Company.....	94
Medium Boat Company.....	95
Harbormaster Operations Detachment.....	95
Seaport Operations Company.....	96
Floating Craft Company	97
Modular Causeway Company.....	98
Expeditionary Theater Opening Element.....	99
Automated Cargo Documentation Team.....	100
Watercraft Field Maintenance Company.....	100
Transportation Theater Opening Element.....	100
Transportation Brigade (SDDC Terminal Brigade Reserve Component).....	101
Deployment & Distribution Support Battalion.....	102
Deployment and Distribution Support Team.....	103
Theater Gateway Personnel Accountability Team.....	103
Joint Deployment and Distribution Center.....	104
Theater Closing.....	105
Theater Logistics Overview.....	106
Logistics Contracting.....	108
Strategic-Level Connections and National Enterprise Partners.....	110
Deployment Support Command.....	115
Future of Army Logistics.....	117

Appendix.....	119
Classes of Supply.....	120
Breakdown of Logistics Functions.....	121
Acronyms and Abbreviations.....	122
Glossary of Key Terms.....	125
Logistics Related Automated Systems.....	141

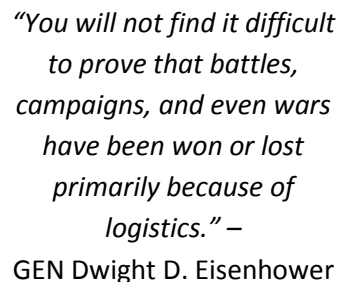
Purpose

Globally Responsive Sustainment (GRS) as developed in CASCOM's Army 2020 and Beyond Sustainment White Paper offers to inform the Sustainment community of practice in future force modernization. While the White Paper offers attributes to shape the future, Army Logistics Quick Reference offers very specific and detailed understanding of current structure to provide leaders a departure point. This paper can be taken in part or whole to understand current approved Sustainment force structure and force design; and provoke thought on future initiatives.

Introduction

Since armies first marched, logistics laid the foundation for success or failure on the battlefield. Successful military leaders understand that to be triumphant, a Soldier must be fed, clothed, armed, cleaned, rested, and transported while his equipment must be maintained, fueled, and controlled through accurate records. For all of those things to happen, a logistician must plan, provide services, weight the priority of resources, and estimate current and future requirements. In direct terms, logistics enables maneuver's success. Army logistics is a critical capability of unified land operations providing support to Army, joint and coalition partners engaged in operations across the operational environment.

Because Army logistics is successful, there is a myth that logistics is a simple, easy process. Companies such as FedEx and UPS run commercials that make logistics sound easy and even the dictionary definition of logistics – “Logistics is the management of the flow of resources between the point of origin and the point of consumption in order to meet a requirement” – contributes to the myth. Even Joint doctrine simplifies it even more – “Planning and executing the movement and support of forces.”¹ Behind the curtain, however, lays a multifaceted and interwoven system of processes that stretch from the Soldier in the foxhole all the way to commercial industry. At any given moment, supplies are moving through a complex and dynamic – and even chaotic – system to provide sustenance, maintenance, fuel, ammunition, supply and transport to a multitude of Soldiers in multiple locations throughout the world. Adding to this complexity, sustainment is a war-fighting function, i.e. it must do all of its logistics tasks while potentially engaged with the enemy.



“You will not find it difficult to prove that battles, campaigns, and even wars have been won or lost primarily because of logistics.” –
GEN Dwight D. Eisenhower

While the civilian definition of logistics is simple, the Army definition is more descriptive. In specific terms, Army doctrine states that logistics is comprised of seven major functions – supply, field services, maintenance, transportation, distribution, operational contract support, and general engineering:

¹ JP 4-0

- Supply is acquiring, managing, receiving, storing, and issuing all classes of supply required to equip and sustain Army forces.
- Field services include feeding, clothing, and showering Soldiers as well as laundering and repairing their clothing.
- Maintenance involves preserving materiel in serviceable and operational condition, fixing it, or updating/upgrading its capability.
- Transportation is the movement of units, personnel, equipment, and supplies.
- Distribution is the synchronization of all elements of the logistical system to provide adequate support, i.e. giving the right things to the right people right on time.
- Operational contract support integrates and manages the acquisition, provision, and use of all types of support from commercial sources.
- General engineering, while a logistics function, is not performed by logistics units.

“Gentlemen, the officer who doesn't know his communications and supply as well as his tactics is totally useless.” –
 GEN George S. Patton

In October 2013, Army Chief of Staff GEN Raymond Odierno issued strategic priorities for the Army that had a direct impact on future Army logistics. Odierno said the Total Army – active component, Army National Guard (ARNG) and U.S. Army Reserve (USAR) – must train and equip itself to rapidly deploy, fight, sustain, and win. GEN Odierno’s priorities also direct support of the Joint Force with critical enablers, including logistics, both enroute to and operating within expeditionary environments alongside unified action partners. To meet these priorities, logisticians must maintain an emphasis on creating and supporting adaptive officers and noncommissioned officers through leader development and realistic training. They must be prepared and capable to lead a ready, modern, and globally responsive and regionally engaged Army with Soldiers committed to the Army profession. To empower a globally responsive Army, logisticians must be ready to rapidly deploy to support the fight to win whenever and wherever our national interests are threatened. Logistics planners must also ensure the right mix of operationally ready and responsive Total Army forces.

As GEN Odierno points out, Army logisticians face a gamut of challenges from a volatile, uncertain, complex and ambiguous battlefield and it will continue to face fiscal and force reductions. As logistics downsizes in the future it will also transition to sustain a smaller, but ready and capable Total Army that provides Joint and Combined forces with expeditionary and enduring landpower for the full range of military operations. Army logisticians will continue to be operationally adaptive to defeat these complex challenges that blur the distinctions of past conflicts. To overcome these challenges, logisticians at all levels will continue to use both art and science to be successful. Logistics leaders will organize equipment, Soldiers, and collective training to accomplish their mission. They will continue to blend those tools with their own experience, knowledge and ingenuity to meet the challenges of the battlefield – Political, Military, Economic, Social, Information, and Infrastructure (PMESII) – to develop, adapt and execute their own plans to accomplish their assigned mission. This is nothing new. In the war in Afghanistan, restrictions placed upon the types of cargo that could traverse the Pakistan ground line

of communication (PAK GLOC) into Afghanistan and the decision to use host nation trucking for logistics in Afghanistan presented planners with consistent tracking and control challenges. In the future, unforeseen human obstructions and acts of nature, such as strikes at seaports, hurricanes and earthquakes, will require logisticians to rework routes and change modes of transport. Enemy actions, including improvised explosive devices, hijacking of contracted commercial vehicles, pilferage, and capture of supplies en route will also force logisticians to evaluate and reevaluate how they provide goods and services to Soldiers.

As with all aspects of war craft, information is critical to this process and adds to the complexity. Military logisticians must use computer systems and software to ensure that the logistics pipeline is flowing from factory or farm – military or civilian – to the foxhole. They must analyze, understand, visualize, describe, direct, lead, and assess the conduct of operations to ensure the flow of supplies and services are both sufficient and efficient. Concurrently, they must take this information and balance competing requirements.

Visibility, velocity, precision, and integration (V2PI) is the performance metrics used to express gaps or proposed solutions in a manner that is easily understood and readily demonstrates the potential impact on future operations:

- Visibility enables responsive sustainment management, achieved through superior situational awareness (using a sustainment information system), a common operating picture (COP), total asset visibility, personnel tracking, and effective physical distribution services.
- Velocity is the reduction of distribution cycle times through management. It involves the exploitation of guaranteed physical distribution networks, systems, and data communications and utilizes more capable distribution assets. The end state is a reduction in the distribution cycle times providing required materiel to the organization at the right time.
- Precision is the ability to deliver the right supplies and services, in the right quantity and at the right time and place. It transcends the ability to forecast demands more precisely, as well as the ability for the distribution system to deliver the supplies and services precisely and on time. It also means that the sustainment information system must be capable of responding and providing the end-user with information about when the supply or service will be provided.
- Integration is the coordination and synchronization of sustainment assets, organizations and information at the highest level in concert with maneuver support planning. It involves the unity of command, maintaining a COP, imposing technical control on sustainment assets and the ability to respond with timely decision making. The ability to monitor, measure and manage end-to-end sustainment activities is fundamental in order to reduce the degree of friction inherent in a logistics pipeline.

Bringing all of these elements together, successful logistics leaders ensure that they have increased the commander's operational reach, enhanced his freedom of action, and prolonged his endurance.

In many forums, CASCOM commander MG Larry Wyche has reinforced that logistics leaders need to understand the complete materiel and distribution enterprise – from the factory to the foxhole. That includes understanding everything from contractors on the battlefield to how all classes of supply make their way into the theater of operations. An Army logistician can only be successful by training, taking key positions and learning the craft of warfighting and maneuver logistics. Leaders must develop themselves and their subordinates in the craft and take advantage of all opportunities to exercise that craft, especially when at home station. By learning the enterprise and gaining knowledge, a logistics leader can use the full range of resources available to overcome the complexities created by the enterprise and the fog of war.

By law under U.S. Code Title X, the Army has certain responsibilities, most directly or indirectly involving Army logistics. Title X specifically charges the Army with administrative control (ADCON) of Army forces assigned to combatant commands. That includes providing administrative and logistic support to these forces. When designated an executive agent, the Army also enters into inter-Service, interagency, and intergovernmental agreements for certain responsibilities including:

- Civil engineering support
- Common-user land transportation
- Disaster assistance
- Force protection
- Mortuary services
- Detainee operations
- Bulk petroleum management

Of these responsibilities, all but detainee operations and force protection have direct logistics responsibilities.

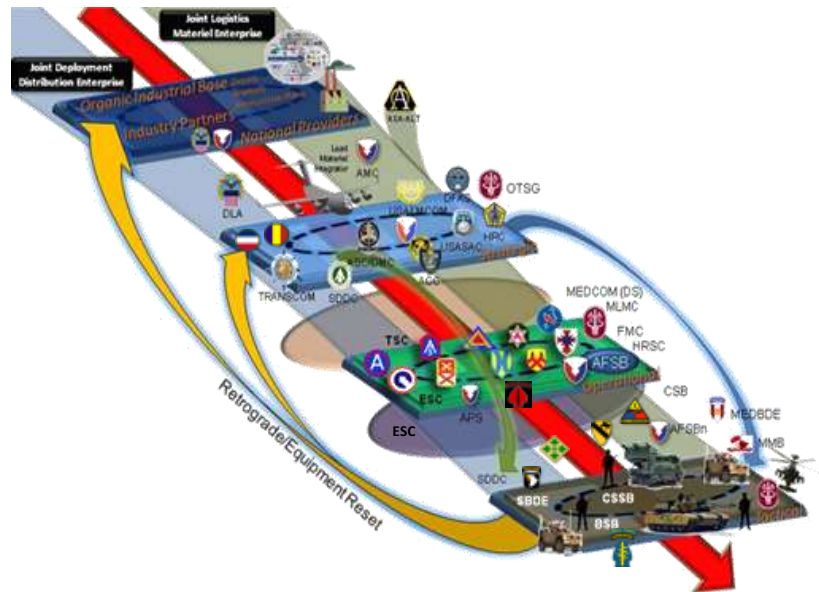
Title X also includes combatant commander's responsibilities and authorities. Two of these overlap the military department's Title X functions: joint training and directive authority for logistics. Title X functions and the diverse set of missions assigned by the President and combatant commanders link the Army's enduring roles to its vision and mission.²

"I don't ever, ever, ever want to hear the term 'logistics tail' again. If our aircraft, missiles, and weapons are the teeth of our military might, then logistics is the muscle, tendons, and sinews that make the teeth bite down and hold on— logistics is the jawbone! Hear that? The jawbone!" – Lt. Gen. Leo Marquez, USAF

² See FM 1

Major Logistics Players

By 2019 there will be approximately 1,550 logistics units – 80 percent of which will be in the USAR and ARNG – comprised of 65 unit types to meet all logistics requirements. These units range from a four-star Army command to specialized platoons. Each of these units plays a unique and critical role in meeting Warfighter requirements at home station, conducting training, or conducting deployed humanitarian or combat missions.

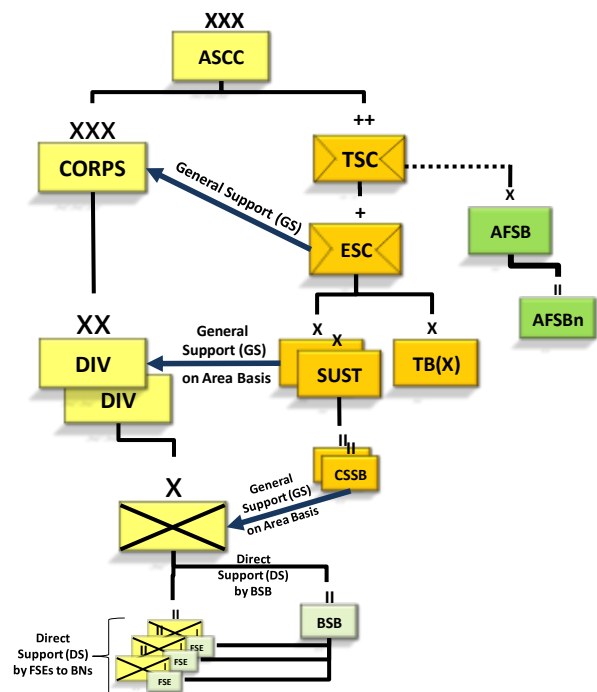


Those 65 Army logistics unit types can be divided into four general groups:

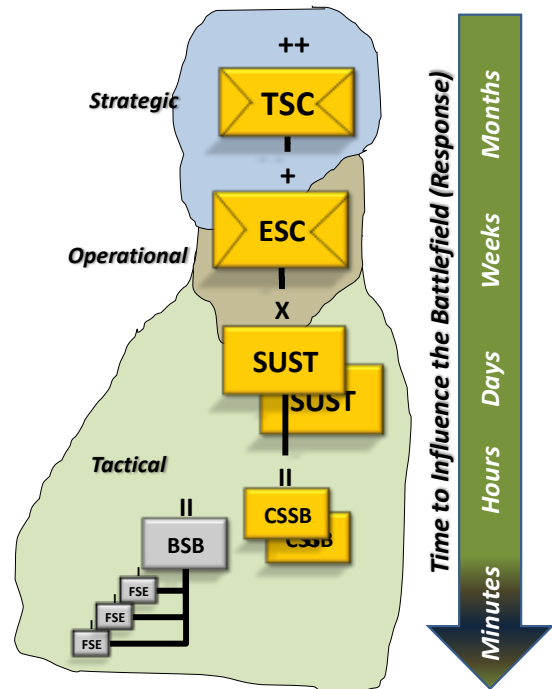
- Organizations that provide direct services or support (Direct Support Providers)
- Organizations that provide indirect support (General Support Providers)
- Organizations that plan and support at an operational-to-strategic level (Enablers)
- Organizations that plan and coordinate from a strategic-to-national provider level (Supporters)

In a deployed scenario, Army logistics has a general flow from the Soldier to the national provider:

- Subordinate platoons of the forward support companies (FSC) work directly to support brigade combat team (BCT) battalions.
- The FSCs work in coordination with BCT battalions to weigh support requirements at the tactical level.
- The 60 Brigade Support Battalions (BSB) have mission command of the FSCs and they, in turn, answer directly to the Brigade Combat Team (BCT). They are responsible for the coordination of logistics support for the entire BCT. They also have a Distribution Company and a Support Maintenance Company to provide direct support to the BCT.



- The Combat Sustainment Support Battalion (CSSB) and its subordinate companies provide general support on an area basis to units located at echelons above brigade (EAB) (e.g. engineers, military police, etc.) and the BCTs.
- At the same time the CSSBs are moving supplies forward, movement control teams (MCT) under the mission command of a movement control battalion (MCB) assist in keeping supply routes synchronized.



- Enablers, including the sustainment brigade (SUST BDE), expeditionary sustainment command (ESC) and theater sustainment command (TSC), provide planning, support and mission command up to the theater level. The TSC and ESC coordinate logistics requirements with the Army Service Component Command (ASCC) and the Combatant Command (COCOM). They specifically ensure the pipeline of supplies moves smoothly and coordinate with strategic providers, including:
 - Army Materiel Command (AMC)
 - U.S. Transportation Command (USTRANSCOM)
 - Defense Logistics Agency (DLA)
 - Military Surface Deployment and Distribution Command (SDDC)
- Depending upon requirements, some services, including food service and maintenance, may be contracted to civilian companies. Most of that contracting responsibility falls to AMC's Army Field Support Brigades (AFSB) and Army Field Support Battalions (AFSBn) who, when deployed, get direction from TSCs.
- AMC's Contracting Support Brigade with its subordinate Contingency Contracting Battalions also supports the logistics chain as the primary operational contract support planner, advisor and contracting commander to the ASCC. The CSB, through contracting authority delegated by the ECC, executes theater support contracting actions and coordinates other common contracting actions as directed by the supported commander.³
- In addition to conventional forces, Special Operations Forces (SOF) have special logistics support units, including the Sustainment Brigade (Special Operations)(Airborne), Group Support Battalion (GSB) and Ranger Support Company (RSC).

How these units relate to each other on the battlefield is as important as who is on the battlefield. Command and support relationships define not only who does the administrative functions of rating

³ See FM 4-92

schemes but also defines mission command and who controls the priority of the logistics assets. To be effective, these relationships must be comprehensive and not rigid to face the complex, fluid nature military operations.⁴

To overcome these challenges, mission command doctrine lays out how mission command relates to how the Army operates. For logistics, mission command and relationships are a critical component of how the intricate and complex enterprise operates effectively.

Most relationships in Army logistics are general support – normally on an area basis. This is true for nearly all logistics units in EAB. At the tactical level, BSBs are all in a direct support relationship with the maneuver or maneuver support brigades. Their subordinate FSCs are normally under the mission command of the BSB with a direct support relationship with the battalion to which they are assigned. At this tactical level – where the logistics train meets the supported Soldier – is often where the art of mission command and command relationships comes into play. The success of the logistics mission and the success of the maneuver commander are directly dependent upon how commanders work through the complex operational challenges.

Army Support Relationships								
If relationship is:	Then inherent responsibilities ...							
	Have command relationship with:	May be task-organized by:	Receives sustainment from:	Are assigned position or an area of operations by:	Provide liaison to:	Establish/maintain communications with:	Have priorities established by:	Can impose on gaining unit further command or support relationship by:
Direct support	Parent unit	Parent unit	Parent unit	Supported unit	Supported unit	Parent unit; supported unit	Supported unit	<i>See note¹</i>
Reinforcing	Parent unit	Parent unit	Parent unit	Reinforced unit	Reinforced unit	Parent unit; reinforced unit	Reinforced unit; then parent unit	Not applicable
General support reinforcing	Parent unit	Parent unit	Parent unit	Parent unit	Reinforced unit and as required by parent unit	Reinforced unit and as required by parent unit	Parent unit; then reinforced unit	Not applicable
General support²	Parent unit	Parent unit	Parent unit	Parent unit	As required by parent unit	As required by parent unit	Parent unit	Not applicable
Note 1: Commanders of units in direct support may further assign support relationships between their subordinate units and elements of the supported unit after coordination with the supported commander.								
Note 2: <i>Area Support</i> is a term used to describe a geographic area in which a unit may provide support. Normally, this term is associated with General Support , e.g. the Combat Sustainment Support Battalion provides General Support on an Area Basis for units in echalons above brigade (EAB).								

This chart outlines the four types of Army support relationships. Most logistics units fall under either direct support (e.g. FSCs) or general support (e.g. CSSB). Support, especially general support, may be conducted on an area basis.

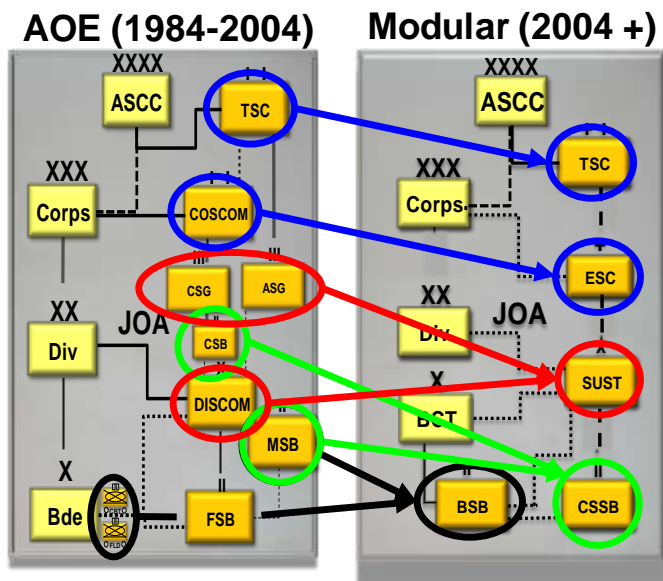
⁴ ADP 6-0

Evolution of Modern Army Logistics

Over the course of the past 20 years, Army logistics dramatically transformed in its structure to meet the needs of an army at war and create a regionally engaged, globally responsive army of the future. This transformation has involved reductions in the types and numbers of units while maintaining a high level of service to the Warfighter.

From the mid-1980s through 2004, the Army of Excellence (AOE) tied logistics units tightly to corps and divisions. Corps Support Commands (COSCOM) answered directly to corps. Division Support Commands (DISCOM) answered directly to divisions. Forward Support Battalions (FSB) answered directly to combat brigades. While that system worked well for the Army in a Cold War, corps/division centric force, it did not meet the needs of a smaller Army with a different set of priorities. Army logistics also began the AOE era with a large footprint that was consistently made smaller even as the combat formations grew in size and number moving into modularity.

When the transition to modularity began in 2004, the basic concept was to make the Army brigade centric with a “plug-and-play” capability to task organize quickly to meet national security needs. It was also designed to meet a new set of challenges, including smaller-scale conflicts. No longer was the Army designed to fight the Soviets at the Fulda Gap, instead it was designed to be capable of decisive action against a wide array of adaptive threats and operationally adaptive to defeat the complex challenges that blur the distinctions of past conflicts. This also meant a smaller, agile force was required to meet the smaller combat challenges of the future.



This is the transition of logistics from AOE to modularity. Solid lines show assignment, dashes show OPCON, and dotted lines show coordination.

For logisticians, the change to modularity meant restructuring to be BCT-centric, utilize technology and scale down the force to gain efficiencies while maintaining the combatant commander’s requirements. Those structural changes saved the Army spaces as well as reduce the mission command structure. Many unit types were consolidated into new unit types with more robust, wide-ranging missions. The biggest change was moving mission command for logistics under a logistics structure. Modularity converted the Theater Support Command into the Theater Sustainment Command, the COSCOM into the ESC, the Division Support Command (DISCOM) into the SUST BDE, the Main Support Battalion (MSB)

into the CSSB, and the Field Support Battalion (FSB) into the Brigade Support Battalion. In the end, these changes under modularity added flexibility to logistics.

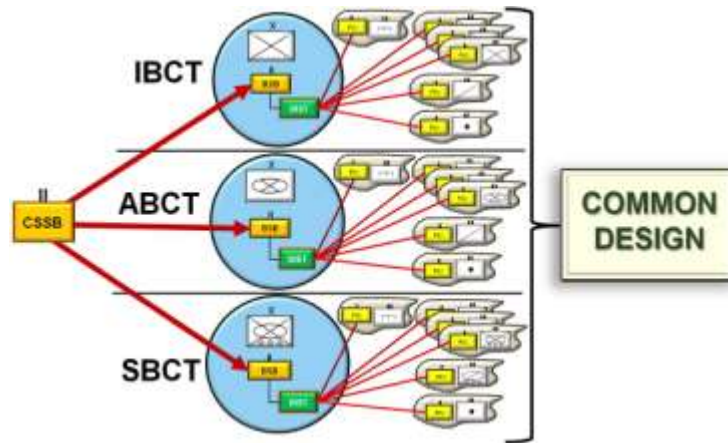
While logistics gained centralized mission command, easier task organization, standardized unit designs, a reduced footprint and improved coordination with the materiel enterprise system, it was not without challenges. The changes made under modularity worked in the conflicts in Iraq and Afghanistan but they came at the price of mission command, synergy and economy of scale. Mission command and synergy were challenged largely because logistics units were piecemealed together and often given missions for which they were not designed. At the same time, we also created units so specialized that they never deployed for their specialized mission. These challenges often led to a larger logistics footprint on the battlefield than required while not always having the right type of unit.

“The war (World War II) has been variously termed a war of production and a war of machines. Whatever else it is, so far as the United States is concerned, it is a war of logistics.” – Fleet ADM Ernest J. King in report to Sec. of the Navy

In many ways, logistics was already modular in AOE; under modularity, logistics became hyper-modular with too many small units that were overly specialized. A “unit” could literally be a single mechanic in a maintenance company. In a few instances during the wars in Iraq and Afghanistan, planners thought they requested an entire company but only received a headquarters without mechanics. Some logistics areas lost a degree of functional expertise; this was especially true in the areas of movement control and petroleum units where skilled fuel distribution and management units and personnel disappeared from the Army logistics arsenal. Synergies and habitual relationships were lost as units were deployed against COCOM requirements using the Army Force Generation (ARFORGEN) process. These strained habitual relationships emerged when divisions and BCTs no longer “owned” their logistics assets. This caused friction since supporting and supported units often met for the first time on the battlefield. Without the benefit of long-term working relationships, confidence in logistics by maneuver commanders had to be earned. On the home front, the reduction in logistics units also created a challenge. Whereas there were normally multiple logistics units on military posts in AOE, the smaller number of logistics units in the Army meant that there was often only one supply, transportation or maintenance unit per post to support all of the BCTs and EAB units located there; if that logistics unit deployed – or even part of it deployed – there was an immediate void in that area of service and capability at the post. This created friction as many units were left “orphaned” at home station without support. This was especially evident during the wars in Iraq and Afghanistan when many sustainment units deployed out of cycle with each other and out of cycle with the supported units on the same installation.

Birth of Army 2020 Logistics

Changing the size and mission of the Army began during the withdrawal from Iraq and continues during the planned withdrawal from Afghanistan in 2014. A new dynamic, based on using the best of modularity and contending with further reductions in the size of the Army began taking shape in 2012. Analyzing gaps and looking at the long-term requirements of a largely CONUS-based Army operating in a complex contemporary security environment, logisticians began working to fill gaps and transition formations created during



By adding FSCs to the Stryker BCT (SBCT) and to the other battalions in the SBCT became much easier to task organize with other BCTs. Previously, SBCTs were difficult to task organize since their logistics was ad hoc.

modularity to support an Army at war and operating primarily from Forward Operating Bases (FOB) into an Army ready to support the logistics challenges created by significant growth in the size of the BCTs – the addition of a third maneuver battalion, changing the BCT special troop battalion to a brigade engineer battalion (BEB) and adding the BEB and FSCs to the Stryker BCT (SBCT). All those efforts became the Army of 2020 and developed into the 2020 logistics concept of support.

Changes for 2020 fine tuned the modular design. The 2020 logistics concept of support centers on habitually aligning selected logistics capabilities into three corps CSSBs and 10 division-aligned CSSBs. Eight additional CSSBs in the ARNG are also expected to be converted by 2020. In turn, these division and corps CSSBs have the responsibility to provide general support to units within corps and or division Areas of Responsibility (AOR). Gaining synergy through area support is a must to balance the Army and maintain an effective force. Consolidating capabilities and being able to distribute them back out to the force on a geographic basis leverages economy of force and flexibility and saves time, materiel and resources. Providing general support on an area basis reduces security risks by consolidating movement, e.g. there are fewer vehicles and drivers providing sustainment. Fewer vehicles translate to lower fuel, vehicle and manpower requirements by the sustainment footprint and increased capacity in a theater-level supply pipeline. By making these organizational and support relationship changes, sustainment forces provide the same – and in some cases, better – support to the BCTs.

One of the more contentious changes in 2020 logistics was the decision to move some capabilities out of the Brigade Support Battalions (BSBs) and place it into echelons above brigade, including water purification, bulk fuel storage and infantry troop transport capability. Water production is now consolidated at the CSSB and can be projected into a BSB if mission conditions support and justify it.

This unencumbered the mobile force, especially when on the offense or defense when there isn't time to establish water production operations – even if there is a suitable source of water. The same is true for bulk fuel storage. The large-capacity fuel storage bags initially scheduled to be added to the BCTs are designed to be placed on the ground and were originally added for forward operating base (FOB) operations. Since they are not a mobile source of storing fuel, they would limit maneuver. Ironically, removing troop transport from the Infantry BCT (IBCT) made it more mobile since the trucks used for troop movement are not always required. When they are required, they will be available and in larger quantities than before the change.

Although the CSSB now provides a base capability with a Composite Truck Company, Composite Supply Company and Support Maintenance Company, it still retains a modular construct and can easily be tailored with additional integrated capabilities – up to seven companies. Since the corps- and division-aligned CSSBs have a common base design and capability, the 2020 CSSBs are able to provide augmentation/surge capability to each other when required. By providing simultaneous area support to EAB formations and BCTs the CSSBs are more responsive operating within prudent economies of scale. Additionally, the CSSBs also filled a major EAB sustainment gap caused by reductions in internal logistics capabilities, including the Maneuver Enhancement Brigade (MEB) and Fires Brigade (FIB).

***Organic Support** includes capabilities inherent within a unit that allow it to manage and execute requirements without external support. Examples include maintenance, supply handling, supply storage, distribution, transportation and materiel handling. These are prioritized by and are under a unit commander's control.*

***Area Support** provides capabilities, typically on a geographic basis, that enables units to accomplish missions/tasks that they cannot otherwise execute within their organic sustainment structure. This can include providing supply, maintenance, transportation, field services, health services, personnel services and distribution. Use of area support is designed to provide efficiency without sacrificing effectiveness. These are prioritized by and under the control of a higher logistics headquarters.*

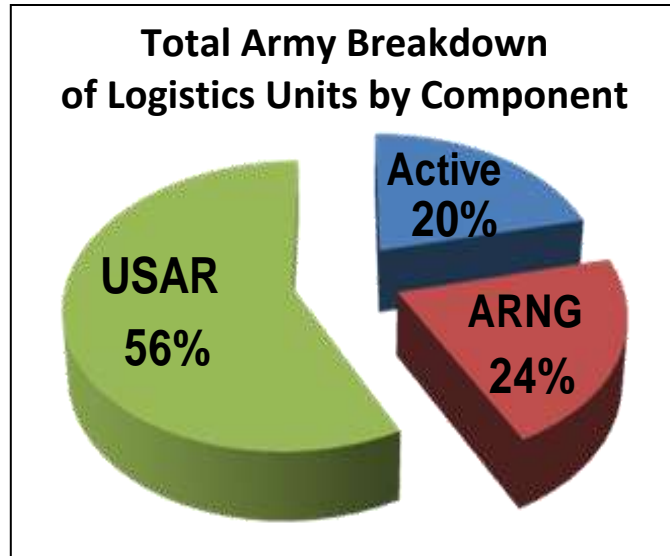
In addition to changes to the CSSB, there is also a significant change to the sustainment within BCTs. Unlike other BCTs, SBCTs didn't have FSCs. Without these critical units in the SBCT, the SBCT's BSB faced a mission command challenge. The 2020 Concept of Support adds these companies into the SBCT giving the subordinate battalions better support. The 2020 designs also gives the SBCT, IBCT and Armor BCT (ABCT) the same sustainment structure allowing for easier cross organization of a task force.⁵ An additional FSC was added to support the third maneuver battalion and an FSC was added to support the Brigade Engineer Battalion (BEB) in the new BCT design.

⁵ See "Sustainment Concept of Support: Tactical-Level Sustainment for Army 2020" for additional information.

Reserve Reliance and the Active Component/Reserve Component Balance

As part of the Army draw downs scheduled to occur before 2020, Army leadership determined to shift more capabilities from the active component into the USAR and ARNG. This change is not new. Even during the growth years during the conflicts in Iraq and Afghanistan, the role and dependence on the reserve components grew. By 2017, 78 percent of Army sustainment will be in the USAR and ARNG. By 2020, that is expected to increase to 80 percent. Many logistics units and capabilities reside only in the reserve components. Those units are:⁶

- Expeditionary Rail Center – 1 in USAR
- Petroleum Group – 1 in USAR
- Deployment Support Brigade – 4 in USAR
- Deployment Support Battalion – 13 in USAR
- Transportation Motor Battalion – 11 in ARNG and 8 in USAR
- Ammunition Battalion – 2 in USAR
- POL Pipeline & Terminal Operations Battalion – 3 in USAR
- Light/Medium Truck Companies – 29 in ARNG
- Medium Truck Company (EAB Tactical) – 22 in ARNG
- POL Truck Company (7.5K EAB Linehaul) – 8 in USAR
- POL Truck Company (5K EAB Linehaul) – 2 in ARNG and 18 in USAR
- POL Supply Battalion – 10 in USAR
- POL Pipeline & Terminal Operations Company – 12 in USAR
- Force Provider Company – 1 in USAR



The USAR and ARNG compose the largest percentage of the logistics units in the Total Army – 80 percent. Some types of units are exclusively located in the USAR and ARNG.

Renewed reliance on an operational reserve was reinforced in October 2013 when GEN Odierno said the Army will “serve as a Total Army: Soldiers, Civilians and Families of the Active Army, the Army National Guard, and the US Army Reserve who share the same professional ethic and commitment to the defense of our nation and way of life.” He further said the Total Army will be properly trained and equipped to meet the expeditionary challenges of the future and that the Army will provide the right education and training to the right individuals at the right time among all three components.

⁶ Name designations for unit types are from the “Sustainment Handbook (2013)”

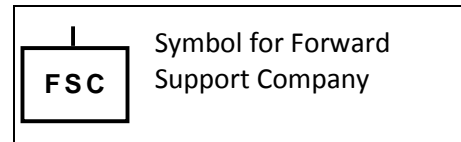
Additionally, the Army will challenge and certify units from all components through CTCs “in a comprehensive and realistic decisive action training environment.”

Since the Army is expected to be mostly based in CONUS with an expeditionary mindset, reserve component units must stand ready to project the force quickly. Growing dependence on the USAR and ARNG is focusing attention on how to best train, man, and equip these components to meet a more demanding cycle.

Logistics from the Soldier to Echelons above Brigade

Tactical logistics – Forward Support Company (FSC)

Tactical logistics begins with the first interaction a logistician has with maneuver Soldiers. In the U.S. Army, that interaction is with the Forward Support Company (FSC). Each battalion in a BCT, FiB, Aviation Brigade (AVN), and some functional battalions is allocated one FSC with the mission to provide field feeding, field maintenance and distribution support to the units under the mission command of that battalion. The FSC is in direct support to the supported battalion. An FSC-supported battalion could be any type of battalion located in the BCT area of operations, including infantry, Stryker, armor, aviation, cavalry, artillery, and engineers. FSCs are only located in the active component and the ARNG.⁷



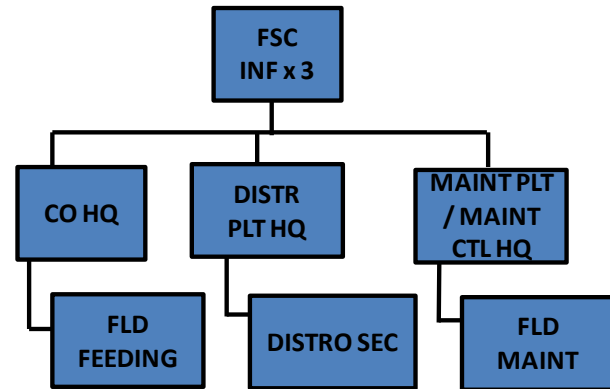
Since the FSC is in direct support to the supported battalion, the supported battalion commander has the authority to direct the priorities of support for the FSC and to position it on the battlefield. This gives the supported battalion commander the ability to ensure the continuity and priority of support to better control the scheme of maneuver. By controlling this logistics element, the supported battalion commander can better enable freedom of action, prolonged endurance and operational reach.

FSCs operate close to the enemy. Thus positioned, Soldiers in the FSC must have honed tactical combat skills. As with all Army leaders, FSC commanders and subordinate leaders must ensure that their Soldiers maintain a high proficiency in this area to improve survivability and combat efficiency on the battlefield. FSCs must be trained in the art and science of war and be able to react quickly on a quickly evolving and chaotic battlefield. This preparation begins at home station and continues throughout the training cycle of the unit. FSC commanders must ensure that their units have every opportunity to perform their critical wartime mission functions and survivability skills in a realistic training environment. This requires a degree of creativity by leaders, especially in a home station environment where balancing competing requirements is never-ending.

To accomplish its mission, the FSC has three main sections that support the maneuver force – a field feeding section, a distribution platoon and a maintenance platoon. FSCs are tailored to the type of units they support, e.g. an FSC supporting an aviation unit has specialized mechanics specifically trained to work on aircraft and fuel handlers especially trained to refuel aircraft whereas an FSC supporting an armored unit will have mechanics that specialize in tracked vehicles and fuel handlers trained in fueling armor. For example, an FSC supporting an IBCT provides distribution capability of 10 flat rack loads of cargo daily and 10,000 gallons of fuel using four tank rack modules. That same FSC accomplishes field feeding for a battalion from one consolidated site and up to four remote field feeding sites.

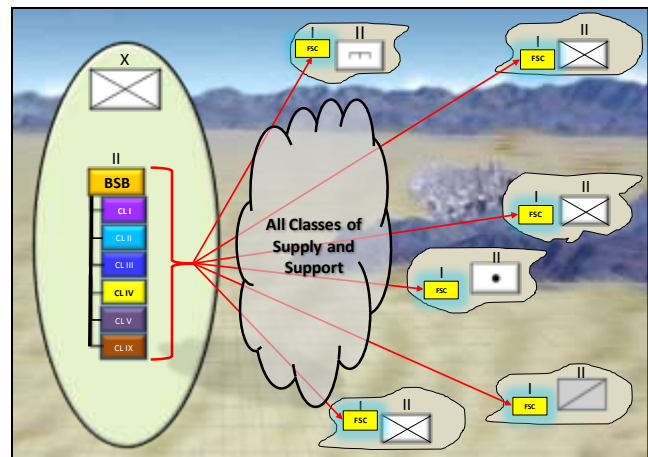
⁷ FM 4-90

One of the most critical functions of the FSC is maintenance. As mentioned earlier, these FSC's maintenance platoons are tailored to the type of unit they support. That maintenance is specifically performed by the Maintenance Control Section (MCS). The MCS provides direct control and supervision of field maintenance activities for the supported battalion. Field level maintenance includes all maintenance activities performed by a Soldier for repair and return to the user. This could be as simple as a tire repair or as complex as replacing an engine. Essentially, field level maintenance combines maintenance that was traditionally conducted in a motor pool and Direct Support (DS) maintenance activities. That means that the FSC is conducting component replacement, battle damage assessment and repair, recovery, and other related maintenance activities. With these requirements, the FSC conducts the highest levels of maintenance on a battlefield although they can receive assistance from the Field Maintenance Company (FMC) of the Brigade Support Battalion or even the Support Maintenance Company (SMC) of the CSSB. Keep in mind, there is no "pass back maintenance" anymore – any item that is sent to the rear for repair will retrograde back to a depot or AMC forward repair activity.⁸



(Above) This is the organization of the three FSCs in an IBCT. FSCs supporting other BCTs have the same general design and capabilities – field feeding, fueling, supply distribution and maintenance. (Below) FSCs support the battalions in a BCT area of operations. The BSB provides direct support and mission command to those FSCs.

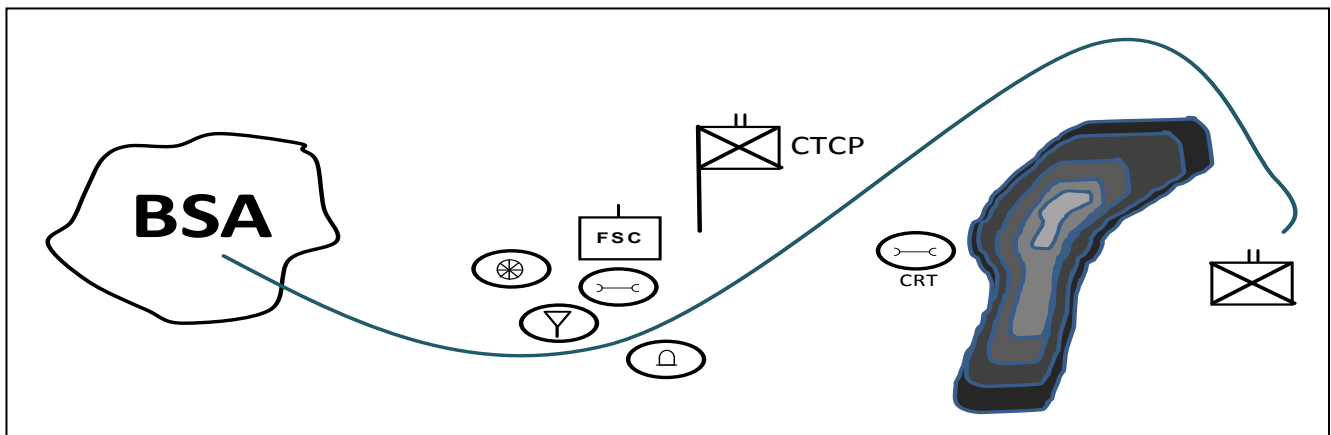
Supply distribution is critical for the FSC. Through the distribution section, the FSC provides all of the classes of supply required for the maneuver battalion to conduct its mission. This includes the distribution of Class III and Class V – fuel and ammunition. The distribution section carries one complete day of supply and combat platforms retain combat loads. That translates to approximately two tailorable combat loads in a combat battalion's formation. An additional BCT day of supply resides in the BSB and any additional supply requirements must come from EAB or through theater distribution channels. They have limited material handling equipment to move, load and offload supplies.



⁸ AMC forward repair activity normally involves contract maintenance. Use of contract maintenance is METT-TC driven.

Each of these sections, under the mission command of the company headquarters, has the challenge of facing unique and dynamic changes to meet mission every day. Commanders must work directly with the supported battalion and the BSB to determine priorities of support. They must then determine how to layout their areas of operations to conduct field feeding, resupply and refueling without delaying or hindering the combat mission of the BCT. This is done while keeping terrain, security, and other physical limitations in mind. Applying military art to the science of conducting these operations, a prudent commander may shift assets internally or seek additional assets from the BSB. That commander may also use electronic planning tools to determine requirements and validate those requirements with the BSB staff. The commander must balance tactical combat skills and technical skills to conduct both in the maneuver battalion area.

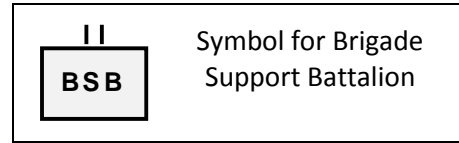
FSC placement on the battlefield will be METT-TC dependent and determined by the supported battalion. The echelons of support include those directly behind the supported battalion, positioning in the brigade support area (BSA), or a geographical position between locations in order to extend operational reach and responsiveness to the maneuver unit.



Above is an example of simple battlefield geometry showing how a maneuver commander – in this case an infantry battalion commander – could place his FSC and direct support elements. In this example, the FSE is placed at the battalion command post but the CRT is pushed forward behind a mountain. Although behind the combat forces, it is close enough behind the main thrust of the infantry battalion on the other side to deliver faster service. The blue line represents the main line of communication.

Tactical logistics – Brigade Support Battalion (BSB), Fires Support Battalion, and Aviation Support Battalion (ASB)⁹

Brigade Support Battalions and Aviation Support Battalions are responsible for making sure that the right thing is delivered to the right place at the right time to support the BCT, Aviation BCT or FiB commander. To accomplish this, they mission command FSCs, synchronize logistics, coordinate requirements with the CSSB, provide sustainment automation management support for subordinate units, and oversee health service support operations.

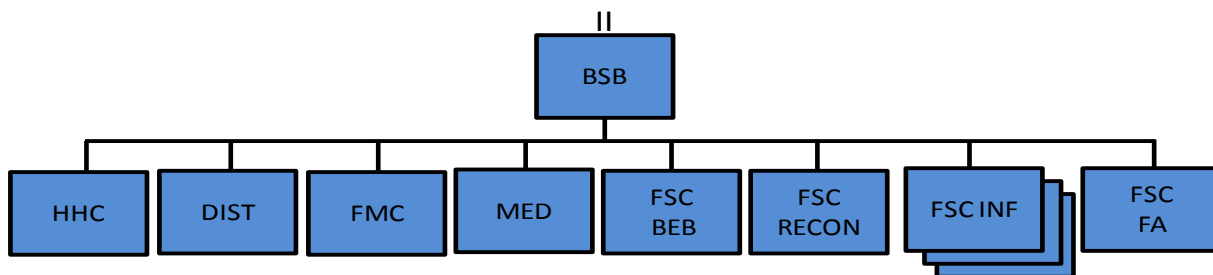


They also provide mission command for other units providing support capabilities to the BCT. Each BCT, Aviation BCT and FiB in the Army has one BSB. BSBs provide direct support to supported brigades and get additional logistics support from CSSBs at echelons above brigade.



The coordination required to meet the needs of the Warfighter are tremendous. This is especially true at the tactical level. At the center, the BSB holds mission command over the logistics for the entire BCT. It accomplishes this through the Distribution Company providing all classes of supply to the FSCs. In turn, the FSCs provide everything from food to fuel to the Soldiers. At the same time, maintenance assets in the FSEs repair equipment or coordinate with the BSB for additional assets to meet the combatant commander’s requirements. In the meantime, the BSB is constantly coordinating with the BCT to determine the priority of support and how to weigh the logistics efforts to support the plans of the combat commander.

Because of their direct tie to the BCTs, BSBs are only located in the active component and ARNG.¹⁰ By 2020, there will be a total of 120 BSB/ASBs in the Total Army. Specifically, the active component will have 54 BSBs – nine ABCT BSBs, 15 IBCTs BSBs, eight SBCT BSBs, 13 CAB ASBs, seven Fires BSBs, and two BfSB BSBs. The ARNG will have a total of 66 BSBs – seven ABCT BSBs, 20 IBCTs BSBs, one SBCT BSBs, eight CAB ASBs, seven Fires BSBs, 16 MEB BSBs, and seven BfSB BSBs.

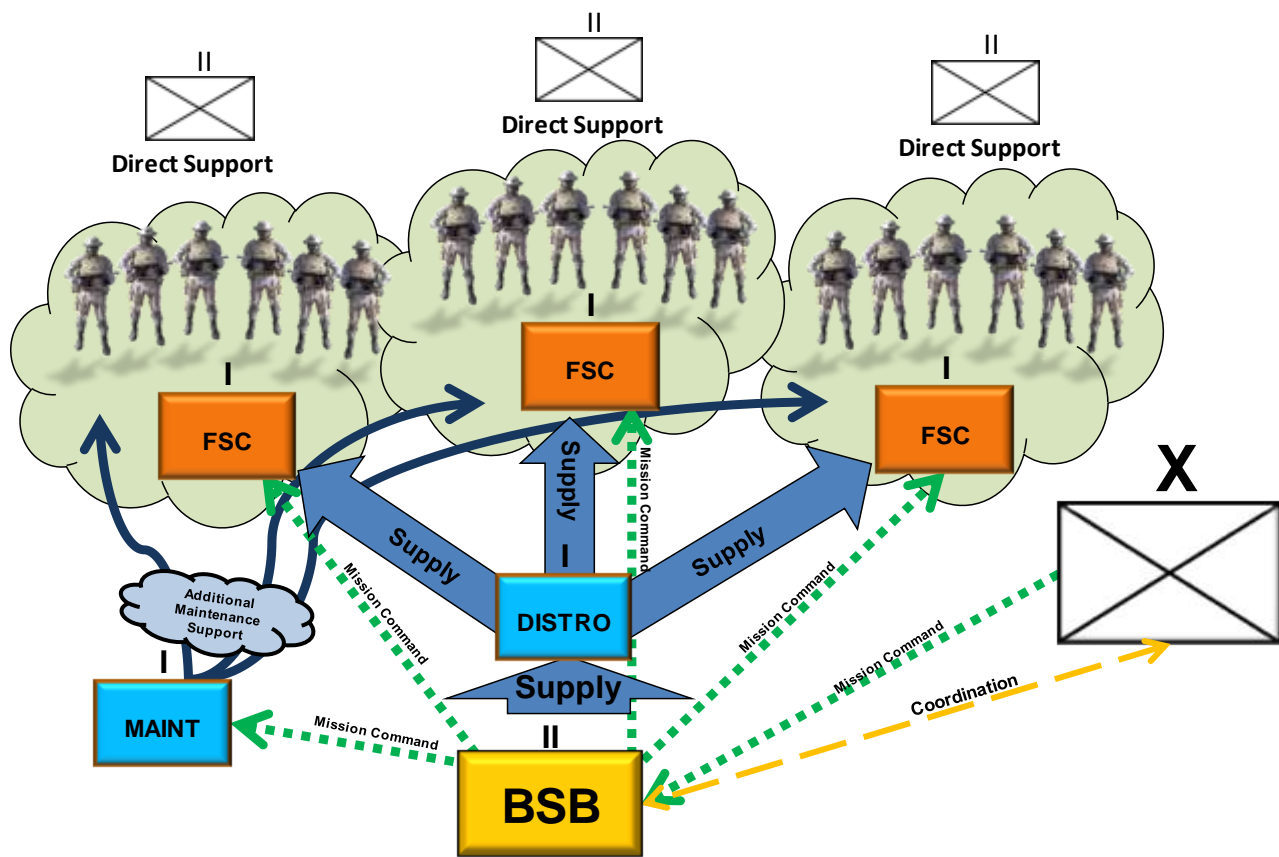


⁹ An ASB, FiB BSB and a BSB are essentially the same unit other than an ASB serves an aviation brigade and a FiB BSB serves a FiB.

¹⁰ Reference FM 4-90 and the “Sustainment Handbook (2013)” for additional information on BSBs.

Although each BSB is designed to accommodate the requirements of the formation it supports, there are common capabilities. Through the Support Operations Section (SPO), the BSB is responsible for planning and synchronizing supply and services, fuel, ammunition, maintenance, health services, mortuary affairs and transportation operations for the BCT. These capabilities are accomplished through the mission command of the FSCs supporting the BCT's subordinate units, the distribution company, the medical company, and the forward maintenance company (FMC). It can also be supplemented with other capabilities moved forward for specific missions by the CSSB.

One of the greatest challenges for the BSB is taking the BCT commander's guidance and translating that into a logistics plan to weigh the priority of support. This is especially challenging when the BSB commander may have to shift logistics assets – manpower or supply – from one area into another. By having mission command of the FSCs, the BSB is designed to effectively and artfully weigh the effort of



The Brigade Support Battalion provides direct logistics support to the BCT or other unit to which it is assigned. It provides this by planning and synchronizing supply and services, fuel, ammunition, maintenance, health services support, mortuary affairs and transportation operations. These capabilities are accomplished through the mission command of the FSCs supporting the BCT's subordinate units, the distribution company, the medical company and the forward maintenance company.

support to meet the BCT commander's requirements.

The BSB gets most of its supplies from the CSSB. It is the job of the BSB and CSSB commanders and staffs to coordinate for the throughput of supply and for needed logistics capabilities not in the BSB's "toolbox." These additional capabilities include all classes of supply, infantry troop transport, water production and bulk fuel storage. This general support relationship between the BSB and CSSB also offers the BSB reach back to additional maintenance, transportation and supply and services capacity/capability. And since the CSSB is modular, additional types of units, e.g. petroleum truck units and field services companies, can be used to assist the BSB during times of high consumption.

When operating at home station, BSB commanders are challenged with ensuring that the FSCs are trained and ready for their wartime missions.

BSB Current Roles/Functions

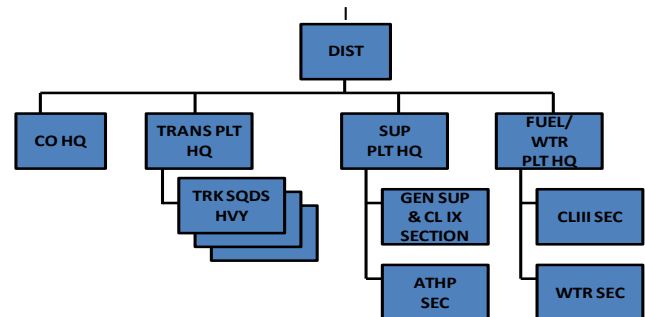
- Tracking the current battle so it may anticipate support requirements before units request them.
- Serving as the entry point for units entering the BCT rear area in contiguous operations.
- Monitoring main support routes (MSR) and controlling sustainment vehicle traffic.
- Coordinating the evacuation of casualties, equipment, and detainees.
- Coordinating movement of personnel killed in action (KIA).
- Coordinating with the sustainment brigade for resupply requirements.
- Assisting in operation of a detainee facility or a DC point.
- Providing ad-hoc representation to the main CP in support of the sustainment cell.



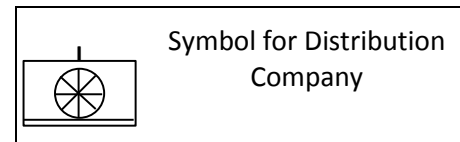
Tactical logistics – Distribution Company¹¹

The Distribution Company can be viewed as the warehouse and fuel depot of the BCT. It specifically provides a multi-class Supply Storage Activity (SSA) and Ammunition Transfer and Holding Point (ATHP).

There is one Distribution Company per BSB or CAB for a total of 120 Distribution Companies in the Total Army. Specifically, the active component will have 54 Distribution Companies – nine ABCT Distribution Companies, 15 IBCTs Distribution Companies, eight SBCT Distribution Companies, 13 CAB Distribution Companies, seven Fires Distribution Companies, and two BfSB Distribution Companies. The ARNG will have a total of 66 Distribution Companies – seven ABCT Distribution Companies, 20 IBCTs Distribution Companies, one SBCT Distribution Companies, eight CAB Distribution Companies, seven Fires Distribution Companies, 16 MEB Distribution Companies, and seven BfSB Distribution Companies. There are none in the USAR.



The Distribution Company provides the warehousing and fuel and water distribution requirements for a BCT. Key to its success is an SSA and ATHP that the FSCs use to provide supplies and ammunition to Warfighters.



Specific capabilities for a distribution company depend upon the type of BCT supported.

- ABCT
 - Operation of a multi-class Supply Storage Activity (SSA)
 - Ammunition Transfer and Holding Point (ATHP)
 - Distribution of up to 40 flatrack loads of cargo daily.
 - Distribution of 90K gallons of fuel daily with quality surveillance testing of fuel
 - Distribution of 20K gallons of bulk water daily with quality testing of water
- SBCT
 - Planning, direction, and supervision of supply distribution and transportation support to the SBCT
 - Daily receipt, temporary storage, and issuance of all classes of supply (less Class VIII) to the SBCT
 - Transportation of up to 286 short tons (ST) of cargo daily
 - Class III (B) retail fuel support of up to 31,500 gallons per day
 - Water distribution for the brigade.
- IBCT
 - Operation of a multi-class Supply Storage Activity (SSA)
 - Operation of a Ammunition Transfer and Holding Point (ATHP)
 - Distribution of up to 30 flatrack loads of cargo daily

¹¹ Reference FM 4-90 for additional information.

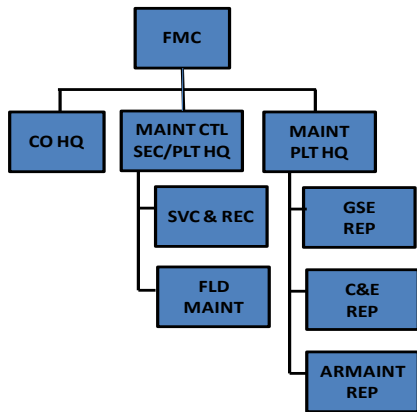
- Distribution of 25,000 gallons of fuel daily
- Quality surveillance testing of fuel
- Distribution of 25K gallons of bulk water daily
- Quality testing of water.
- Fires
 - Operation of a multi-class Supply Storage Activity (SSA)
 - Operation of a Fuel Storage Supply Point
 - Distribution of potable water
 - Operation of Ammunition Transfer Holding Point

Through the coordination and planning of the BSB, the Distribution Company works with FSCs to move all classes of supply. There are three distribution options:

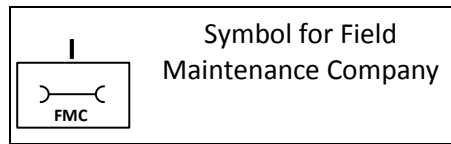
- Supply point – Supply point distribution requires the supplying unit to issue supplies from a supply point to a receiving unit. The receiving unit must go to the supply point and use its own transportation to move the supplies to its area for distribution.
 - Supply point distribution is most commonly executed by means of a logistics release point (LRP)
 - The LRP may be any place on the ground where unit vehicles return to pick up supplies and then take them forward to their unit
 - Occasionally, the LRP is the brigade support area (BSA) itself.
- Unit – Unit distribution requires the supplying unit issue supplies and deliver them to the receiving unit's area using transportation assets from the supplying unit. In other words, the supported unit is not required to go back to a supply point to pick up supplies and carry them back to their AO for final distribution.
- Tailgate – The tailgate method is a quick distribution method that causes the least interference of the supported unit's work effort since it does not have to spend time moving to a supply point. Instead, the supplying unit and the supplied unit meet and exchange supplies "off the tailgate." This method is most often used when:
 - Time is of the essence
 - There isn't enough security to perform a supply point distribution

Any of these three options, or combinations thereof, will be used based on mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC) and the concept of support.

Tactical logistics – Field Maintenance Company (FMC)



This is an example of how an FMC is organized. This is an FMC supporting an IBCT (ABN).



The FMC is the primary source of field level maintenance for the vehicles in the BSB and an additional source of maintenance for the vehicles in the BCT. FMCs operate within the Brigade Support Area (BSA) footprint with subordinate elements operating throughout the BCT area of operation. FMCs coordinate directly with the FSCs to provide support for specific mission requirements and ensure synchronization with BSB SPO. There is one FMC per BSB for a total of 120 FMCs in the Total Army. Specifically, the active component will have 54 FMCs – nine ABCT FMCs, 15 IBCTs FMCs, eight SBCT FMCs, 13 CAB FMCs, seven Fires FMCs, and two FMCs. The ARNG will have a total of 66 FMCs – seven ABCT FMCs, 20 IBCT FMCs, one SBCT FMCs, eight CAB FMCs, seven Fires FMCs, 16 MEB FMCs, and seven BfSB FMCs. There are none in the USAR.

As the repair shop for the BSB, the FMC directs, controls, and supervises field maintenance mission and activities and performs maintenance management and production control functions. Each FMC provides base shop and on-site field maintenance on power generation, construction, quartermaster and utilities

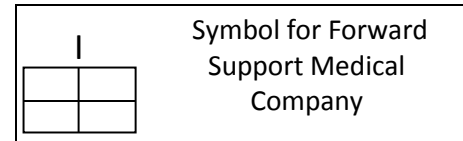
equipment FSCs also provide lift capabilities for repair shops, recovery of organic equipment, recovery to supported units, back-up recovery to combat repair teams in the FSCs, and support of maintenance evacuation. Depending upon the type of BCT supported, capabilities will vary. For example, an FMC supporting an IBCT will have lighter, limited recovery capabilities whereas an FMC supporting an SBCT will have heavier recovery equipment.

An FMC can provide machine shop support, including welding, to the battalion FSCs and perform base shop field maintenance on small arms, combat vehicle fire control systems, and turret mounted weapons and mechanisms. Technicians (warrant officers) provide technical expertise to all forward activities. The FMC also provides Battle Damage Assessment Repair (BDAR) and maintains combat spares to include receipt, storage, issue, retrograde and exchange.¹²

¹² FM 4-90

Tactical logistics – Brigade Support Medical Company (BSMC)¹³

Although a sustainment function residing inside the mission command of a logistics unit, the Brigade Support Medical Company in the BSB provides Echelon I and Echelon II medical care to supported maneuver battalions with organic medical platoons. Medical treatment is provided on an area basis to those units without organic medical assets operating in the brigade support area (BSA). The BSMC normally establishes its treatment facility in the BSA. Also, the FSMCs may deploy its treatment teams that can operate independently from the company for limited periods of time.



The BSMC is organized to provide triage and management of mass casualties,

ATM, initial resuscitation and stabilization, care for patients with DNBI, and battle wounded and injured soldiers. The FSMC also provides intervention for combat and operational stress disorders to include BF and preparation of patients for further medical evacuation. The BSMC establishes its MTF/division clearing station in the BSA. Specific capabilities include providing:

- Limited reinforcement and augmentation to supported maneuver battalion medical platoons
- Routine sick call and consultation services for patients referred from Echelon I MTFs
- Urgent initial surgery when it is augmented or has an organic FST for critically injured patients
- Ground ambulance evacuation and/or arrangement for air ambulance evacuation for patients from supported aid stations and ambulance exchange points (AXPs)
- Patient holding for up to 40 patients in an armored or mechanized division and 20 patients in a light, airborne and air assault division that are able to RTD within 72 hours
- Operational dental care – emergency dental care and essential dental care intended to intercept potential dental emergencies
- Class VIII resupply and medical equipment maintenance for supported medical units
- Medical laboratory and radiology services commensurate with Echelon II/division-level treatment
- Preventive medicine services/consultation and support
- Medical surveillance for detection of any health hazards that pose a medical threat
- Mental health/combat operational stress control (COSC) services, to include management of battlefield and stress-related casualties under Force XXI and the BSMC of the BCT TOEs

¹³ FM 4-02.6

Tactical logistics – Brigade Combat Teams (BCT)

As combined arms organizations, Brigade Combat Teams (BCT) form the basic building block of the Army's tactical formations. They are the principal means of executing engagements. Three standardized BCT designs exist: armor, infantry, and Stryker. Battalion-sized maneuver, fires, reconnaissance, and Brigade Support Battalion are organic to BCTs.

The S4 is the coordinating staff officer for logistic operations and plans and is usually the chief of the BCT sustainment cell. The S4 provides staff oversight to BCT units in the areas of supply, maintenance, transportation, and field services. The S4 is the BCT staff integrator for the brigade support battalion (BSB) commander and his support operations officer (SPO), who executes sustainment operations for the BCT. The S4 is also the staff point of contact for unit movements and deployments.

Duties of the S4 include:

- Developing logistic plans to support BCT operations.
- Coordinating with supporting sustainment brigades on current and future support requirements and capabilities.
- Conducting logistic preparation of the battlefield.
- Coordinating with for all classes of supply.
- Monitoring and analyzing the equipment readiness status of all BCT units.
- Planning transportation to support special transportation requirements.
- Coordinating for food preparation, water purification, mortuary affairs, aerial delivery, laundry, shower, and clothing/light textile repair.
- Recommending sustainment priorities and controlled supply rates (CSR) to the commander.

Tactical logistics – Divisions

Divisions are the Army's primary tactical warfighting HQ. Their principal task is directing subordinate brigade operations. Divisions are not fixed formations. Therefore, they may not have all types of Brigade Combat Teams (BCT) in an operation or they may control more than one of a particular type of BCT. A division can control up to six BCTs with additional appropriate supporting brigades during major combat operations. The types of support brigades are combat aviation, fires, maneuver enhancement, battlefield surveillance, and sustainment. The sustainment brigade normally remains attached to the TSC or ESC but supports the division. The division may have OPCON of a sustainment brigade while conducting large-scale exploitation and pursuit operations. As the senior logistics officer in the division, the Assistant Chief of Staff, G-4 is the principal staff officer for sustainment plans and operations, supply, maintenance, transportation, services, and operational contract support. The G-4 also prepares Annex F (Sustainment) and Annex P (Host-Nation Support) to the operations order or operations plan.

The G-4 (S-4) responsibilities for sustainment plans and operations (general) include:

- Developing the logistic plan to support operations (with the G-3).
- Coordinating with the G-3 and G-1 on equipping replacement personnel and units.
- Coordinating with the support unit commander, normally a sustainment brigade, on the current and future support capability of that unit.
- Coordinating with the division staff and sustainment brigade for the selection of main supply routes and logistic support areas.
- Performing logistic preparation of the battlefield with the sustainment brigade.
- Recommending command policy for collecting and disposing of excess property and salvage.
- Determining supply requirements, except medical.
- Coordinating all classes of supply except Class VIII (medical).
- Coordinating the requisition, acquisition, and storage of supplies and equipment, and the maintenance of materiel records.
- Recommending sustainment priorities and controlled supply rates.
- Ensuring that accountability and security of supplies and equipment are adequate.
- Calculating and recommending to the G-3 basic and prescribed loads, and helping the G-3 determine required supply rates.
- Monitoring and analyzing the equipment readiness status.
- Coordinating with the sustainment brigade to determine maintenance workload requirements, less medical.
- Coordinating with the sustainment brigade for equipment recovery and evacuation operations.
- Determining maintenance time lines.
- Conducting operational and tactical planning to support mode and terminal operations, and movement control.
- Planning administrative troop movements.

Division Current Roles/Functions

- Tactical Warfighting HQs
- Tactical Level HQs
- Conduct Tactical Land Operations
- Task Organize & Employ BCTs, MF & Functional Brigades in Unified Land Operations
- Integrate & Synchronize Operations of BCTs, MF & Functional Brigades
- Mass effects at Decisive Points (Focus BCTs, MF & Functional Brigades and Joint Capabilities)
- Allocate Resources & Set Priorities
- Leverage Joint Capabilities
- Conduct Shaping Operations within Division AO
- JTF/JFLC HQ for Small Scale Operations

Source: FM 3-94, Echelons Above Brigade (Initial Draft), which is being produced from FM 3-91 Division; FM 3-92, Corps; FM 3-93 Theater Army. 36th CSA approved the tasks in FEB 11. 37th CSA approved as CG TRADOC in DEC10.

- Coordinating with the sustainment brigade for transportation assets for other branches of DoD.
- Coordinating with the G-9, sustainment brigade and AFSBn for host-nation support.
- Coordinating with the sustainment brigade for special transport requirements to move the command post.
- Coordinating with the G-3 and sustainment brigade for sustainment of tactical troop movements.
- Coordinating the construction of facilities and installations, except for fortifications and signal systems.
- Coordinating with the sustainment brigade for field sanitation.
- Coordinating with the sustainment brigade for organizational clothing and individual equipment exchange and replacement.
- Coordinating with the sustainment brigade for water purification, mortuary affairs, aerial delivery, laundry, shower, and clothing/light textile repair.
- Coordinating with the sustainment brigade for the transportation, storage, handling, and disposal of hazardous material or hazardous waste.

Tactical logistics – Corps

The corps provides a HQ that specializes in operations as a land component command HQ and a joint task force for contingencies. When required, a corps may become an intermediate tactical HQ under the land component command, with OPCON of multiple divisions (including multinational or Marine Corps formations) or other large tactical formations. Its primary mission command is land combat operations. The corps HQ has the capability to provide the nucleus of a joint HQ.

The sustainment functional cell contains sections that provide support and services to ensure the corps's freedom of action, extend its operational reach, and prolong its endurance. Four staff sections contribute sections to the sustainment cell: assistant chief of staff, personnel (G-1); assistant chief of staff, logistics (G-4); assistant chief of staff, financial management (G-8); and the surgeon. The G-4 serves as both the chief of sustainment cell and the logistic section chief. Elements perform specific functions within each staff sections.¹⁴

¹⁴ FM 3-92

Logistics functions performed by the sustainment cell include providing logistics input to the common operating picture and synchronizing and integrating logistics operations to include maintenance, supply and services, transportation, general engineering, and mortuary affairs.

Overall, the G-4 oversees the corps' logistic elements, including all logistic operations, maintenance, supply and services, transportation, and logistics automation. For logistics, the G4 is responsible for working with the TSC, ESC and/or sustainment brigade supporting the corps to help synchronize logistic operations for the corps.

For maintenance, the G-4 is responsible for:

- Formulating policy, procedures, and directives related to materiel readiness.
- Providing oversight of equipment and ordnance maintenance, recovery, and salvage operations.
- Participating in joint, inter-Service and host-nation agreements to provide resources to support corps operations.
- Monitoring and analyzing maintenance functions and equipment readiness status.

For services and supply, the G-4 is responsible for:

- Formulating and implementing policy and procedures for all classes of supply except Class VIII (medical) and related services.
- Assisting in developing the ammunition required supply rate.
- Monitoring corps logistic operations regarding the supply system, general engineering, and miscellaneous services, including mortuary affairs, food service, billeting, textile repair, clothing exchange, and laundry and shower.

For transportation operations, the G-4 is responsible for:

- Advising the corps commander on the support of deployment and redeployment of forces and on the distribution of materiel, including:
 - Transportation policy
 - Systems,
 - Movement planning and execution
 - In-transit visibility.

Corps Current Roles/Functions

- Sr Army Headquarters in JOA (ARFOR)
- JTF/JFLC HQ for major operations
- Operational level Headquarters
- Conduct Large Scale Land Operations
- Task Organize & Employ Divisions & Brigades in Unified Land Operations
- Integrate & Synchronize Operational of Divisions & Brigades
- Mass effects at Decisive Points (Focus Divisions & Joint Capabilities)
- Allocate Resources & Set Priorities
- Leverage Joint Capabilities
- Conduct Shaping operations within ARFOR AO (extended Operational Reach)

Source: FM 3-94, Echelons Above Brigade (Initial Draft), which is being produced from FM 3-91 Division; FM 3-92, Corps; FM 3-93 Theater Army. 36th CSA approved the tasks in FEB 11. 37th CSA approved as CG TRADOC in DEC10.

Tactical logistics – Army Field Support Battalion (AFSBn)

Army Field Support Battalions are scalable TDA organizations that are part of Army Material Command's interface to maneuver forces. Consisting of a mixture of military, Department of the Army civilians, and contracted support personnel, AFSBns are normally in direct support to an active component division headquarters. In this position, the AFSBn assists AFSB commanders and staff to coordinate AMC national-level provider support and acquisition, logistics and technology (ALT) support within their designated support area. In addition to direct support to the division, the AFSBn also provides general support to all other units operating in a division area of operations that does not have a Brigade Logistics Support Team (BLST).

The AFSBn is capable, with the requisite augmentation, of providing sustainment maintenance and back-up field maintenance support to deployed units in performing modification work orders (MWOs) on selected items of equipment, as well as assisting in reset, maintenance and disposition of both LBE and TPE.

More specifically, the AFSBn is responsible for:

- Mission Command of assigned and attached BLSTs
- Coordinating for Logistics Assistance Program (LAP)¹⁵ support
- Accounting for and maintaining Leave Behind Equipment (LBE) as required and when directed
- Synchronizing Director of Logistics operations in support of senior commander requirements
- Synchronizing and supporting ALT actions between PM/PEOs and supported units
- Managing and coordinating AMC lead materiel provider and other national-level support as required.

Life Cycle Management Command (LCMC) logistic assistance representatives (LARs) are a key component to the AFSBn and make up the bulk of the AFSBn. LARs provide weapon systems oriented supply and maintenance technical assistance to Army units and are the smallest modular capability of the AFSB structure. LARs have substantial experience on the equipment they support and provide answers to maintenance, training, supply parts, and operational readiness questions. LARs responsibilities include:¹⁶

- Monitoring supported unit equipment readiness and provides assistance in analyzing, reporting, effecting improvements, and coordinating the LAP related trends, and issues
- Assists the AFSBn commander to research and find solutions to supported unit supply problems
- Provide on-site maintenance, assistance for surveillance, distribution, storage, explosive safety, accountability and disposal of ammunition, guided missiles, and ordnance

¹⁵ LAP is a HQDA program carried out under the auspices of the ASC. LAP is oriented to the early detection and resolution of logistics related problems that affect materiel readiness. LAP representatives conduct logistics assessments, in coordination with the supported commands, to determine current status, historical trends, provide corrective and preventative measures for improving unit and command readiness. This includes the identification and correction of systemic problems. LAP also provides support to units/Soldier on installation, before, during and after deployments. Further details on LAP are found in AR 700-4.

¹⁶ ATP 4-91

Tactical logistics – Brigade Logistics Assistance Team (BLST)

Brigade Logistics Assistance Teams (BLST) are a deployable TDA organization under the mission command of an AFSBn that consists of both military and DA civilian members that normally operates in direct support of a designated brigade or brigade level unit and provides limited general support to other units normally on an area basis as directed. Deployed BLSTs may receive additional capability via individuals or teams (e.g., sustainment maintenance contractors) as coordinated by the supporting AFSB. When augmented with contractors, the BLST can perform limited and short-term split-based operations during the BLST displacement in support of the BCT.

The BLST's mission areas and capabilities include, but are not limited to:

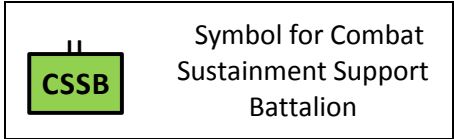
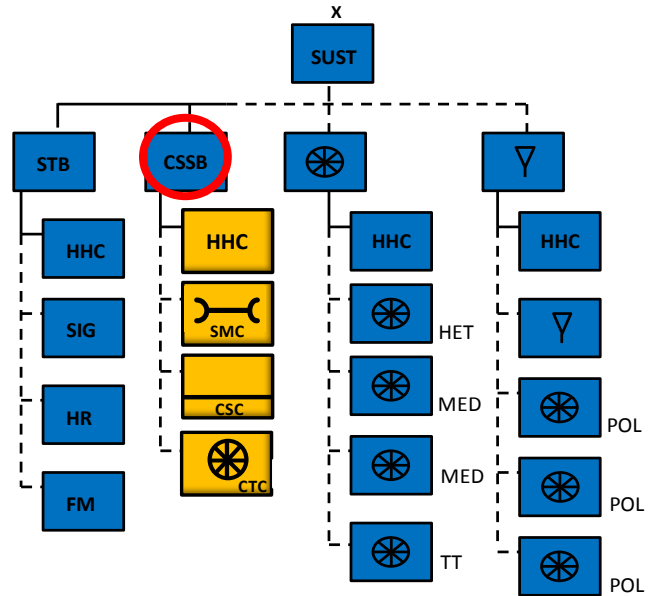
- Providing LAR technical expertise from the appropriate USAMC organization to include ASC and AMCOM, CECOM, and TACOM LCMCs
- Assisting in coordinating ALT assistance called forward to support the BCT
- Assisting in the coordination, synchronization, and de-confliction of systems support contract and related USAMC LAP support actions
- Providing technical support reach-back capability from the BCT to the appropriate USAMC command
- Assisting the AFSB contractor personnel coordination cell in the accounting of, and deployment assistance to, CAAF personnel
- Assisting with ARMT planning and synchronizing with respect to planning and executing equipment reset
- Planning and synchronizing LBE induction, re-issue and materiel readiness as required and when directed

Echelons above Brigade Logistics

Combat Sustainment Support Battalion (CSSB)

In the Army of 2020, the Combat Sustainment Support Battalion (CSSB) is the hub for EAB logistics. As a multifunctional headquarters, the CSSB provides a powerful and agile logistics headquarters to give support to BCT, functional and multifunctional support brigades and support to joint and other combat and support units as required. As a modular formation capable of maintaining mission command of seven companies, the CSSB can be tailored to meet any logistics mission requirements and bridges tactical-to-EAB requirements. By doctrine, the CSSB provides:

- Mission command for assigned and attached units
- Synchronization of distribution operations
- Administrative support
- Communication equipment
- CBRNE defense
- Electronic warfare and sustainment automation management support for subordinate units



By 2020, there will be a total of 85 CSSBs in the Army – 16 CSSBs in the active component, 39 in the ARNG and 30 in the USAR. Eight of the ARNG CSSBs and 13 active component CSSBs will be of a common design. Each of these CSSBs will have a base of supply (Composite Supply Company), transportation (Composite Truck Company) and maintenance (Support Maintenance Company) to sustain both EAB units and the BSBs. As the logistics bridge into EAB, the CSSB plays a pivotal mission command and planning role for logistics. It is critical in the synchronization of distribution operations to support operations in a designated area of operation.

The 13 of the 16 active component CSSBs will be habitually aligned to divisions or corps – 10 divisionally-aligned and three corps-aligned, i.e. they will have a training and support relationship with that corps or division. Although “aligned,” the CSSB is not necessarily attached to that division or corps and can be deployed in support of another corps or division. On the battlefield, the CSSB falls under the mission command of a SUST BDE and is not OPCON or TACON to other units. They can be OPCON to support unique missions such as Special Forces or early entry GRF. Alignment does not build habitual relationships and makes them the unit of choice for deployment.

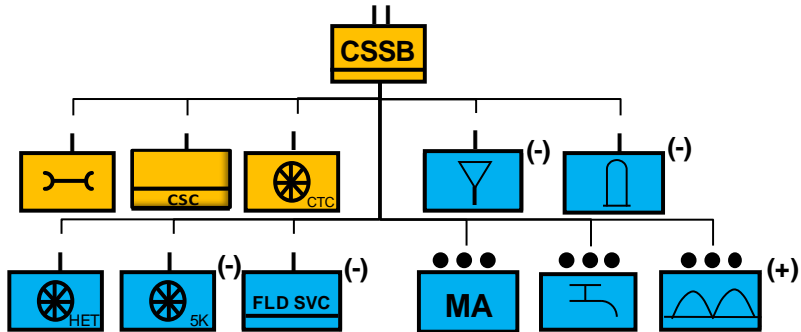
A CSSB provides general support on an area basis – commonly referred to as “area support” – to units in EAB and those conducting decisive actions. The CSSB does not provide direct support to units with the exception of requirements to support unique missions. CSSB commanders can give OPCON or TACON of units or parts of units to BSBs to provide specific additional capabilities, e.g. water production, to the BCT as mission requirements dictate.

As a modular headquarters, CSSBs are normally task organized with additional functional logistics companies and detachments to allow for a full range of logistic and support activity in EAB and at the tactical level. In addition to

the CSC, CTC and SMC, common units assigned to the CSSB include aerial delivery units, airdrop units, field service units, water units, ammunition units, fuel units, supply units, and various types of truck units that move supplies and troops around the battlefield.

With such a breadth of logistics responsibilities, CSSB commanders and their staffs

are constantly employing art and science to accomplish missions. They must synchronize the operations process by integrating processes – the arrangement of action in time, space, and purpose. Integration is combining actions into a unified whole. At any given moment, the planning cell can be planning mid- to long- range operations – developing plans, orders, branches, and sequels based on orders from higher echelons and the CSSB commander’s guidance. Concurrently, the SPO can be managing the CRSP using an Inland Cargo Transfer Team (ICTC), coordinating with the MCT supporting the Sustainment Brigade and using CSSB assets (e.g. attached transportation companies) to select the best platforms to accomplish required missions based upon capabilities and availability of equipment.¹⁷



The CSSB is a flexible, agile logistics headquarters capable of providing mission command across a vast array of capabilities. In the above example, the orange units are part of the division-aligned CSSB; units in blue represent a sample of unit types/capabilities typically assigned to a CSSB.

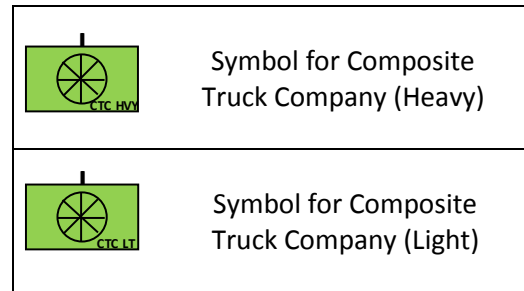
¹⁷ ATP 4-93

Units/capabilities that are typically attached to a CSSB include:

1. Composite Truck Company (CTC)

Composite truck companies are a new type of transportation unit that are one of the three base units attached to the CSSB in 2020. They were designed to gain efficiencies while increasing transportation capabilities on the battlefield. Throughout the conflicts in Iraq and Afghanistan, commanders said they needed “some of this and a little bit of that” when it came to truck companies but they rarely needed the full capabilities of a specific type of truck unit.

At its core, the CTC provides motor transport capability to move personnel, containers, flatracks and heavy equipment under the mission command of the CSSB. There are two types of CTCs – light and heavy. The light CTCs are designed to support infantry and Stryker brigades while the heavy CTC is designed to support armored brigades. Both heavy and light CTCs have organic convoy protection with MRAPs.

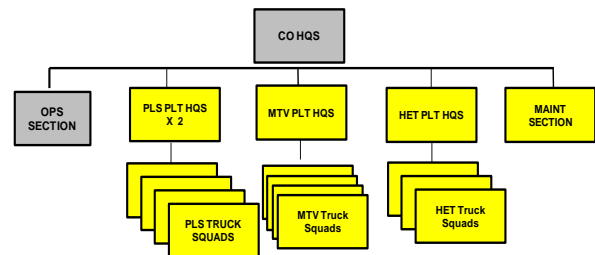


There are a total of 21 CTCs in the Total Army – 13 in the active component and eight in the ARNG. All of the active component CTCs are located in the CSSBs on the 13 active duty posts with BCTs, including Fort Bragg, Fort Stewart, Fort Drum, Fort Bliss, Fort Hood, Joint Base Lewis-McCord, Fort Carson, and Fort Riley.

Heavy CTCs have a basis of one company per division with an ABCT. There are five CTC (HVY) in the active component and three in the ARNG.

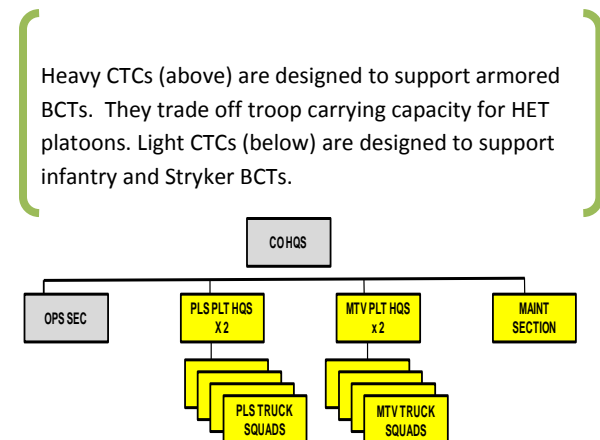
A CTC (HVY) consists of:

- 40 PLS trucks and 40 PLS trailers
- 18 Heavy Equipment Transporters (HET) and 18 70-ton trailers
- 20 MTV cargo trucks with trailers
- 20 Convoy Protection Platforms



Light CTCs have a basis of one company per division with infantry or Stryker BCTs. It cannot contain an ABCT, however. There are eight CTC (LT) in the active component and five in the ARNG. A CTC (LT) consists of:

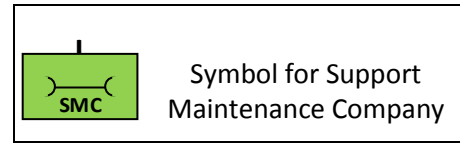
- 40 PLS trucks and 40 PLS trailers
- 40 MTV cargo trucks with trailers
- 20 Convoy Protection Platforms



Heavy CTCs (above) are designed to support armored BCTs. They trade off troop carrying capacity for HET platoons. Light CTCs (below) are designed to support infantry and Stryker BCTs.

2. Support Maintenance Company (SMC)

The Support Maintenance Company (SMC) provides field maintenance support to units that do not have organic maintenance capability in EAB and additional maintenance support to the BSB, when required. SMC capabilities include wheeled vehicle repair, armament repair, allied trades, radio/COMSEC repair, computer and electronic equipment maintenance and ground support equipment repair.



The most significant change was a reduction in the number of SRCs from 22 to one.

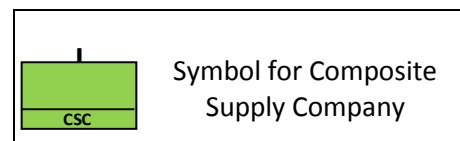
Previously, planners often had difficulty in determining what assets (SRCs) within the SMC to bring to battle. By making the SMC a single SRC, planners can ensure the full capabilities of the SMC can be brought to the battlefield.

There are a total of 69 SMCs in the Total Army – 13 in the active component, 42 in the ARNG and 14 in the USAR. All of the active component's SMCs are located in the CSSBs on the 13 active duty posts with BCTs, including Fort Bragg, Fort Stewart, Fort Drum, Fort Bliss, Fort Hood, Joint Base Lewis-McCord, Fort Carson, and Fort Riley.

3. Composite Supply Company (CSC)

In 2020, the Composite Supply Company (CSC) provides a multi-class supply support activity (SSA), fuel storage, distribution and , and quality surveillance capability, water purification and storage capability, and field service support capability. More specifically, the updated CSC has a Petroleum and Water Platoon and an ATHP. These additions offer three major capabilities to the CSSB that give both EAB and BCTs higher levels of support while meeting the economies of scale required by BCT passbacks.

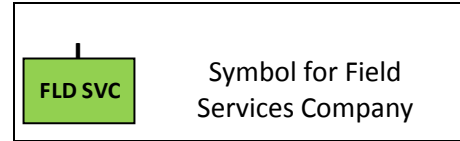
There are a total of 21 CSCs in the Total Army – 13 in the active component and eight in the ARNG. All of the active component's CTCs are located in the CSSBs on the 13 active duty posts with BCTs, including Fort Bragg, Fort Stewart, Fort Drum, Fort Bliss, Fort Hood, Joint Base Lewis-McCord, Fort Carson, and Fort Riley.



Having an ATHP helps to fill gaps in Class V distribution in EAB and provides versatility to EAB support. CSSBs are now capable of providing Class V in EAB to units that no longer have BSBs. Additionally, the Petroleum and Water Platoon specifically address the passbacks from the BCTs under Army 2020. The bulk fuel and water production capabilities provided by this section can be used by the CSSB for EAB/BCT support or can be pushed directly into a BCT if required.

4. Field Services Company

Field service companies are an asset that resides at echelons above brigade (EAB) under the mission command of a CSSB; however, they deploy capabilities, i.e. teams, directly down to Soldiers through coordination with the BSB. They also provide these services for units in EAB. Those services include providing planning and coordination for field service operations, i.e. providing Soldiers with showers, laundry service and clothing repair. In addition, it provides mission command and unit-level administration for Chemical, Biological, Radiological and Nuclear (CBRN) defense support. There are 26 field service companies in the total force, including four in the active component, four in the ARNG and 18 in the USAR.



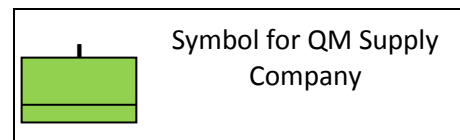
Each field service company is capable of providing a maximum of 21,000 Soldiers one shower per week and 15 pounds of laundry per soldier per week through the use of six shower, laundry and clothing repair (SLCR) sections. These sections are deployed into the BCT area of operations in various locations to best suit the needs of supported Soldiers.

Field service commanders must take many things into consideration when planning for field services, including the security of shower areas, location of laundry facilities, and water availability. These units are dependent upon the CSSB for support as well as the Support Medical Company for force health protection and Class VIII support and the Water Purification and Distribution Company for water support. Both of those assets are normally deployed under the mission command of the CSSB. Additionally, the field services company may receive assistance from the Composite Supply Company (CSC) of the CSSB since it has additional water purification assets that can be pushed forward into the BCT area of operations.

In the future, additional shower capabilities will be added to the CSC to increase the number of Soldiers that can be provided field services. These additional capabilities will supplement, not replace, the field service companies.

5. Quartermaster Supply Company

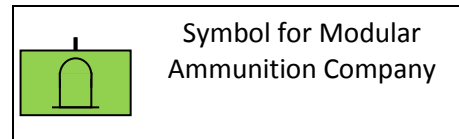
Quartermaster Supply Companies provide planning and coordination for SSA and subsistence supply operations. They are primarily employed in the Sustainment Brigade area of operations under the mission command of a CSSB. Most of them in the active component are being converted to Composite Supply Companies. By 2020, there will be 26 remaining in the Total Army – two in the active component, three in the ARNG and 21 in the USAR.



To perform its mission, the company is divided into two types of platoons – a supply platoon and a subsistence platoon. The supply platoon is responsible for performing stock control functions for supply operations, receiving and issuing supplies, storing supplies, and packing and crating supplies for distribution. The subsistence platoon provides subsistence supply support operations.¹⁸

6. Modular Ammunition Company¹⁹

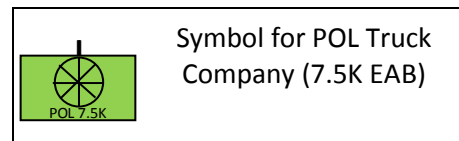
The Modular Ammunition Company provides ammunition supply and maintenance functions on an area basis. More specifically, it provides operation and maintenance of Ammunition Storage Areas (ASA) and assists in the fire fighting support of the ASA. It has material handling equipment with a Rough Terrain Forklift (RTFL) Section to move ammunition and a Rough Terrain Container Handler Augmentation Team to load, unload, and move ammunition containers.



The 20 modular ammunition companies – six in the active component and 14 in the USAR – are normally under the mission command of a CSSB.

7. POL Truck Company (7.5K EAB Linehaul)²⁰

The POL Truck Company provides the Army with the motor transport (semi-trailers) capability to move bulk fuel in EAB. With 60 M915 trucks and 60 7.5K tankers, a single company can transport 450,000 gallons of fuel per haul within the theater of operations.²¹



Although the unit is unit is employed in a Sustainment Brigade's area of operation, it is dependent upon improved road conditions so utilization is often limited to operation in the Corps/Division area. They can be placed under the mission command of a CSSB or a POL Support Battalion.

There are a total of eight POL Truck Companies (7.5K EAB LINEHAUL) in the Total Army. All are in the USAR.

¹⁸ FM 4-40

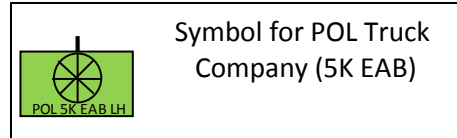
¹⁹ FM 4-30.1

²⁰ ATP 4-11

²¹ An approved Force Development Update (FDU) has been approved that will reduce the number of task vehicles to 48. The remaining 12 vehicles will be converted into MRAPs for convoy platform protection (CPP). A date for the conversion has not been established. Note also that all capabilities will be reduced to account for the loss of task vehicles.

8. POL Truck Company (5K EAB Linehaul)²²

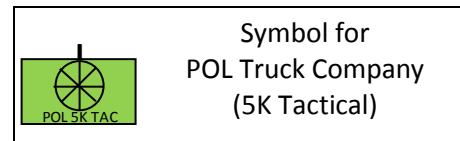
The POL Truck Company provides the Army with the motor transport (semi-trailers) capability to move bulk fuel in EAB. With 60 M915 trucks and 60 5K tankers, a single company can transport 300,000 gallons of fuel per haul within the theater of operations. The unit is employed in a Sustainment Brigade's area of operation to provide both line haul and local operations. Hauling methods include direct haul, shuttle, relay, and intermodal operations. They can be placed under the mission command of a CSSB or a POL Support Battalion.



There are a total of 20 POL Truck Companies (5K EAB Linehaul) in the Total Army – two are in the ARNG and 18 are in the USAR.

9. POL Truck Company (5K Tactical)²³

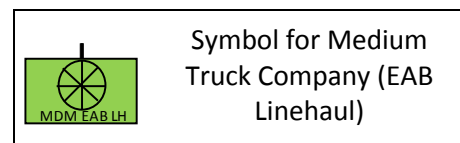
The POL Truck Company (5K Tactical) provides the Army with the movement of bulk petroleum. The unit is employed in both line haul and local haul operations. Local haul would commonly be used to transport fuel stored at a CSSB or other fuel point to a BSB. With 60 FMTV trucks and 60 5K-gallon semi-trailers, a single company can transport 300,000 gallons of fuel per haul. The unit is employed in a Sustainment Brigade's area of operation. Similar to the POL Truck Company (5K Linehaul), hauling methods include direct haul, shuttle, relay, and intermodal operations. They can be placed under the mission command of a CSSB or a POL Support Battalion. These units are normally employed in direct support of the theater movement plan.



There are a total of seven POL Truck Companies (5K EAB TACTICAL) in the Total Army – three are in the active component and four in the ARNG.

10. Medium Truck Company (EAB Linehaul)²⁴

Medium Truck Company (EAB Linehaul) provides area support to EAB for the movement of containerized, non-containerized, palletized, dry and/or refrigerated cargo, and bulk water products. Normally under the mission command of a CSSB or a Motor Transportation Battalion, the Medium Truck Company (EAB Linehaul) has 60 M915 Tractors and 120 M872 semi-trailers for cargo movement.



²² ATP 4-11

²³ ibid

²⁴ ibid

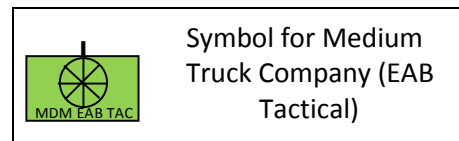
Using all assets, the company can move in a single haul:²⁵

- 1,080 pallets (60 trucks/trailers X 18 pallets/trailer)
- 240 463L pallets (60 trucks/trailers X 4 pallets/trailer)
- 240 20-foot containers (60 trucks/trailers X 4 containers/trailer)
- 120 40-foot containers (60 trucks/trailers X 2 pallet/trailer)
- 285K water with Semi Mounted Flexible Water Tanks (SMFT)

There are 55 Medium Truck Companies (EAB Linehaul) in the Total Army – four in the active component, 36 in the ARNG and 15 in the USAR.

11. Medium Truck Company (EAB Tactical)²⁶

Normally under the mission command of a CSSB or a Motor Transportation Battalion, the Medium Truck Company (EAB Tactical) provide transportation support for the movement of containerized, non-containerized, palletized, dry and/or refrigerated cargo, and bulk water products. The unit is employed in a Corps/Division area of operation, i.e. EAB, and can utilize direct haul, shuttle, relay, and intermodal operations.



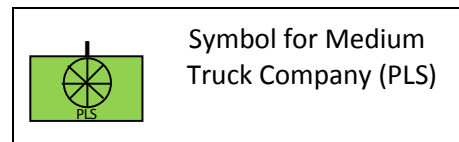
Using 60 FMTV Tractors and 120 semi-trailers, the company can move:

- 840 pallets (60 trucks/trailers X 18 pallets/trailer)
- 240 463L pallets (60 trucks/trailers X 18 pallets/trailer)
- 60 20-foot containers (60 trucks/trailers X 18 pallets/trailer)
- 180K SMFT of water

There are 22 Medium Truck Companies (EAB Tactical) in the Total Army. All are in the ARNG.

12. Medium Truck Company (PLS EAB Tactical)²⁷

Utilizing the Palletized Load System, the Medium Truck Company (PLS EAB Tactical) – colloquially known as a “PLS Company” – provides ground transportation to the Sustainment Brigade’s supported units on an area basis for the movement of dry and refrigerated containerized cargo, and other break-bulk cargo, ammunition, and bottled water. When properly equipped with tank racks or hippos, the 60 PLS trucks and 60 PLS trailers can transport bulk water and bulk petroleum products.



²⁵ See note 21. The number of items capable of being moved is subject to new multipliers (48 vs. 60).

²⁶ ATP 4-11

²⁷ ibid

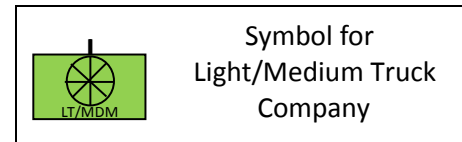
Normally under the mission command of a CSSB or a Motor Transportation Battalion, the PLS Company has 60 PLS trucks and 60 PLS trailers that can move:²⁸

- 960 pallets (60 trucks+60 trailers X 8 pallets)
- 240 463L pallets (60 trucks+60 trailers X 2 pallets)
- 120 20-foot containers (60 trucks+60 trailers X 1 container)
- 240 tank racks of water (60 trucks+60 trailers X 2 racks)
- 240 tank racks of fuel (60 trucks+60 trailers X 2 racks)

With the creation of Composite Truck Companies in Army 2020, there was a reduction in the number of PLS Companies. In 2020 there will be 39 in the Total Army – two in the active component, 12 in the ARNG and 25 in the USAR.

13. Light/Medium Truck Company²⁹

Normally under the mission command of a CSSB or a Motor Transportation Battalion, the Light/Medium Truck Company brings two capabilities to EAB logistics. First, the unit has 50 FMTV cargo trucks with 25 trailers capable of moving both materiel and personnel. The cargo trucks are used for small bulk



shipments, personnel movements, and unit relocations. Second, the unit has 10 FMTV tractors with 20 semi-trailers capable of line haul cargo transport. Combining these capabilities, the Light/Medium Truck Company can provide transportation area support for the movement of bulk cargo, containers, and personnel to units supported by a Sustainment Brigade. This unit conducts local haul and line haul transport operations.

Using the prime movers and trailers, the Light/Medium Truck Company can move:

- 140 pallets
- 30 463L pallets
- 10 20-foot containers
- 30 SMFT of water

Rules of allocation provide for one Light/Medium Truck Company per sustainment brigade and one per APOD. There are 29 Light/Medium Truck Companies in the Total Army, all in the ARNG.

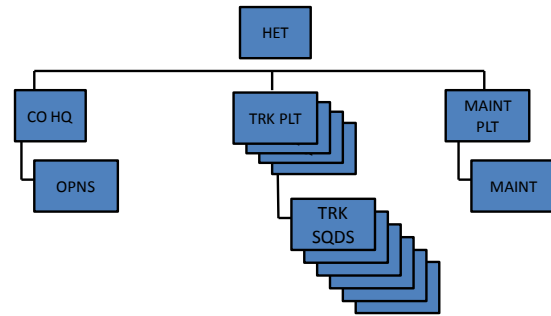
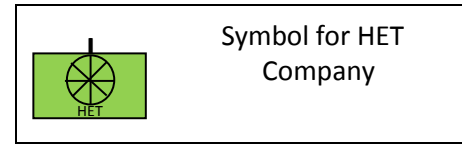
²⁸ See note 21. The number of items capable of being moved is subject to new multipliers (48 vs. 60).

²⁹ ATP 4-11

14. Transportation Combat Heavy Equipment Transport (HET) Company³⁰

The Transportation Combat Heavy Equipment Transport (HET) Company (colloquially known as a “HET Company”) is a versatile and sought-after resource on the battlefield. Although it is an EAB asset normally under the mission command of a CSSB or a Motor

Transportation Battalion, the HET Company’s mission spans all the way from port clearance to battlefield recovery. Basis of allocation provide for three HET companies per ABCT, one per Sustainment Brigade, and one per Theater Opening Element.



Its primary mission is to provide area transportation support to the Sustainment Brigade and supported units; however, its initial mission is port clearance and force closure. It is then made available to relocate heavy maneuver forces on the battlefield. Once the force is closed, its mission is for tactical displacement of ABCTs while performing recovery and evacuation mission for equipment, normally battle-damaged equipment being sent back to a depot for repair.

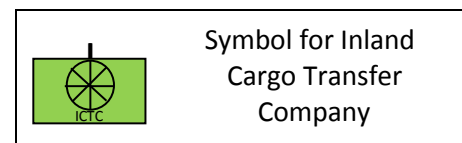
This is the force structure of a HET Company. It is comprised of four platoons with three squads each. Each squad has eight HETs for a total of 24 HETs per platoon.

Using the unit’s 96 HETs and 96 HET trailers, a HET Company can perform an operational or tactical relocation of heavy maneuver forces, including the move or relocation of an ABCT in a single lift. Rules of allocation call for five HET companies to move one ABCT.

There are at total of 14 HET companies in the Total Force – three in the active component, six in the ARNG and five in the USAR.

15. Inland Cargo Transfer Company (ICTC)³¹

The Inland Cargo Transfer Company provides the capability to discharge, load and transship cargo at air, rail or truck terminals, Theater Distribution Centers (TDC), and Central Receiving & Shipping Points (CRSP). Under the mission command of a CSSB, the unit provides container and materials handling equipment (CHE/MHE) to move/transfer cargo, documentation support for cargo transshipment and support to arrival/departure airfield control group (A/DACG) operations.



³⁰ ATP 4-11

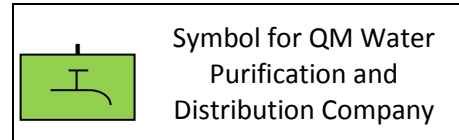
³¹ FM 55-1

ICTCs are normally employed in corps or theater areas to operate an intermodal terminal at theater and corps hubs in up to two separate locations.

There are 27 ICTCs in the Total Army – 10 in the active component and 17 in the USAR.

16. Quartermaster Water Purification and Distribution Company³²

Under the mission command of a CSSB, the Quartermaster Water Purification and Distribution Company provides production, storage and distribution of potable water to customer units on an area basis in a CSSB's support area. Each of the three platoons can purify water at three different locations.



More specifically, the unit is capable of:

- Purifying up to 450K gallons of potable water (150K per platoon) from fresh water source or 100K gallons per day from a brackish or contaminated source.
- Storing up to 300K gallons (100K per platoon)
- Providing limited local distribution using HEMTT-LHS and 2,000 gallon HIPPOS

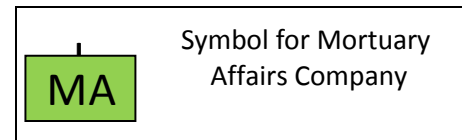
In addition to the three platoons, the Water Purification and Distribution Company may also have mission command of the Tactical Distribution (Hoseline) Detachment (TWDS). This unit provides additional potable water distribution via hose and may be detached from the Water Purification and Distribution Company and attached directly to the CSSB. Specifically, the detachment can:

- Deploy up to 10 miles of hoseline to transport water
- Transport 720K gallons of potable water per day by hoseline.
- Operate two Direct Support water supply points using organic equipment

There are 24 Water Purification and Distribution Companies in the Total Army – one in the active component, 12 in the ARNG and 11 in the USAR. There are 14 TWDS in the Total Army – eight in the ARNG and six in the USAR.

17. Mortuary Affairs Company (MA)³³

The Mortuary Affairs Company performs the full spectrum of mortuary affairs (MA) operations. Each of the five platoons can perform any one of the MA functions at a time but does not perform them concurrently. Each platoon has four Forward Collection Teams. Although MA units are considered a theater asset, they are employed in a Sustainment Brigade's area of operation. With civilian augmentation, the MA Company can set up and operate an in-theater mortuary. MA platoons and teams are often forward deployed to support BCT areas. The MA Company may be



³² FM 10-52

³³ FM 4-20.64

assigned to the mission command of either a CSSB or the Special Troops Battalion (STB) of the Sustainment Brigade.

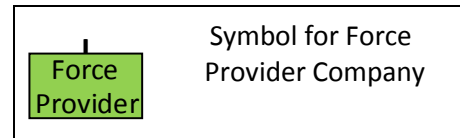
MA Company capabilities include:

1. Operating up to four MA Collection Points (MACPs)
2. Operating a Theater Mortuary Evacuation Point (TMEP)
3. Operating a main MACP to process up to 400 remains per day for onward movement to the TMEP
4. Operating a Personal Effects (PE) Depot to receive, store, inventory and process personal effects

There are eight MA Companies in the Total Army – two in the active component and six in the USAR.

18. Force Provider Company

Force Provider Companies provides all Warfighters a brief respite from the rigors of combat during theater reception, rest and refit, redeployment and base camps by providing basic life support services as close to a combat zone as possible. Those services include: Billeting, supply, climate control and facility space for basic MWR services; they also provide field feeding, shower and laundry support for Soldiers utilizing the unit's services. The Force Provider (Heavy) Platoon provides full service support for units temporarily staying in the facility, such as for RSOI. The Force Provider (Light) Platoon has four squads which can each operate a 150 person module to provide life support at a FOB/COP. Personnel from the residing unit provide support personnel, such as cooks.

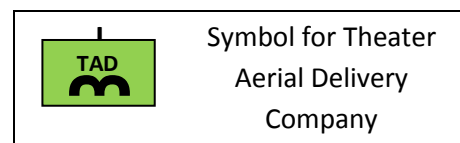


Operating mainly under the mission command of a CSSB, they are typically employed in a Sustainment Brigade's area of operations in support of major combat or stability operations such as humanitarian aid, noncombatant evacuation, disaster relief, peace keeping or peace enforcement operations.

There is one Force Provider Company in the Total Army located in the USAR.

19. Theater Aerial Delivery Support Company (TAD)³⁴

The overall mission of a Theater Aerial Delivery Support Company (TAD) is to pack parachutes and temporarily store and rig supplies and equipment for airdrop to Army, Air Force or other services. Each of the two platoons can rig for airdrop up to 25 STs of cargo for a total of 50ST per TAD. It normally falls under the mission command of a CSSB.



³⁴ FM 4-20.41

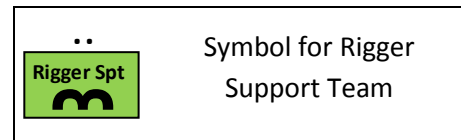
More specifically, the TAD provides:

- Personnel and cargo parachute packing
- Rigging for airdrop platform and container loads
- Inspection, repair, fabrication, and salvage of airdrop equipment
- Requisition, receipt, storage, and issue of airdrop equipment
- Packing of parachutes and temporary storage and rigging of up to 50 STs of supplies and equipment for airdrop.

By 2020, there will be five TAD Companies in the Total Army – three in the active component and two in the USAR.

20. Rigger Support Team (BfSB)³⁵

The Rigger Support Team (BfSB) provides personnel parachute packing for static line and military free fall operations. It also provides cargo parachute packing, Container Delivery System (CDS) and Joint Precision Airdrop System (JPADS) BfSBs in support of Long Range Surveillance Companies (LRSC). One team is allocated per BfSB for the LRSC. The team normally deploys to the corps area in direct support of a BfSB.



Specific capabilities of the Rigger Support Team include:

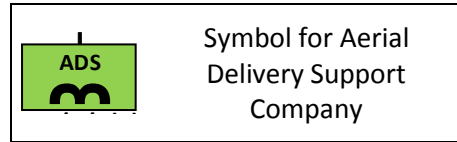
- Personnel parachute packing for static line and military free fall operations
- Rigging cargo and cargo parachute packing for Container Delivery System (CDS) and Joint Precision Airdrop System (JPADS)
- Packing up to 20 personnel parachute systems per day and/or rigging and delivering up to 6 short tons of cargo per day for 10 days.
- Performing field level maintenance on air items.
- Performing limited sling load missions
- Assisting in loading supplies and equipment into aircraft and in release of supplies and equipment from aircraft in flight
- Providing supervision, technical assistance and advice in the recovery and evacuation of airdrop equipment

By 2020, there will be 10 Rigger Support Teams in the Total Army – three in the active component and seven in the ARNG.

³⁵ FM 4-20.41

21. Aerial Delivery Support Company (ADS)³⁶

The Aerial Delivery Support Company Support is a specialized unit designed to provide parachute packing services and the receipt, storage, inspection, field-level maintenance, and issue of airdrop equipment required for airdrop of personnel, supplies, and equipment for up to four Airborne Brigade Combat Teams (BCTs). Each ADS Platoon in the active component can support an Airborne BCTs. The ADS Platoons may also be tasked to provide area support within the division area.



Specifically, the ADS Company provides:

- Direct rigging support to two to four Airborne BCTs of approximately 3,400 personnel each.
- Receipt, storage and issue of airdrop items
- Inspection services and technical assistance for packing, rigging, and loading, supplies and equipment for an airdrop
- Supervision and technical assistance in the recovery and evacuation of airdrop equipment after an airdrop
- Inspection and packing of parachutes
- Sustainment airdrop support to a BCT of 134-268 short tons per day following an initial assault

Each platoon of the ADS Company can perform all of the aerial delivery functions and can be employed separately from the mission command of the company.

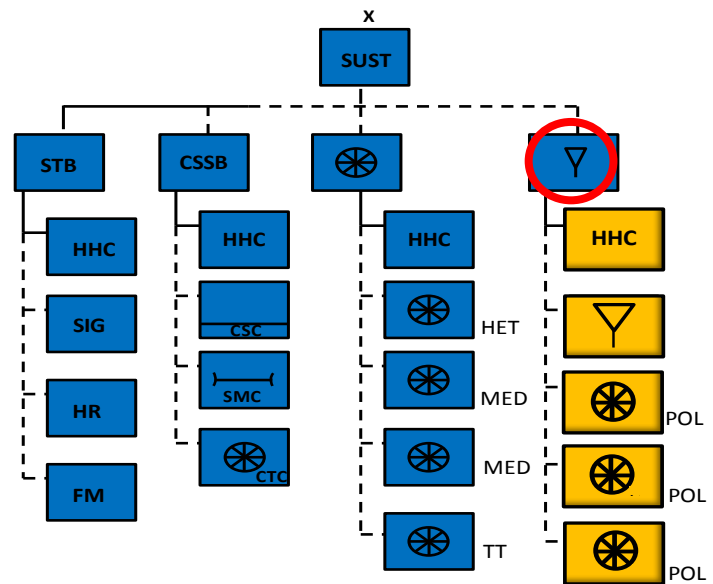
- The Aerial Delivery Office provides operational planning and task organization for aerial delivery operations
- Airdrop Support Section packs and maintains the parachutes used for personnel and cargo airdrops
- Airdrop Rigging Section rigs platform loads and airdrop containers, maintains rigging equipment, and performs training and technical assistance for supported units
- Air Items Maintenance Section provides field level maintenance support on air items

There are four ADS Companies in the Total Army – one in the active component, two in the ARNG and one in the USAR. The ADS Companies in the ARNG and USAR have a reduced quantity of personnel parachutes.

³⁶ FM 4-20.41

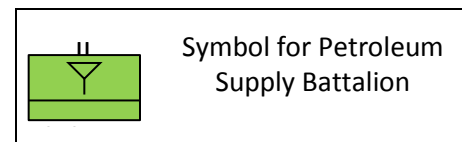
Petroleum Supply Battalion³⁷

Petroleum Supply Battalion provides mission command to all assigned petroleum-related units and synchronizes current and future petroleum distribution operations for the Sustainment Brigade. More specifically, the headquarters plans and coordinate the movement of bulk petroleum using ground transportation assets and dispatches vehicles to perform bulk POL missions. The battalion also has a petroleum quality analysis section to ensure the quality of petroleum products being handled by the unit.

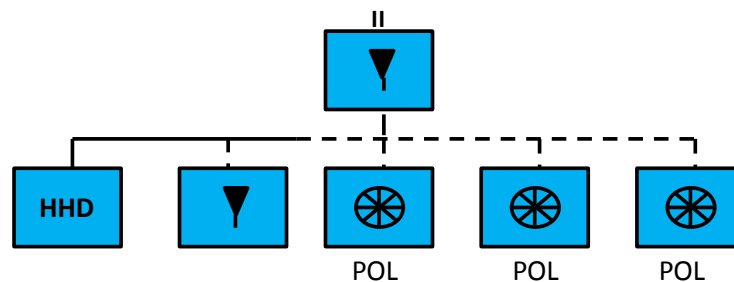


Rules of allocation provide for one Petroleum Supply Battalion for mission command of 2-5 QM Petroleum Support Companies and/or Medium Truck Companies (POL) in the theater area. Petroleum Support Companies and POL truck companies in the division area fall under the mission command of a CSSB or the Special Troops Battalion of the Sustainment Brigade.

The POL Supply Battalion is designed to mission command petroleum handling and distribution assets for a Sustainment Brigade's area of operation

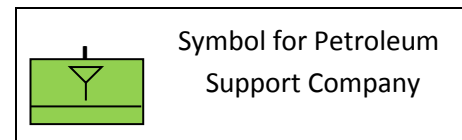


There are 10 POL Supply Battalions in the Total Army, all in the USAR.



1. Petroleum Support Company³⁸

The Petroleum Support Company provides POL supply support on an area basis. They also provide theater stockage capability. The unit specifically plans and coordinates for POL supply operations

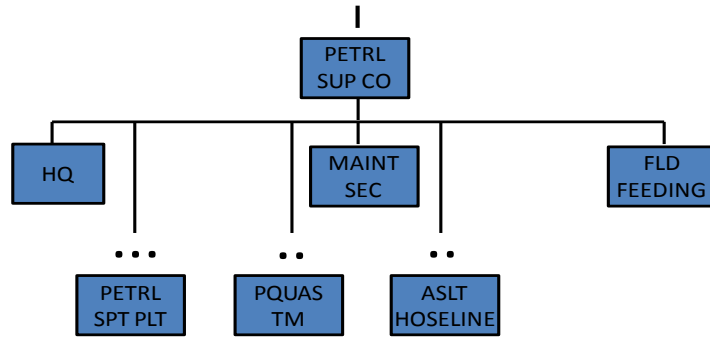


³⁷ See FM 10-67 for additional information.

³⁸ FM 10-67

under the mission command of a Petroleum Supply Battalion although they can also be assigned to a CSSB.

In addition to the headquarters, maintenance and field feeding sections of the POL Support Company, there are three petroleum support platoons. Depending upon mission requirements, the company may also have an Assault Hoseline Team and/or a Petroleum Quality Analysis Team (PQAS).



The base capabilities of the company with all three POL support platoons are:

- Receive and issue 600,000 gallons of fuel per day,
- Store 1,200,000 gallons of petroleum using 300K FSSPs. They can operate 800K FSSPs if issued from APS.
- Provide area support using the 120K FSSP in the Area Support Section of each platoon.
- Provide local distribution up to 112,500 gallons per day using 5,000 gallon fuel tankers (five per platoon).

One of the most important characteristics of the Petroleum Support Company is that it is modular. Each platoon, the PQAS and Assault Hoseline Teams can be detached and placed under the mission command of other units, including a CSSB.

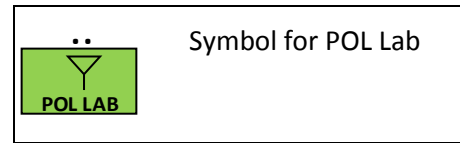
The Petroleum Quality Analysis Team operates a petroleum laboratory used to perform complete specification and procurement acceptance testing of petroleum products. They also provide technical assistance for handling, storing, sampling, identifying, and performing quality evaluation of petroleum products and their containers for all US and allied forces on an area support basis. There is one PQAS assigned per ASB, one per POL Support Company operating in the division area, and one in the Composite.

The assault hoseline augmentation team operates and maintains the assault hose line system to transfer fuel. It has four hoseline systems providing up to 10 miles of hoseline. This allows it to provide movement of approximately 1,680,000 gallons of bulk petroleum per day (20 operational hours and with four hours downtime for maintenance).

There are 28 Petroleum Support Companies in the Total Army – three in the active component and 25 in the USAR. There are 13 Assault Hoseline Teams in the Total Army – all in the USAR. And there are 15 PQAS in the Total Army – three in the active.

2. Quartermaster Base Petroleum Lab Team (POL Lab)

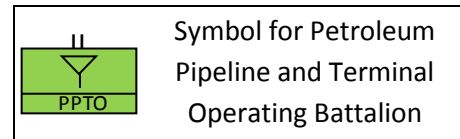
The QM Base Petroleum Lab Team performs complete specification and procurement acceptance testing of petroleum products. It provides theater level POL testing and evaluation. This laboratory is the largest POL mobile lab available for POL quality surveillance. It provides technical support and supervision to other laboratories for handling, storing, sampling, identifying, and performing quality evaluation of petroleum products and their containers for US and allied forces. The organization is under the command of either a Theater Sustainment Command (TSC) or Expeditionary Support Command (ESC).



There are four POL Lab Teams in the Total Army – one in the active component and three in the USAR.

Petroleum Pipeline and Terminal Operating Battalion (PPTO)

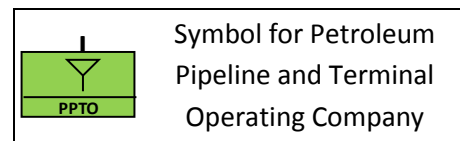
Under the mission command of a sustainment brigade, the POL Pipeline and Terminal Operating Battalion (PPTO) provides mission command to QM Petroleum Pipeline and Terminal Operating Companies and synchronizes current and future petroleum distribution operations – pipeline and ground/water – for the Sustainment Brigade. It also has a POL lab branch to provide analysis support for petroleum products. One PPTO is required for every 2-5 PPTO Companies.



There are three PPTO battalions in the Total Army – all in the USAR.

1. Pipeline Terminal Operating Company (PPTO)

Employed in a POL port or theater Sustainment Brigade area of operation, the PPTO Company operates petroleum pipeline and terminal facilities for receipt, storage, issue, and distribution of bulk petroleum products in support of an independent corps or theater army area of operations.



Each company is capable of operating fixed terminal facilities, a tactical petroleum terminal, or up to 75 miles of pipeline and has a Tactical Assault Hoseline with a maximum of five miles.

More specifically, the two tank farm sections operate and maintain the Tactical Petroleum Terminal (TPT) to receive, store, and issue bulk fuel. The company has a bulk storage capability of 3,780,000 gallons of fuel or can operate a bulk fuel terminal facility with up to 21M gallons. The storage and issue section can operate and maintain the 880K Fuel System Supply Point (FSSP).

There are 12 PPTO Companies in the total Army – all in the USAR.

Transportation Motor Transport Battalion (TMT)

Under the mission command of a Sustainment Brigade, Motor Transport Battalions provide mission command of organic and attached units and performs transportation support to Sustainment Brigade operations. The battalion provides synchronization and situational awareness of all transportation support for the Sustainment Brigade and provides administrative, communication, CBRNE defense, electronic warfare, and sustainment automation management support for subordinate units.³⁹

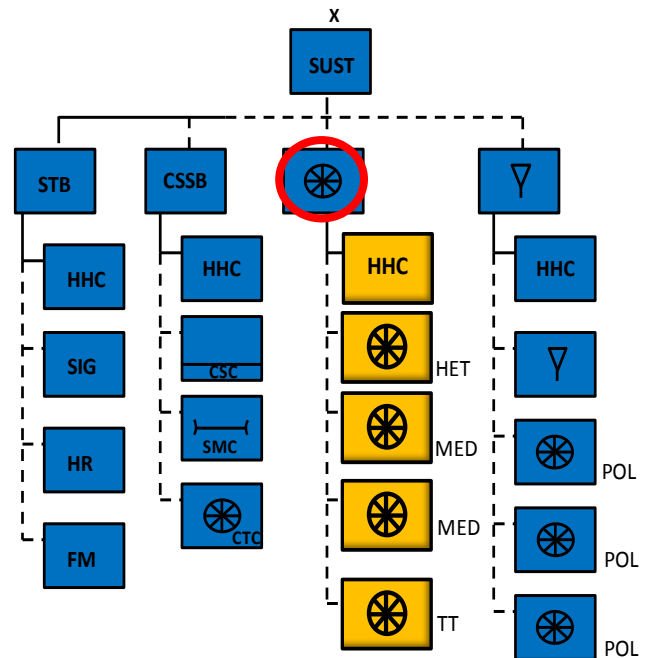
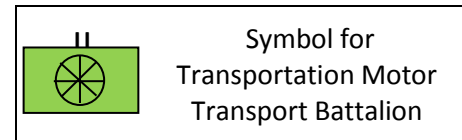
One TMT Battalion is allocated per 3-7 subordinate motor transport units in a theater of operations. Additionally, one TMT BN is allocated per committed Sustainment Brigade with a Theater Opening Element or with a Transportation Brigade (Expeditionary) (TB(X)).

Units that will typically be placed under the mission command of a TMT include:

- Truck Company Linehaul (7.5K) POL
- Truck Company Linehaul (5K)
- Truck Company Light/Medium (Cargo)
- Truck Company Medium EAB Tactical (Cargo)
- Truck Company Medium EAB Tactical (POL)
- Truck Company Medium EAB Tactical (PLS)
- Truck Company (HET)
- Truck Company Med (EAB Line Haul) Cargo

Most of the trucks and trailers assigned to the subordinate units of the TMT perform long distance, linehaul missions. These missions are often providing transport from a port to a CSSB, SSA, ASP, etc. Commanders and their staffs must carefully weigh the effort and efficiently use their assets to ensure that maneuver commanders receive a steady flow of supply. This involves selecting the right types of trucks and synchronizing the flow of supply – both forward and back (retrograde). This is all done at the direction of and coordination with a Sustainment Brigade.

There are 19 TMTs in the Total Army – 11 in the ARNG and eight in the USAR.



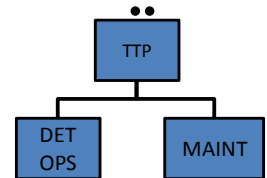
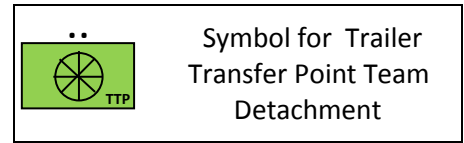
The Transportation Motor Transport Battalion is designed to mission command truck companies and other assets in a Sustainment Brigade's area of operation. The schematic above depicts a typical mission command structure for this type battalion.

³⁹ Reference "Sustainment Force Structure Handbook"

1. Trailer Transfer Point Team Detachment (TTP)

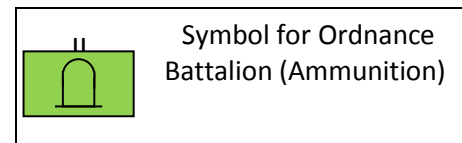
Normally under the mission command of a Motor Transport Battalion, the Trailer Transfer Point Team Detachment operates a Trailer Transfer Point (TTP) supporting line haul and local haul motor transport operations. The TTP can manage 250 semitrailers in trailer transfer operations, serve as a refueling point for the TTP, recover trailers and provide limited field maintenance for trailers, including emergency maintenance for trailers used in transfer point operations.

There are 39 TTPs in the Total Army. All are in the USAR.



Ordnance Battalion (Ammunition)⁴⁰

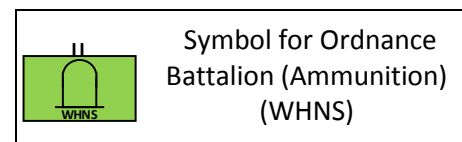
The Ordnance Battalion (Ammunition), better known as an AMMO Battalion, provides mission command for assigned ammunition companies and staff planning for up to nine ammunition companies involved in the coordination, supply, and maintenance of Class V. As a mission command element for Modular Ammunition Companies, the AMMO Battalion provides oversight of the operation and maintenance of Ammunition Storage Areas (ASA).



Normally placed under the mission command of a sustainment brigade, the two AMMO Battalions in the Total Army are both in the USAR.

Echelons above Brigade logistics – Ordnance Battalion (Ammunition) (WHNS)

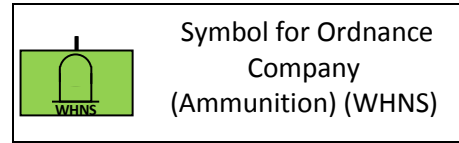
The Ordnance Battalion (Ammunition) (WHNS) – better known as a Host Nation AMMO Battalion – provides mission command for assigned ammunition companies and staff planning for up to nine ammunition companies involved in the coordination and management of U.S.-owned Class V stocks being received, stored, and issued by Host Nation ammunition units. It is employed within a theater of operations at a Host Nation ammunition storage facility containing U.S. owned ammunition. Currently, there is only one in the Total Army and it is in the active component and stationed in the Republic of Korea (6th Ammunition Battalion). It operates under the mission command of the 501st SUST BDE.



⁴⁰ FM 4-30.1

1. Echelons above Brigade logistics – Ordnance Company (Ammunition) (WHNS)

The Ordnance Company (Ammunition) (WHNS) manages U.S.-owned Class V stocks being received, stored, and issued by Host Nation ammunition units. It is employed within a theater of operations at a Host Nation ammunition storage facility containing U.S. owned ammunition. Currently, there are only three in the Total Army and they are in the active component, stationed in the Republic of Korea (84th, 52nd and 17th ammunition companies). They all operate under the mission command of the 6th Ammunition Battalion.

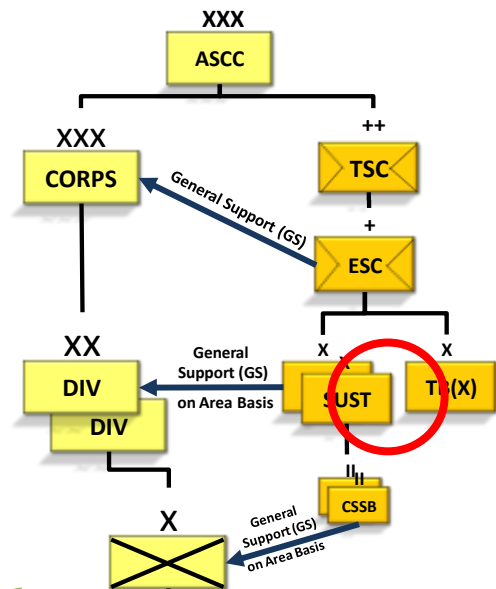


Sustainment Brigade (SUST BDE)⁴¹

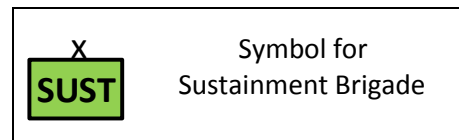
Sustainment Brigades (SUST BDE) are flexible, modular logistics headquarters that provide mission command for a wide range of sustainment and logistics units in EAB, including CSSBs and functional sustainment battalions, e.g. POL Battalions and Motor Transport Battalions. In a theater of operations, a Sustainment Brigade is assigned to the ASCC and provides general support to ASCC units. Sustainment brigades may be assigned or attached to a Theater Sustainment Command or an Expeditionary Sustainment Command. Its role is to enable operational reach, freedom of action, and prolonged endurance of Army forces executing decisive actions in support of unified land operations. It is the primary hub for planning, coordinating and synchronizing current and future logistics operations for a given area. Sustainment Brigades have theater opening, theater distribution, and sustainment operations responsibilities.

On an area support basis, SUST BDEs provide general support to BCTs, Multifunctional Support Brigades (FiB, MEB, BfSB and CAB), Special Forces, and joint and multinational forces. The SUST BDE's primary focus is "down" toward fulfilling tactical logistics needs as demanded from the CSSBs, functional battalions and BSBs. As a bridge between operational and tactical logistics, the SUST BDE must weigh a corps and/or division commander's priority spread across the area of operations. As such, the SUST BDE is a lynchpin in theater distribution. Critical tasks for a SUST BDE in theater distribution include:

1. Establishing and operating Ammunition Supply Point (ASP)
2. Establishing and operating Fuel System Supply Point (FSSP)
3. Establishing and operating Supply Support Activity (SSA)
4. Operational control of Sustainment Maintenance Forward Repair Activities
5. Operational control of Common User Land Transportation (CULT) assets
6. Aerial Delivery



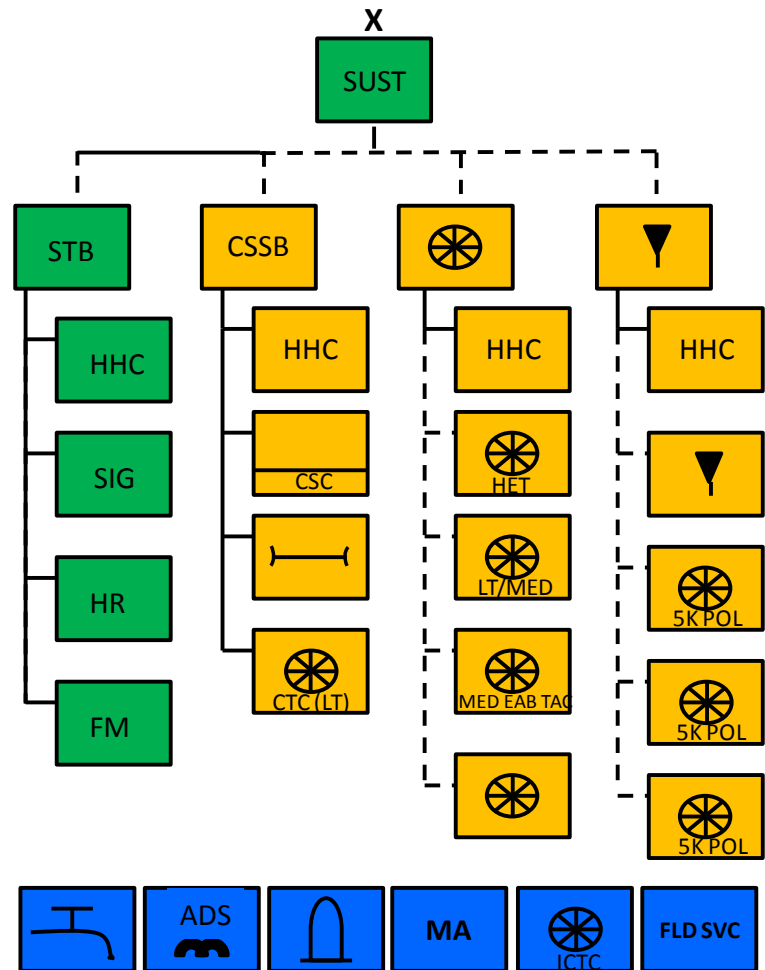
Under the mission command of an ESC, a Sustainment Brigade provides general support on an area basis to a division (above). A typical task organization for a SUST BDE includes CSSBs, Motor Transport BNs, POL BNs, and units under the Special Troops BN, (below)



⁴¹ ATP 4-94

More specifically, the SUST BDE has responsibility for:

- *Distribution* – Maintaining visibility of materiel moving through the theater distribution system and the decision points for making changes to fulfill shortages, priorities, and operational needs
- *Requirements Validation and Prioritization* – Validating and prioritizing all requirements against commander’s priorities.
- *Redistribution* – Reallocating excess materiel to other locations in the area of operations to eliminate excess and simultaneously fill shortages and requirements elsewhere.
- *Retrograde* – Redirecting sustainment to other locations in the area of operations.
- *Requirements Determination* – Maintaining visibility of all requirements for supplies and equipment.
- *Warehousing* – Organizing, sorting, issuing, accounting for and safeguarding materiel.
- *Materiel Management* – Maintaining accountability and visibility of materiel and cross-leveling materiel to fill shortages and ensure materiel is available to meet operational needs.
- *Cataloguing* – Maintaining materiel visibility by correct identification and location for stored materiel.



A typical task organization for a SUST BDE includes CSSBs, Motor Transport BNs, POL BNs, and units under the Special Troops BN. In the above example, the units in green are part of the SUST BDE; units in orange are those that are normally attached to a SUST BDE; and those in blue are additional capabilities normally put under the mission command of the STB or the CSSB. Dotted lines denote attachment.

For some of these responsibilities, the SUST BDE staff conducts the planning and execution. For example:

- Field services section performs a direct management role over Aerial Delivery operations, Mortuary Affairs, and field service operations within the Sustainment Brigade area.
- Support Operations Distribution Integration Branch monitors the distribution of all classes of supply and services, and personnel movements of the supported command. It provides location

of transportation assets and movement of critical supplies along main supply routes. It provides staff recommendations to direct, redirect, retrograde, and cross level resources to meet mission requirements.

In many instances, the SUST BDE does not have organic assets to do certain tasks, including operating an ASP or an SSA. Instead, units capable of performing these tasks are attached. By using the modular capabilities of task organized formations, the SUST BDE can establish where and how those capabilities are utilized. For example, the Fuel and Water section of the SUST BDE conducts commodity management of fuel and water and performs a direct management role over the FSPs operated by the CSSBs.

Critical to success, the SUST BDE coordinates with a multitude of other commands that provide services to maneuver, EAB and support units. Although the TSC and ESC do most high-level coordination, working with these and other agencies allows the SUST BDE to add additional velocity in the logistics pipeline by keeping reach back capability into the total logistics enterprise. These commands and agencies include:

- Army Materiel Command
 - Army Services Command (ASC)
 - Army Field Support Brigades (AFSB)
 - Army Field Support Battalions (AFSBn)
 - Army Contracting Command (ACC)
 - Contract Support Brigades (CSB)
 - Contingency Contracting Battalions (CCBn)
- Surface Deployment and Distribution Command
- Defense Logistics Agency
- Medical Command (MEDCOM)

While planning and executing its logistics function, the SUST BDE is simultaneously providing subordinate units with administrative support, communication equipment and support, CBRNE defense, electronic warfare, and sustainment automation management support. These functions are accomplished through staff sections and units attached to the Special Troops Battalion. The STB typically has a Sustainment Brigade Signal Network Support Company, Human Resource Company, and Finance Company attached. It may also be supplemented with a Transportation Theater Opening Element (TTOE) and Theater Distribution Augmentation Element (TDAE). The STB staff sections provide the SUST BDE with trial defense services, limited medical treatment, medical ground evacuation and religious support. The SUST BDE does not have health service support (HSS) organizations attached.

HSS is executed through the medical mission command structure.

There are 30 Sustainment Brigades in the Total Army – 11 in the active component, 10 in the ARNG and nine in the USAR. All of the SUST BDEs in the active component are located on posts where there are BCTs; each has a CSSB with the division/corps-aligned design, i.e. CTC, CSC and SMC.

When at home station, the SUST BDE is normally the senior logistics command on a post and has the responsibility to oversee the training, readiness and administration of all logistics units as well as coordinating logistics support for the other units on post.

Units assigned to the Special Troops battalion (STB) of the SUST BDE include:

1. Human Resource Company (HR)

Under the mission command of a Sustainment Brigade, the HR Company provides mission command, planning and technical support to all assigned or attached HR and postal platoons. It is both an existence and workload-based modular headquarters. The HR Company has both long and short term capability for:

- Leadership/oversight of two-six platoons
- Postal inspections, planning and directory services
- Current and future operations management
- Establishing Casualty Liaison Teams (CLT) and (Personnel Accountability Teams (PAT)

HR Companies detach their HR platoons into battalions under the SUST BDE to provide human resource services, including postal services.

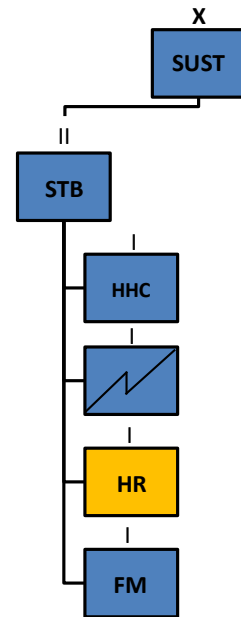
As part of the HR Company, the Military Mail Terminal Team (MMT) performs postal distribution and routing support – receiving, sorting, safeguarding, directing, and redirecting mail and maintaining postal routing schemes. There are five MMTs in the Total Army – three in the active component and two in the USAR.

There are 60 HR platoons in the Total Army – 24 in the active component, 13 in the ARNG, and 14 in the USAR. There are 94 postal platoons in the Total Army – 13 in the active component and 81 in the USAR.

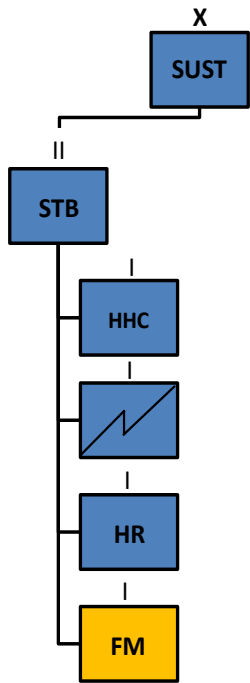
There are 30 HR Companies in the Total Army – 11 in the active component, five in the ARNG and 14 in the USAR.

2. Financial Management Company (FMCO)

Assigned to a Sustainment Brigade, the Financial Management Company offers a modular and tailorable unit that gives the commander the capability to mission command three to five Financial Management Detachments (FMDET). The FMCO's primary mission is to provide financial management (FM) support on an area basis in support of joint commands, multinational commands, units, Soldiers, authorized civilians and contractors. Working closely with the SUST BDE, the FMCO:



 HR	Symbol for Human Resources Company
.. HR MMT	Symbol for Military Mail Terminal Team
... Postal	Symbol for Postal Platoon



- Coordinates all FM support within SUST BDE area of operations and tracks missions conducted by FMDETs
- Certifies contract payments
- Prepares payment vouchers and forwards prepared vouchers to the disbursing section for payment
 - Serves as the central funding element, acquiring and providing currency support
 - Establishes management internal control processes to provide reasonable assurance that government funds are protected and safeguarded
 - Oversees the execution of pay support functions

There are 91 FM support detachments (FMSD) in the Total Army – 34 in the active component, 33 in the ARNG and 24 in the USAR.

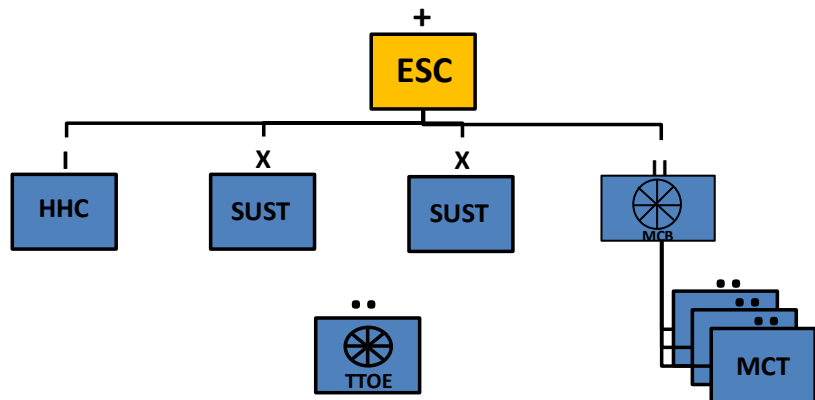
	Symbol for Financial Management Company
	Symbol for Financial Management Detachment

There are 26 FMCOs in the Total Army – 11 in the active component, 10 in the ARNG and five in the USAR.

Operational Logistics

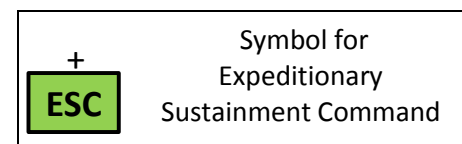
Expeditionary Sustainment Commands

Commanded by a brigadier general, the Expeditionary Sustainment Command (ESC) is a force pooled asset that is normally assigned or attached to a TSC, but may be task organized directly under the mission command of a GCC, ASCC or Corps/ARFOR. It also may be OPCON to a Corps functioning as a Joint Task Force in a JOA. The ESC is often the senior Army sustainment headquarters within a Joint Operational Area (JOA). Through the planning and synchronization of logistics units, the ESC provides the logistics needed by Army forces to enable Operational Reach, Freedom of Action, and Prolonged Endurance, thereby enabling Army forces to conduct Decisive Action.



A typical task organization for an ESC includes sustainment brigade(s) and movement control battalion(s).

The ESC is focused on synchronizing operational-level sustainment operations to meet the day-to-day and projected operational requirements of the JTF or supported force. It accomplishes this, in part, by establishing mid- and short-range planning horizons that are derived from the JTF OPLAN, commander's intent, commander's critical information requirements (CCIR), operational tempo, and distribution system capacity. The ESC also reaches back into the total logistics enterprise, i.e. national and strategic assets, available to the theater. Since the ESC is an operational-to-strategic unit, it conducts high-level coordination into— a multitude of commands and agencies – to provide velocity in the logistics pipeline for maneuver, EAB and support units. These commands and agencies include:



- Army Materiel Command
 - Army Services Command (ASC)
 - Army Field Support Brigades (AFSB)
 - Army Field Support Battalions (AFSBn)
 - Army Contracting Command (ACC)
 - Contract Support Brigades (CSB)
 - Contingency Contracting Battalions (CCBn)
- Surface Deployment and Distribution Command
- Defense Logistics Agency

- Medical Command (MEDCOM)

The ESC provides centralized mission command and decentralized operations of sustainment units (less medical) in designated areas of a theater in support of unified land operations. More specifically, the ESC utilizes mission command over sustainment brigades to aid in executing logistics operations and may serve as a basis for an expeditionary command for joint logistics when directed by the GCC or designated multinational or joint task force commander. It normally deploys when a TSC determines that a forward command presence is required to provide the TSC commander with regional focus necessary for effective operational-level support to Army or JTF missions.

On the ground, the ESC plans, prepares, executes, and assesses theater opening, distribution, and sustainment for Army forces in theater. These roles are critical in setting the theater and supporting the theater by ensuring a synchronized campaign plan for one or more corps/divisions. Specific roles and responsibilities of the ESC include:

- Distribution management
- Materiel readiness
- Munitions management
- Supply/Materiel Management
- Logistics automation

To accomplish distribution management, ESCs coordinate and synchronize the movement of all personnel, equipment, and supplies into and out of the AOR. To do this effectively, the ESC relies on internal coordination and information exchange between its supply and the mobility branches. A complete awareness of the logistics status of subordinate and supported units enables the ESC to optimize resources and task subordinate organizations in support of on-going and future operations.

Materiel readiness requires the ESC staff to provide supervision over maintenance issues impacting force readiness. It determines AOR-level requirements and manages the maintenance capabilities for supported units of the command. This includes ground maintenance, electronic maintenance, and aviation maintenance. The ESC must conduct maintenance trend analysis and identify equipment maintenance issues across the entire AOR and then coordinate with appropriate elements in the logistics enterprise – e.g. TSC, ASCC, and Army Materiel Command – to resolve any issues.

The ESC provides supervision over all supply operations except medical (Class VIII). It performs materiel management of subsistence, general supplies, construction material, and repair parts for a designated area of responsibility. Handling of Class V (munitions) is critical. At this level of materiel management, the ESC has less of an interactive, direct management role and more of a quality surveillance and oversight role over SUST BDEs. ESC materiel management capabilities are focused on maintaining operational awareness of order status that enables effective distribution management within an AOR, theater of operations, or AO/JOA. With that said, an ESC still provides high-level visibility of conventional ammunition and, through staff analysis, determines munitions requirements, manages supply capability and conducts materiel management for supported units of the command. As a material manager, the ESC is responsible for:

- Performing materiel management of specified classes of supply
- Assisting in expediting critical supplies through the logistics enterprise
- Management oversight – review work at the SSA and support operations to ensure appropriate levels of effectiveness
- Monitoring the SSA excess posture
- Monitoring the SSA to ensure repairable are being turned in within allotted timeframes
- Monitoring of SSA overdue deliveries to ensure they are being resolved effectively and in a timely manner
- Monitoring of SSA’s performance statistics to ensure appropriate supply
- Providing customer support and evaluating performance
- Planning and reviewing requirements, including involvement in running demand analysis process which generates the authorized stockage list

Communications is key to logistics success. ESCs are responsible for logistics automation software systems and networks in use in their AOR. ESCs establish the theater logistics automation plan and policies while directing operational functions, maintaining system readiness, and providing maintenance support for logistics automations systems in support of subordinate units. It maintains regional servers for logistic information systems and provides log automation support to subordinate and supported units.

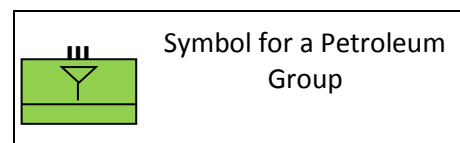
ESCs are responsible for all movement control planning and supervision of all allocated transportation assets within their assigned area of responsibility. ESCs directly coordinate with joint and strategic partners, including the Joint Deployment Distribution Operations Center (JDDOC) and SDDC, to synchronize inter-theater and intra-theater deployment and distribution efforts and optimize intra-theater distribution by employing all transportation modes available in theater. While the ESC’s mobility branch conducts planning in this area, it is mostly conducted by assigned Movement Control Battalions and/or Movement Control Teams.

ESCs also play a vital role in port opening and management. The ESC’s specific role in port opening and the unique units used in that operation will be discussed later in this document.

There are 14 ESCs in the Total Army – four in the active component, two in the ARNG and eight in the USAR.

Petroleum Group (POL Group)

The POL group has the mission from the Theater Army to plan, control, and supervises the operation of the fuel-distribution system. The group’s headquarters develops requirements for petroleum-handling equipment, facilities, construction, and petroleum units’ needed to develop, operate, and maintain the system.



It supervises two or more petroleum-pipeline and terminal-operating battalions, transportation motor transport battalions (petroleum, oils, and lubricants (POL)), and other units, as required.⁴²

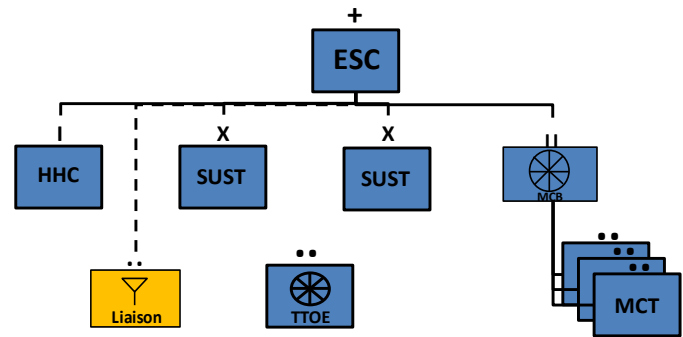
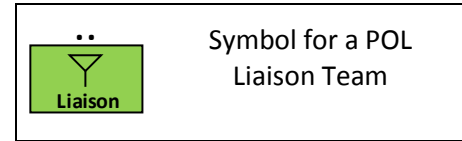
There is only one POL Group in the Total Army. It is in the USAR.

Petroleum Liaison Team

The POL Liaison Team is designed to coordinate Class III “bulk fuel” support between U.S., allied, and host nation forces. It is placed under the mission command of a Theater Sustainment

Command (TSC), Expeditionary Sustainment Command (ESC) or Sustainment Brigade to:

- Coordinate for theater bulk petroleum sustainment support
- Interface with Defense Logistic Agency-Energy (DLA-Energy) for delivery/distribution, transportation, and inventory control of bulk fuel assets
- Report bulk petroleum data to the supported command
- Identify petroleum equipment required to be compatible with US Army systems
- Insure proper quality surveillance procedures are used to meet US military fuel standards



There are 19 Petroleum Liaison Teams in the Total Army. All are in the USAR.

⁴² See FM 5-482

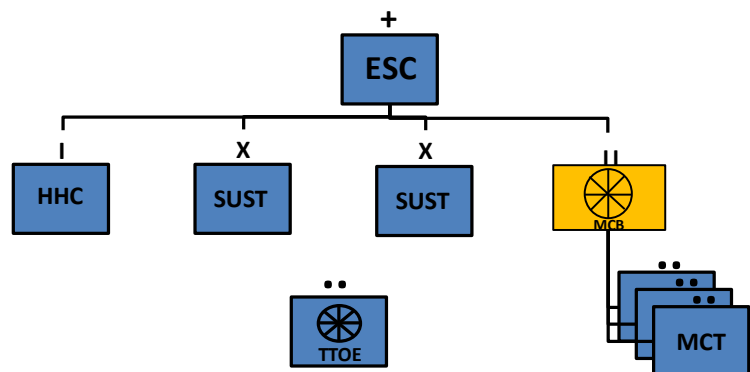
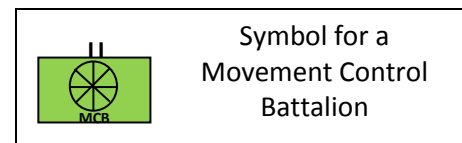
Movement Control

Movement control, as a transportation subordinate function, is the dual process of committing allocated transportation assets and regulating movements according to command priorities to synchronize the distribution flow over lines of communications (LOC) to sustain land forces. While distribution is about getting the “right things” to the “right place” at the “right time,” movement control is the part of the process that synchronizes the flow to ensure the “right place” at the “right time” happens.

TSC and ESC DMCs synchronize operations within the distribution system to maximize throughput and follow-on sustainment. They manage all facets of transportation including the effective use of air, land, and sea transportation assets. The TSC and ESC roles in movement control include maintaining visibility of theater distribution assets within the distribution network directing the cross-leveling of distribution resources to meet requirements and/or optimize the distribution flow. They also develop the policies and procedures to control, regulate, and expedite the movement of intermodal assets within the theater.

Movement Control Battalion (MCB)

The Movement Control Battalion (MCB) is a versatile functional transportation organization that can be used in a variety of movement missions spread throughout an operational area to support the distribution and sustainment efforts in enabling decisive actions. The MCB is at the center of movement control as the lead unit in synchronizing the flow of transportation assets and matching transportation movement requirements against transportation capabilities. MCBs are the key element in keeping the transportation systems synchronized to ensure the uninterrupted movement of personnel, supplies, equipment, and services to Soldiers. MCBs are under the mission command of an ESC or TSC. They, in turn, provide mission command to Movement Control Teams (MCTs).



There are five functions of movement control that are essential for MCBs to follow:

- *Planning* in relation to movement control is taking the known and anticipating the unknown events and requirements to initiate necessary actions that most appropriately avoid or resolve an issue. For movement planners in the MCB, anticipation requires developing alternative plans for routes and the potential loss of assets due to enemy action. Movement planners must also know the distribution system, road networks, location of customer activities, and frequency and magnitude of their transportation requirements and their material/container-handling

capabilities. A more specific planning requirement is assisting in planning and executing reception, staging, onward movement, and retrograde of personnel, equipment, and sustainment supplies, including actions associated with marshalling and staging areas.

- *Allocating* resources (the common user transportation capability) against planned movement requirements. This is critical in the decision making process since it forces MCB planners to analyze and synchronize requirements, capabilities, and priorities. Planners must constantly review and adjust available capabilities to maximize the support provided. Transportation personnel allocate capabilities based on theater priorities when there are not enough assets to satisfy all transportation demands.
- *Routing* is the process of scheduling and directing movements on LOCs to prevent conflict and congestion. When routing traffic, movement planners consider the following:
 - Assign highest priority traffic to routes that provide the minimum time-distance.
 - Consider the sustained capabilities of roads and bridges when assigning movements.
 - Separate motor movements from pedestrian movements.
 - Separate civilian traffic (vehicular or pedestrian) from military movements.
 - Consider consolidating shipments that can be applied to a selected route.
- *Coordinating* is working with organizations that participate directly or indirectly with the movement of personnel, supplies, and forces supporting deployment, redeployment, and distribution operations. Coordination extends to joint and multinational forces, host nations, contractors and nongovernmental agencies. Coordination of requirements occurs with TSC/ESC, other MCBs, sustainment brigades, aviation brigades, maneuver enhancement brigades, CTO, DTO, and HN and commercial transportation organizations. This can also involve coordination with SDDC and the Joint Deployment Distribution Center (JDDOC) when the TSC/ESC delegates that authority for strategic movements entering their operational area
- *In-transit visibility* (ITV) is knowing where things are in the logistics pipeline. Using electronic systems, the MCB must have reliable ITV to properly plan and execute the synchronization of transportation assets and accomplish the other aforementioned core tasks. Without it, there cannot be effective and efficient planning and utilization of resources.

Other major functions of the MCB include:

- Validation or selection of mode for movement requirements
- Providing additional synchronization of movements by maintaining mission command over Army Arrival/departure airfield control group (A/DACG) operations in their operational area.
- Monitoring the use of containers located in its operational area and coordinating with users to expedite return of these assets to the transportation system
- Enforcing movement priorities set by the TSC/ESC.
- Monitoring, managing, and executing the TSC/ESC movement and port clearance plans and programs
- Developing an intelligence collection plan for subordinate units

To provide effective support, the MCB coordinates with the TSC/ESC to select the sites where MCTs will operate. Site selection will consider the location and types of customers requiring service, location of

terminal and intermodal operations, and the location of mode operators determine the most appropriate mode of transportation, i.e. truck, rotary wing, or fixed wing. The MCB/MCT will consider a variety of factors to determine the most effective and efficient means to fill movement requirements.

These factors include:

- Availability status of the mode operator’s transportation assets
- Command priorities for movement and support
- Security requirements for shipments involving hazardous or sensitive cargo
- Identifying the availability of cargo for transport on return
- Considering political sensitivity to materiel being shipped
- Reacting to changing Tactical situations that may require rerouting and other operational changes
- Use of rail transportation, most often in coordination with the Expeditionary Rail Center at the TSC/ESC
- Use of air transportation
- Use of water transportation
- HN and commercial assets

The MCB operates on the principal of centralized control and decentralized execution, i.e. it is the focal point for movements planning and resource allocation for an operation while it keeps transportation mode determination during the movement request process at the lowest level possible. This process allows mode operators to remain free to assign the specific transportation assets that will meet requirements.

To decentralize execution of movement control functions, the TSC/ESC may divide an operational area into transportation movement regions each with an MCB depending upon the number and dispersion of MCTs required, geographical distances or constraints, the variety of intermodal operations ,or the number of major distribution hubs and staging areas. To provide effective support, MCBs coordinate with the TSC/ESC to select the sites where MCTs will operate.

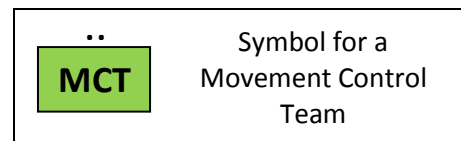
Maintaining flexibility is one of the biggest challenges facing movement planners and operators in a changing operational environment with shifting conditions and priorities. To do this, the MCB must plan for contingencies, including the rerouting and diverting of traffic.

There are 17 MCBs in the Total Army – five in the active component and 12 in the USAR.

1. Movement Control Team (MCT)

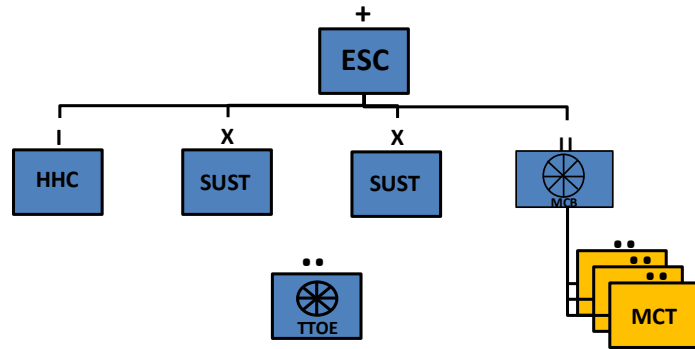
Movement Control Teams are a modular, 21 Soldier transportation organization designed to provide movement control functions in a given area of operation.

Specifically, MCTs execute five movement control missions:



intermodal, area support, movement regulation, documentation, and division support.⁴³

The MCT has the capability to commit allocated transportation assets, regulate movement, and provide transportation services in a theater of operation. MCTs, normally supervised by captains (O3), are subordinate elements of the MCB and are positioned throughout the theater to assist in the decentralized execution of movement control responsibilities.



An MCT is the immediate interface for Army units requesting transportation support when the unit's requirement exceeds their organic capability. The MCT is also the first point of contact for other DoD organizations needing Army common user transportation. The process at this level starts when an organization submits a movement request and ends when a Transportation Movement Release (TMR) is established and a mode operator is committed. When given the authority by the MCB, MCTs can directly coordinate motor truck transportation with a sustainment brigade, host nation, or commercial assets and can also coordinate for the use of allocated fixed/rotary wing assets in the Aviation Brigade.

Though an MCT may not have committal authority over Air Force aviation assets, host nation rail, or Army watercraft, it will coordinate the use of those assets when those modes of transportation are the most efficient and effective means to meet the movement requirement. MCTs can provide transportation services to other organizations that include ITV of personnel/supplies/equipment moving through the transportation system, assistance with transportation shipping documentation, and unit movement data processing as well as performing Unit Movement Coordinator duties as required in the operational area. Additionally MCTs can be used as a source to collect intelligence information as they are operating in their area of responsibility.

Though an MCB is not normally subordinate to division, an MCT can be attached or OPCON to a division headquarters and work directly for the Division Transportation Officer (DTO) to augment that staff and assist in providing a range of transportation support planning, programming, and operations required to support the spectrum of military operations. The MCT can be critical in providing needed movement control depth to assist the DTO with the responsibilities in planning and executing concurrent deployment/redeployment of subordinate brigades as well as simultaneously coordinating movement control operations supporting distribution. In this capacity, the MCT's responsibilities are:

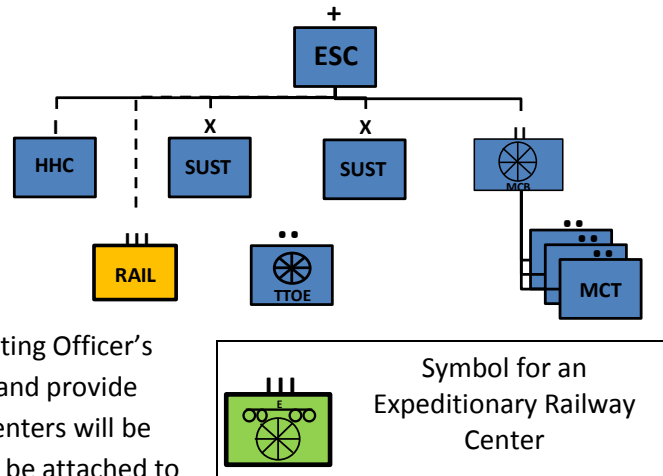
- Provide route synchronization of the supply routes within the division operational area
- Ensure uninterrupted movement of divisional/ brigade sustainment convoys as well as theater sustainment convoys entering the division or brigade area

⁴³ ATP 4-16

- Manage the movement request process to ensure an efficient and effective use of internal assets while providing an expedient process for receiving external transportation support
- Establish periodic movements boards to ensure inbound theater sustainment movements, internal sustainment movement and supporting coordination are synchronized and forecasted.

Expeditionary Railway Center

Shifting from an operational railway capability, the Army is creating Expeditionary Railway Centers to provide rail network capability and infrastructure assessments, perform rail mode feasibility studies and advise on employment of rail capabilities, coordinate rail and bridge safety assessments, perform and assist with rail planning, coordinate use of Host Nation (HN) or contracted rail assets. It will also perform Contracting Officer's Representative (COR) duties to oversee contracts and provide quality assurance of the contracts. The new rail centers will be attached primarily to TSCs although they may also be attached to ESCs when so directed by the TSC.

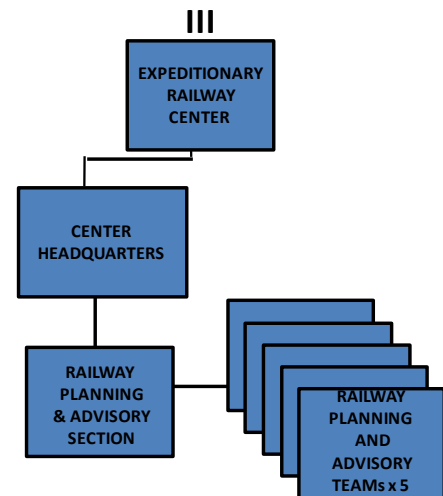


More specifically, the rail unit provides:

- Strategic and operational rail planning
- Railway system capability and infrastructure assessments
- Rail feasibility studies and advice on employment of rail capabilities
- Coordination of Host Nation (HN) or contracted rail assets
- In-transit visibility (ITV) during railway movement
- Direct coordination and interface with HN rail officials

The five Railway Planning and Advisory Teams:

- Provide direct assistance to HN rail assets
- Provide advice to the commander on HN rail infrastructure capabilities and employment of HN assets in support of military rail operations
- Coordinate and communicate with HN, supported unit, or contracted entity to facilitate rail operations
- Perform COR functions related to rail operations
- Conduct planning in support of the Sustainment Brigade, ESC and TSC for rail operations
- Provide in-transit visibility of military equipment moved by rail



There is one Expeditionary Rail Center in the Total Army. It is in the USAR.

Theater logistics

Theater Sustainment Command (TSC)⁴⁴

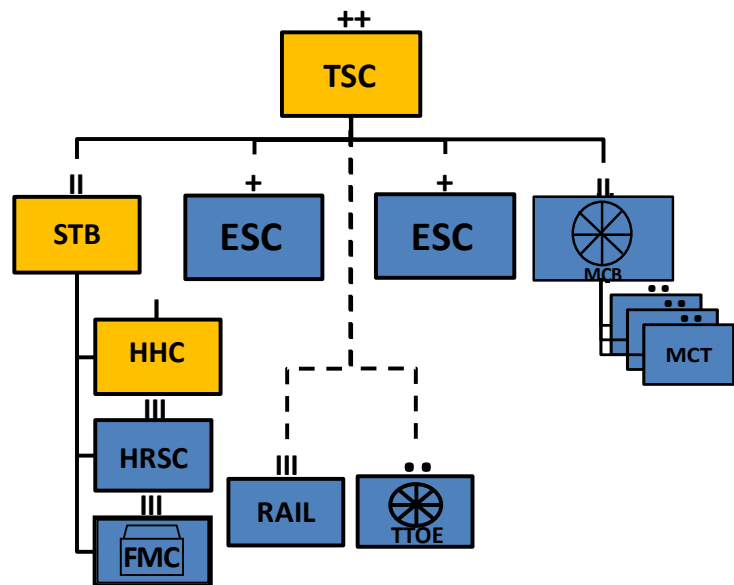
In simple terms, the Theater Sustainment Command Provides mission command for attached units while synchronizing current and future sustainment operations for an ASCC. This simple definition doesn't cover the complexity of the TSC's mission, however. The TSC is the logistics link between the defense resources located around the world and the theater of operations to which it is assigned.

Assigned to an Army Service Component Command (ASCC), the Theater Sustainment Command (TSC) is a fixed headquarters

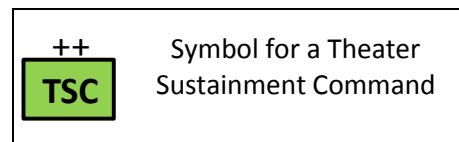
designed specifically to support a geographical combatant commander (GCC). The TSC is normally not deployed. Instead, it will deploy an ESC, or ESCs, to provide a regional focus necessary to provide effective

operational-level support to Army or joint task force (JTF) missions. The TSC is capable of planning, controlling, and synchronizing operational-level Army deployment and sustainment for the ASCC, joint force commander (JFC), or multinational joint force commander. It provides a centralized sustainment mission command structure for the ASCC in support of all operational phases from 0 to 5.

Similar to the ESC, a TSC is focused on strategic and operational sustainment management. The command ensures the information flow from strategic deployment, distribution, and sustainment partners is accurate, timely, and adequate to support the actions of the theater sustainment forces providing movement control for reception, staging, onward-movement and integration (RSOI) and all other sustainment operations. From a logistics standpoint, the TSC commander and staff are constantly looking at the theater ports of debarkation and the theater distribution network to eliminate potential bottlenecks and determine ways to gain efficiencies in the logistics enterprise to better enable Operational Reach, Freedom of Action, and Prolonged Endurance in support of Decisive Action. The TSC ensures the physical flow of inbound forces and non-unit cargo is meeting the priorities and timeline



A task organization for a TSC may include ESC(s), movement control battalion(s), Expeditionary Railway Center (ERC) and a Transportation Theater Opening Element (TTOE). Organizations in orange are organic to the TSC.

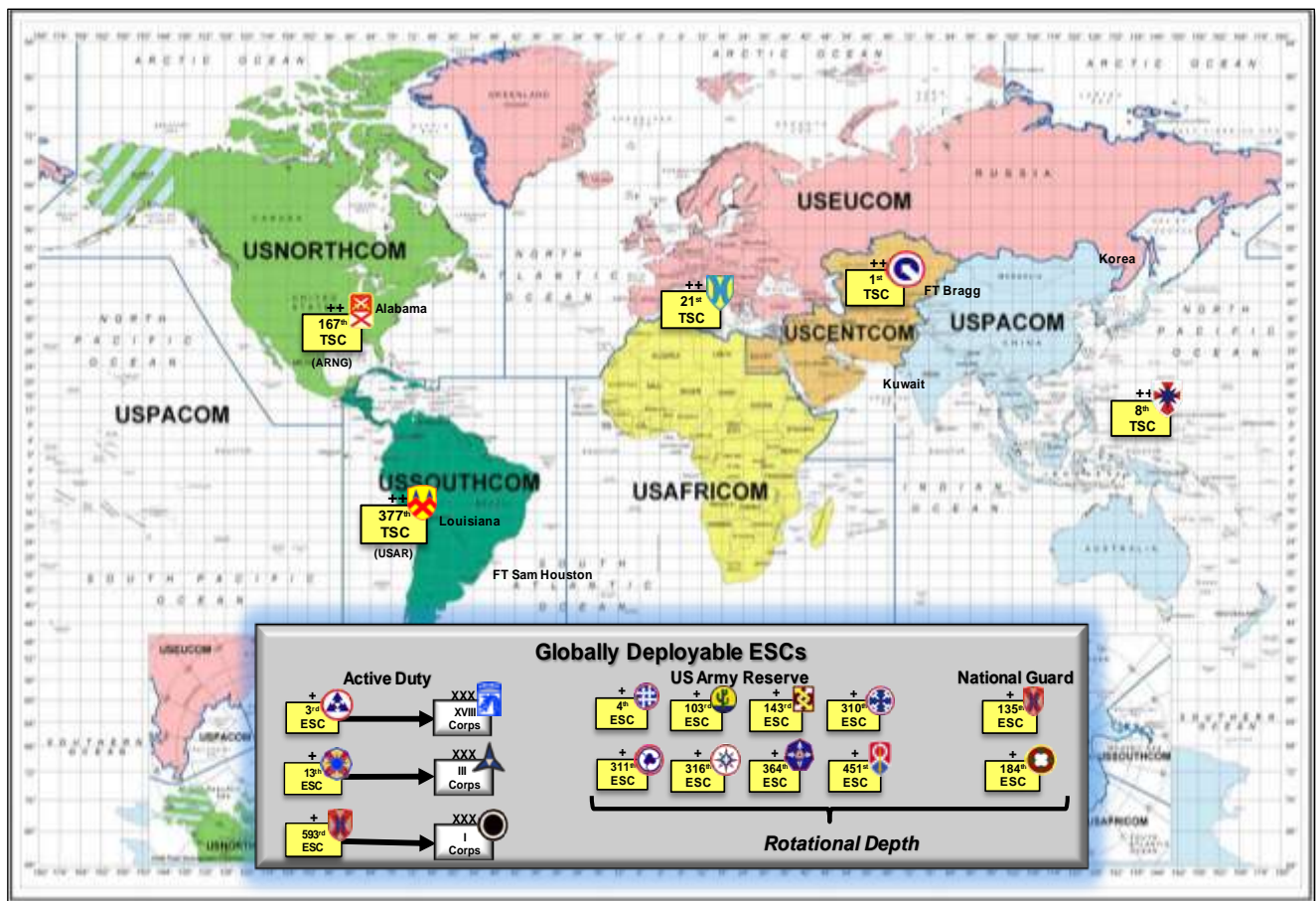


⁴⁴ ATP 4-94

established by the ASCC, and resolves issues with timing if unforeseen events interfere with the planned timing of strategic to theater deliveries.

While supporting RSOI at the theater-level, the TSC will often be responsible for resolving theater-level issues with host nation, joint, interagency, multinational, commercial, and private organizations in the negotiations for joint use of assets available. The TSC plans for common user logistics (CUL) that are provided by Army forces in the theater and notifies the ASCC if the Army forces are inadequate for the expected workload.

As the senior Army sustainment headquarters within an area of responsibility (AOR), TSCs ultimately provide mission command to all of the sustainment units in EAB. This makes the TSC responsible for all of the organizations and functional units executing theater opening, theater distribution and sustainment operations to include supply, maintenance, transportation, petroleum and port and terminal operations in support of the ASCC/GCC objectives.



TSCs are aligned to COCOMs. In the map above, the TSCs are shown with their areas of responsibility. In addition, the ESCs that may be attached to the TSC or are Corps-aligned are shown. Note that most TSCs are in the active component while most ESCs are in the reserve components.

Within the Distribution Management Center (DMC), the TSC manages distribution within the assigned area of responsibility and integrates the ESC into the theater distribution plan. In addition, it conducts distribution planning, determines requirements, and manages existing capabilities with the current and projected operational requirements. There are teams to analyze and manage all classes of supply and services being provided by logistics and sustainment forces within the theater, i.e. water, field services, POL, munitions, and maintenance.

In the Operational Contract Support Section, the TSC determines contract support requirements for subordinate units and develops/updates acquisition ready requirements packages and monitors the status of contracting actions with elements of Army Materiel Command's Contracting Support Brigade (CSB).

TSC support to Special Operations Forces (ARSOF)

ARSOF forces have some organic logistics capabilities, however, they are lean and agile and not self-sufficient. ARSOF routinely arrive in an AO early, execute forced-entry operations, and operate independently in small teams. By the nature of these missions, ARSOF forces operate across the battlefield and require agile logistics support that is tailored based upon mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC).⁴⁵ As a result, TSCs have a support responsibility to Army Special Operations Forces (ARSOF) in fulfilling the service support responsibility of the Army.

Integration of the ARSOF support cell capabilities with those of the TSC SPO facilitates synchronized and tailored support to specific ARSOF mission requirements and provides sufficient flexibility to respond to changing requirements. Additionally, the resulting coordination and synchronization between the ARSOF support cell and TSC provides the means for the TSC to leverage logistics resources and achieve greater operating efficiencies. This is particularly true in the case of demands for common user land transportation (CULT) assets.

Although they have special requirements, ARSOF units are supported in the same manner as conventional forces for common items and common-user support on an area basis, through limited HN support, and contracting. In simple terms, ARSOF may be supported for any length of time by almost any logistics unit on the battlefield from an FSC to an ESC.

The Sustainment Brigade (Special Operations) (Airborne) plans, integrates, and assesses the need for sustainment to ARSOF. The brigade is designed to serve as an early entry element to provide mission command of one Combat Sustainment Support Battalion in support of a conventional force subordinate to the JSOTF. The brigade synchronizes and manages sustainment and distribution operations; determines and anticipates sustainment requirements; plans, coordinates, and synchronizes both current and future sustainment operations for deployed SOF units. The Sustainment Brigade (Special Operations) (Airborne) is discussed in more detail later in this section.

⁴⁵ For more information on ARSOF, see FM 3-05

The most challenging support of ARSOF is during operations in austere environments. When an ARSOF unit deploys into an undeveloped theater of operations, it must bring sufficient resources to survive and operate until it establishes a bare-base support system or makes coordination for support through the TSC.

Unique special operations items are resourced through special operations channels, not the TSC.

In addition to operational capabilities, the TSC also brings some of the unique capabilities. Those include:

- Inspector General
- Staff Judge Advocate
- Regional Trial Defense
- Religious Support
- Public Affairs
- Surgeon

There are five TSCs in the Total Army – three in the active component, one in the ARNG and one in the USAR. The TSCs are assigned to the following COCOMS:

- 1st TSC – CENTCOM (active component)
- 8th TSC – PACOM (active component)
- 21st TSC – EUCOM/AFRICOM (active component)
- 167th TSC – NORTHCOM (ARNG)
- 377th TSC – SOUTHCOM (USAR)

Units normally assigned to the TSC include:

1. Expeditionary Sustainment Commands (ESC)

Unit is discussed in a previous section.

2. Movement Control Battalions (MCB)

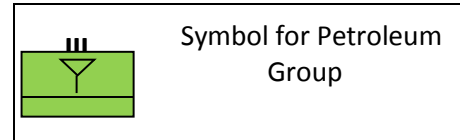
Unit is discussed in a previous section.

3. Petroleum Pipeline and Terminal Operating Battalions (PPTO Battalion)

Although this formation is discussed earlier under the Sustainment Brigade, it is often attached to the TSC. From a theater perspective, PPTO Battalions are responsible for the operation and maintenance of a military petroleum distribution system that may include ports of entry, pipelines, tank farms, and tactical marine terminals. Their core capabilities include scheduling and directing the flow of bulk petroleum products through multiproduct military pipelines and coordinating the movement of bulk petroleum products by barge, rail, and truck. They are also responsible for implementing a quality assurance program and may operate a base petroleum products laboratory.

4. Petroleum Group (POL Group)

Assigned to either a TSC or ESC, the Petroleum Group provides mission command for 2-6 POL Supply Bns and PPTO Bns. It also provides liaison and supervision of bulk petroleum supply, distribution, and quality surveillance. It provides staff planning, coordination, and supervision of receipt, storage, and distribution of bulk petroleum for the theater and performs operational planning for the development, rehabilitation, and extension of petroleum distribution systems. Additionally, it coordinates requirements for construction, rehabilitation and maintenance of petroleum facilities.

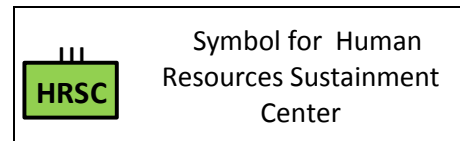


The POL Group has a base petroleum lab to conduct theater level POL quality surveillance and develops detailed plans for receipt, storage, and distribution of bulk petroleum, liaison with host nation agencies for coordination of US and Allied Forces petroleum distribution, and receipt and consolidation of fuel requirements for US Joint Forces, and other supported activities, and coordinates them with the Joint Petroleum Office (JPO).

There is one POL Group in the Total Army. It is in the USAR.

5. Human Resource Sustainment Center (HRSC)

The Human Resource Sustainment Center (HRSC) is attached to the Special Troops Battalion in the TSC to provide theater-level Human Resource staff planning, policy development and technical assistance.



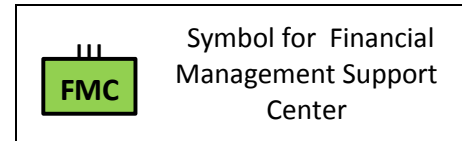
- Provides the theater G1 with theater readiness analysis, personnel accounting, strength reporting, and personnel information management support
- Provides theater G1 with management, oversight, and planning support for all personnel accountability operations in theater
- Provides staff advice to the theater G1 on HR management issues, staff planning, HR policy development, and HR support procedures
- Provides technical support to the Theater Gateway Personnel Accountability Team (TGPA)
- Assists divisions in performing theater readiness analysis, personnel accounting, strength reporting, and providing personnel information management support and provide technical leadership and guidance to S1 sections
- Provides oversight for casualty reporting in theater and assists theater G1 with management and oversight for all casualty data/reporting
- Provides HR companies and S1 sections with technical leadership and guidance on HR operations
- Provides mobilization information
- Provides technical oversight, policy, and compliance support for all postal operations in the theater

There are five HRSCs in the Total Army – three in the active component and two in the USAR.

6. Financial Management Support Center (FMSC)

The Financial Management Support Center (FMSC) provide theater-level Financial Management (FM) staff planning and advise, policy development and technical oversight/assistance to FM units and unit commanders.

More specifically, the FMSC provides:



- Financial Management staff planning, technical coordination, and oversight in theater
- Negotiation with host nation banks
- Coordination with national financial organizations (US treasury, Defense Finance and Accounting services (DFAS), and United States Army Finance Command (USAFINCOM) for FM support requirements
- Advise to commanders on use of local currency
- Contractual and procurement payments
- Internal Control to provide technical oversight of all operating elements of the Financial Management Center to ensure existing policies and applicable regulations, legislative directives, and management controls are followed
- Cash management for coordinating theater U.S. and foreign cash/currency support, maintaining cash disbursing station(s), and establishing local cash depositories (LD) accounts
- Accounting services for appropriated and non-appropriated funds in theater
- Provide technical operating guidance and data management for theater FM functions
- Provide guidance for the types of funds, use of funds, and accounting of funds for the contingency operation

7. Medical Logistics Management Center (MLMC)

Even though the Medical Logistics Management Center (MLMC) is a subordinate unit of the MEDCOM (DS) and not technically “attached” in a doctrinal sense, it has a direct support relationship with the TSC to provide for the centralized management of medical materiel and maintenance throughout a theater. MLMC support teams provide centralized management of medical materiel, primary medical items, medical maintenance, and coordination of the distribution of Class VIII materiel throughout a theater, theater of operations, or JOA.

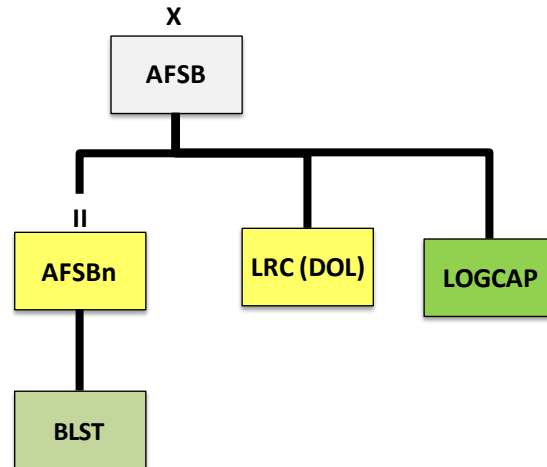
The MLMC has two forward support teams – one team deployed per theater that is collocated with the TSC in order to facilitate the integrated and synchronized flow of Class VIII materiel throughout the theater, theater of operations, or JOA. The MLMC support team coordinates distribution of Class VIII materiel with TSC support operations.

Theater Logistics – Army Field Support Brigade (AFSB)

The Army field support brigade (AFSB) is the primary interface between Army Materiel Command and Army forces and is AMC's key bridge between the generating force and the operational force. AFSB's are a subordinate command of Army Sustainment Command (a subordinate command of Army Materiel Command) but are regionally aligned to an ASCC.

Although one AFSB is normally assigned per geographic combatant command area of responsibility, METT-TC factors may necessitate AMC deploying to deploy more than one AFSB into an area. Specific mission responsibilities include:

- Planning for and providing command over AMC call forward sustainment maintenance and forward repair activity (FRA) organizations, Prepositioned Stock)/ coordinate Army prepositioned stocks (APS) support
- Synchronizing, coordinating, and providing support to acquisition, logistics and technology (ALT) actions between PM/PEOs and the supported units
- Planning and integrating Logistic Civil Augmentation Program (LOGCAP) support
- Synchronizing DOL operations and Logistics Assistance Program (LAP) support when on an military installation



When supporting contingency missions, the AFSB is responsible for the integration of acquisition, life cycle logistics, and technology capabilities in support of operational and tactical level commanders across unified land operations. This includes coordinating reach-back capabilities via a technical reach or call-forward process. When deployed, the AFSB maintains a support relationship with a TSC or ESC and is normally OPCON to the headquarters.

AFSBs consist of a mix of MTOE organization with and TDA augmentation. As AMC's face forward, the AFSB and its subordinate organizations are assigned or attached – per METT-TC – as follows:

- Army field support battalions (AFSBn) are normally in direct support to each active duty division headquarters (HQ)
- Brigade logistics support teams (BLST) are to each brigade combat team (BCT) and combat aviation brigade (CAB)
- Army field support battalions (Prepositioned Stock) (AFSBn (Prepo)) are aligned to an ASCC

Mission command of the AFSBs, especially when deployed, is not absolute. Even though a deployed AFSB can be task organized by the OPCON command (e.g. TSC), subordinate AMC organizations must remain under the command of the AFSB unless otherwise directed by the ASC. The ASC retains authority

to task deployed AFSBs “to support USAMC mission requirements that are outside of the OPCON command’s mission purview, with the understanding that all such AMC global mission taskings will be properly coordinated with the OPCON command prior to execution.”⁴⁶ Any orders directing changes to an AFSB’s command, support relationship, or task organization must be coordinated with HQ ASC.

Much of the AFSB’s support mission is executed via contract support. As a requiring activity, the AFSB is responsible to nominate CORs for all their supporting service contracts and provide receiving officials for all their supporting commodity contracts.

Specific areas of AFSB responsibility include:⁴⁷

- Logistics Assistance Program (LAP) support -- HQDA program carried out under the auspices of the ASC to conduct logistics assessments, in coordination with the supported commands, to determine current status, historical trends, provide corrective and preventative measures for improving unit and command readiness
- Left Behind Equipment (LBE) program -- AFSBs assist ASC in the accountability and maintenance of unit LBE as required and directed
- Army Prepositioned Stock (APS) – Although APS is owned and controlled by HQDA, AMC is responsible to account, manage and maintain APS through the AFSB
- Theater Provide Equipment (TPE) – Oversees the TPE program, including maintenance and accountability of that equipment. This equipment is maintained and tracked/reported by the supporting AFSBs. The AFSBs also develop and execute the TPE maintenance plan leveraging subordinate AMC organizations and acquiring appropriate PEO/PM support as required.
- Sustainment Maintenance Support (SMS) -- As the DA sustainment maintenance process owner, AMC, through the ASC and its subordinate AFSBs, executes its contingency sustainment maintenance mission on installations and during contingencies. See ATP 4-33 for additional detail.
- Test, Measurement, and Diagnostic Equipment Support -- Support teams are assigned to Army Forces Command and other selected ASCCs and the ARNG.
- Army Oil Analysis Program Support (AOAP) -- Assists in planning and the execution of AOAP support in contingency operations
- Logistics Support Activity (LSA) – Logistics Support Agency (LOGSA) LNOs and deployed teams provide supported unit education and assistance on LOGSA products and services
- Logistics Automation Support (LAS) – Support to field-level logistics STAMIS automation maintenance is primarily provided by the unit SASMO
- Operational Readiness Analysis (ORA) – Teams can be deployed under the staff oversight of the AFSB SPO to collect readiness data for both units and weapons systems. The analysis is used to assist deployed Army forces to identify trends and systemic readiness issues, as well as any concerns unique to the operational area

⁴⁶ ATP 4-91 1-9 Mission Command

⁴⁷ See ATP 4-91 for detailed information on the AFSB and its subordinate organizations.

- Responsible Retrograde Task Force (R2TF) -- R2TF is an ad-hoc organization established when necessary to support major equipment drawdown missions. The R2TF bridges the tactical focused AFSB in-theater mission to AMC's national strategic level Lead Materiel Integrator Army-wide equipment reset mission

Logistics Support to ARSOF

As mentioned in the TSC section, ARSOF has special logistics requirements that are largely filled through a separate logistics chain than BCTs. ARSOF sustainment is not self-sufficient; it is reliant upon regional or combatant command theater of operations infrastructure for virtually all logistics, personnel services, and Army Health System (AHS) support above unit organic capabilities. Planning and execution of support to SO must be nested within the CCDR's concepts of operation and sustainment, as well as tailored to interface with the theater of operations logistics structures. To be effective, Army and SO planners must understand the ARSOF logistics organizations' operational concepts, the basic principles of logistics, and sustainment warfighting functions.⁴⁸

ARSOF sustainment structures lack the capability to provide all sustainment functions required to support ARSOF missions. ARSOF receive comprehensive sustainment functions from the TSC, ESC, and sustainment brigade. ARSOF sustainment structures are designed to:

- Enable expeditionary SO missions
- Deploy early and rapidly
- Collocate and habitually train with the supported unit
- Fill immediate and critical logistical requirements with organic capabilities.
- Provide the capability to plug into theater of operations logistics structures, therefore achieving required logistics prolonged endurance
- Tie the Army SO units to the theater of operations support structure
- Provide the capability to link with theater health service support (HSS)

Only the Army SO units, SF groups, and the Ranger Regiment are resourced with organic logistics support capabilities. SOA, CA, and MIS units possess only organizational-level logistics personnel because they are designed to deploy and operate while task-organized under an Army SOF-led SOTF, with an SF group, or with the Ranger Regiment from which they would receive direct support and sustainment.

ARSOF units lack the robust logistics structure normally associated with the Army. SOF routinely arrive into the AO early, execute forced-entry operations, and operate independently in small teams. Because of these factors, ASCC logistics support to SOF must be tailored to meet SOF logistics requirements based upon mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METTTC).

USASOC has one SB(SO)(A), which has a global, operational-level focus. The brigade's mission is to set the operational-level logistics conditions to enable expeditionary SO missions within Army theater of operations sustainment infrastructures.⁴⁹

⁴⁸ ADRP 3-05

⁴⁹ *ibid*

Sustainment Brigade (Special Operations) (Airborne), SB (SO) (A)

The Sustainment Brigade (Special Operations) (Airborne), SB (SO) (A), when deployed acts as the single logistics command element for a special operations task force (SOTF) or when necessary a special operations joint task force (SOJTF). The SB (SO) (A) plans, integrates, and coordinates Army common and special operations forces (SOF) peculiar logistics to sustain SOF. The brigade is designed to serve as an early entry element to provide mission command of one to three CSSBs. The brigade monitors and updates the common operating picture (COP); synchronizes and manages sustainment and distribution operations; determines and anticipates sustainment requirements; plans, coordinates, and synchronizes both current and future sustainment operations for deployed SOF units. The brigade integrates ARSOF support requirements into the ASCC support plan and ensures a timely response to ARSOF logistics requirements. It can operate as a standalone SOF logistics command post or as a lateral staff agency that coordinates with a TSC and can provide continuous, 24-hour operations for all SOF sustainment requirements.

If deployed, the SB (SO) (A) is intended to remain an interim capability and any one of the following triggers would cause a transfer of the mission command capabilities to a conventional Army mission command capability: mission command of more than three CSSBs; geographical dispersion beyond the capability of the SB (SO) (A); operations longer than six months in duration or until a theater logistics infrastructure is developed. After being relieved in place, the brigade would then employ an ARSOF support cell embedded with a conventional sustainment brigade, the ESC, or the TSC, to coordinate, monitor, and synchronize logistics support for SOTF/SOJTF operations, other ARSOF operations, and for multinational SOF where the Army is the lead Service for logistics.

The SB(SO)(A) is unique when compared to other Army sustainment brigades in that it contributes to global situational understanding of the ARSOF logistics support structure. The brigade is focused at the operational level for logistics planning and synchronization, and is designed to deploy small, modular teams like the ALEs and Army special operations forces support operations (ASPO) cells. The brigade can also serve as the senior logistics unit in the JOA. With the right augmentation and growth, it can establish theater-opening and intermediate staging base operations with tailored multifunctional Army sustainment enablers. The brigade also contains three expeditionary medical Role 2 teams to enable SO units to operate with conventional forward surgical teams or other resuscitative surgical teams.⁵⁰

The brigade has the capability to provide technical supervision, utilizing its ARSOF liaison element and ARSOF support cell, to assist the ASCC/TSC and theater special operations command in the planning and execution of logistics and HSS/FHP supporting SOF requirements.

Group Support Battalion (GSB)

Each Special Forces group possesses an organic GSB with a subordinate group support company and a group service support company (GSSC). The GSB is a multifunctional logistics organization organic to the SF group with force structure and capabilities tailored to support the group. The GSB is a cornerstone of

⁵⁰ ADRP 3-5

tactical ARSOF logistics formations. The GSB plans, coordinates, and executes sustainment operations for the group and, when directed, supports forces task-organized with the group, or an ARSOF-led JSOTF. Each Special Forces battalion has an organic battalion support company that provides organizational and limited logistics.⁵¹

An SF group-led JSOTF with its organic group support battalion (GSB) cannot simply plug into the distribution network of a single sustainment brigade and execute tactical distribution to each of the SF battalions, companies, and Special Forces operational detachment A (SFODA) in its task organization.

Support to Ranger Battalions

A Ranger Regiment consists of a regimental headquarters with a Ranger support operations detachment, a Ranger Special Troops Battalion, and three Ranger battalions with an organic Ranger support company. The Ranger Special Troops Battalion provides staff planning and supervision for all logistics within the regiment. The Ranger support operations detachment coordinates with logistics support personnel in the areas of supply, maintenance, and movement management for the support of all units assigned or attached.

Ranger support companies (RSC) are multifunctional logistics companies that are organic to each Ranger Battalion. They provide direct logistics support to that battalion.

The Ranger Regiment is an austere organization with organic logistics capability reliant upon support from home station or prepackaged supplies during initial stages of deployment. Rangers will deploy in support of an operation plan or concept plan. Therefore, a logistics concept of support must be flexible and tailored to support the operational requirement. As a theater matures, the TSC or joint logistics providers within the JOA provide replenishment.⁵²

⁵¹ ADRP 3-5

⁵² *ibid*

Theater Opening

Theater opening can best be described as establishing the off ramp(s) from the logistics highway after it crosses a bridge of air and/or water into a theater of operations. That bridge is the connection between the U.S. industrial and worldwide US military assets and a theater of operations. The off ramp is where all of the required logistics to support the theater leaves that bridge and is prepared to move into the theater, i.e. a seamless strategic-to-theater interface.

From a doctrinal standpoint, the ASCC is responsible for “setting the theater” which includes theater opening operations and the execution of port and terminal operations and reception, staging, onward movement, and integration (RSOI) to the JOA. While the ASCC has the overall responsibility, the TSC develops the sustainment concept of support and is responsible for planning and executing theater opening, including RSOI. This requires a complex joint process involving the GCC, service component commands, USTRANSCOM, USAMC, and DLA. It can also involve coordination with US agencies (e.g. Department of State) and foreign civilian companies and militaries.

Theater Sustainment Command Role⁵³

The TSC’s primary role is in coordinating for RSOI and executing it through the mission command of ESCs or sustainment brigades. TSCs help building a theater infrastructure from a combination of existing and deployable assets capable of supporting the deployment process and rapid force generation. Ultimately, it relies on sustainment brigades, augmented by theater opening elements, to conduct port of debarkation (POD) support operations, provide life support, and execute theater distribution operations.

Within the TSC, the SPO provides staff oversight of TSC RSOI efforts by coordinating and synchronizing reception, staging, and onward movement activities with subordinate commands and strategic/joint headquarters to maintain a balanced flow of supplies, personnel, equipment, and units consistent with strategic lift capabilities and ASCC/GCC priorities.

Collaborative planning and coordination between the TSC and strategic/joint headquarters is critical to the synchronization and integration intra-theater deployment and distribution operations. This planning and coordination effort provides the TSC with the means to successfully:

- Monitor airlift and sealift flow
- Provide movement control of arriving supplies, personnel, equipment, and units
- Establish theater-wide capabilities required to meet anticipated transportation and throughput capacities
- Provide life support
- Establish effective liaison among the Service components and strategic providers.
- Identify HNS requirements

⁵³ See JP 3-35 and FM 3-35 for additional information concerning RSOI operations.

Expeditionary Sustainment Command Role

In theater opening, the ESC is responsible for planning and coordinating with multiple agencies, including TRANSCOM, AMC, DLA and SDDC. Using the Transportation Brigade (Expeditionary), the ESC coordinates for the establishment for all sustainment functions – other than medical – for synchronized reception, staging, and onward movement operations. Balance is central to the relationship between deployment and theater distribution. To achieve balance, the supported GCC maintains overall responsibility for planning for the flow of units, equipment, and materiel into and within the theater, but the execution is the responsibility of the ESC. In this role, the ESC plans, controls and synchronizes all operational-levels of logistic in support the theater or joint force commander including theater opening and distribution. (Port opening is discussed in more detail later in this document.)

An AFSB set to support an operation may deploy an early entry module (EEM), based upon METT-TC factors, into the operational area before the AFSB main body arrives. The EEM will normally be OPCON to and collocated with, an ESC or sustainment brigade during theater opening operations to ensure the seamless integration of the AFSBs main body once it arrives in the operational area. The following are the AFSB EEM responsibilities:

- Validate AFSB related contract support requirements with the contracting support brigade (CSB) or other contracting office as directed
- Plan the call forward of USAMC national provider support modular capabilities to support the operational commander
- Provide command and support to APS-3 Army Strategic Flotilla hand-off team in establishing an equipment configuration and hand-off area (ECHA), and synchronizing link-up and hand off between the AFSBn(Prepo) and the receiving unit
- Coordinate ALT support actions with appropriate ASA(ALT) organization
- Monitor the deployment and arrival of the AFSBn operations cell and BLSTs that are a part of the initial entry force
- Coordinate support required by BLSTs forward with BCTs
- Coordinate LOGCAP support requirements
- Provide command of deployed subordinate AMC organizations
- Coordinate unit/life support and force protection requirements for deployed AMC and ASA(ALT) personnel as directed
- Provide command of AFSB expeditor team at each port of debarkation and LOGSA teams at each APOE to identify and expedite frustrated or high priority cargo

Sustainment Brigade Role

Theater opening (TO) is a critical mission in which the sustainment brigade must support ports of debarkation (air and surface) to establish sustainment bases and to facilitate port throughput for the reception, staging, and onward movement of forces within a theater.

To accomplish this mission, a sustainment brigade is given mission command of a mix of functional battalions and a multi-functional CSSB. In addition, the a sustainment brigade staff may be augmented with a transportation theater opening element (TTOE) to assist in managing the theater opening mission. The TTOE element provides the sustainment brigade with additional manpower and expertise to conduct transportation planning. It also provides additional staff management capability for oversight of RSOI operations, terminal operations, motor transport and movement control.

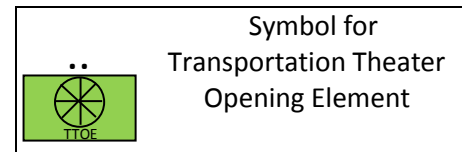
Conducting efficient and effective theater opening operations requires unity of effort among the various commands and a seamless strategic-to-tactical interface. The sustainment brigade interacts and coordinates with the Joint Deployment Distribution Operations Center (JDDOC) – an in-theater representative of USTRANSCOM – to improve in-transit visibility and synchronize and optimize the interface of inter-theater and intra-theater distribution to ensure the optimal flow of forces, equipment, and supplies.

This is another place where coordination with AMC is critical. Supporting AFSB and CSB will work with the sustainment brigade to assess and acquiring available host nation infrastructure capabilities and contracted support.

Working together, theater opening functions set the conditions for effective support and lay the groundwork for subsequent expansion of the theater distribution system.

Transportation Theater Opening Element (TTOE)

The transportation theater opening element (TTOE) is attached to a sustainment brigade when that brigade is assigned the mission of early entry and establishment of an area of operation’s logistics base. The TTOE provides an additional 55 transportation personnel and allows the brigade staff to manage the evolving/expanding distribution network and RSOI functions. Giving this additional capability to the sustainment brigade allows the sustainment brigade to establish the initial surface distribution system for an area of operations.⁵⁴



More specifically, the TTOE provides a sustainment brigade with the staff augmentation and functional expertise necessary to efficiently and effectively conduct theater opening operations (less health service support) that include RSOI of deploying Army forces. RSOI functions include coordinating, synchronizing, and clearing of aerial ports of debarkation/sea ports of debarkation (APOD/SPOD) holding areas, staging areas, and marshalling areas; personnel and unit equipment integration; life support; and the multi-modal onward movement of units and/or supplies to tactical assembly areas and/or distribution hubs. The execution of RSOI functions require close coordination with supported commanders, the TSC, joint partners, and the HN.

⁵⁴ The TTOE does not have material handling equipment (MHE) or cargo trucks so it cannot physically act as a seaport operator.

Other TTOE functions include:

- Evaluating and ensuring that the appropriate mode is employed and fully integrated with materiel distribution requirements
- Providing advice on the use and implementation of assigned, attached, contracted, and HN motor transport assets
- Providing guidance on positioning of motor transport, air, and rail assets throughout the AO
- Monitoring and maintaining the status of all modal transportations assets in the AO and ensuring proper tasking
- Providing advice on the use and implementation of assigned, contracted, and HN terminal and watercraft operations
- Providing terminal infrastructure assessment
- Monitoring and coordinating operations and positioning of all terminal operations in the AO, to include motor, rail, inter-modal, air and sea
- Monitoring and maintaining status of terminal assets in the AO to ensure they are properly employed and not over-tasked⁵⁵

At some point along the deployment-employment-sustainment continuum, the TTOE may be attached to the ESC to facilitate theater-level movements and distribution management in accordance with the TSC movement program and support ongoing deployment/redeployment operations.

⁵⁵ The last four bullets also fall under the purview of a deployed Transportation Brigade (Expeditionary). The TTOE can perform these tasks for a sustainment brigade (or an ESC) acting in the capacity of a TB(X) if a TB(X) is not deployed into the theater.

Port Opening

Port opening and port operations are critical components of theater opening. As a subordinate function of theater opening, port opening is the ability to establish, operate and throughput forces, equipment, and all classes of supplies through a port(s) of debarkation (POD). Commanders and staffs coordinate with the host nation to ensure seaports and air ports possess sufficient capabilities to support arriving vessels and aircraft. Since the port is the first node within the theater distribution system, it is critical to get it established as quickly as possible and using the most efficient means and processes as possible. This can involve air or water transport under a multitude of conditions – improved and unimproved seaport terminals and airports and logistics-over-the-shore (LOTS) operations. Working with joint partners, it is essential that planners consider the long-term theater distribution requirements into account. Balancing out these requirements – and future requirements – is central to the relationship between deployment and theater distribution. To achieve balance, the flow of units, equipment, and materiel in the inter-theater and intra-theater systems must be regulated to allow for a continuous and controlled flow of units, equipment, and materiel. USTRANSCOM is the port manager for deploying U.S. forces and Military Surface Deployment and Distribution Command is the single port manager (SPM) for all common user seaports of debarkation (SPOD).

To open the port – the first physical logistics step in opening the theater – the Army must use a variety of functional units specializing in POD operations. Normally, this is done under the mission command of a Sustainment Brigade. For more austere ports and logistics over the shore missions, the Army has also created the Transportation Brigade (Expeditionary) (TBX) – one in the active component and one in the USAR – to have a specialized port opening unit to plan and maintain mission command over the specialized units, including Army watercraft. Other units providing functional expertise for port opening may include a Terminal Transportation Battalion (TTB), an SDDC Transportation Battalion, a Joint Task Force-Port Opening (JTF-PO), a CSSB, an Air Mobility Command Contingency Response Groups, a Navy Cargo Handling Battalion, and a Movement Control Team (MCT).

Critical tasks for port opening include:

- Providing mission command
- Establishing in-transit visibility
- Conducting transportation management
- Support theater RSOI
- Conducting distribution and distribution management
- Supporting movement control and establishing initial theater sustainment

The port opening process is complete when the POD and supporting infrastructure is established to meet the desired operating capacity for that node. Supporting infrastructure can include the transportation needed to support port clearance of cargo and personnel, holding areas for all classes of

supply, and the proper in-transit visibility systems established to facilitate force tracking and end to end distribution.⁵⁶

Terminal operations are a critical piece of port opening and continuing logistics operations throughout an operation. They support deployment, redeployment and sustainment operations at all three types of terminals – air, water, and land. They begin when the first cargo reached an APOD/SPOD and continue until the theater is closed. Terminal operations consist of the receiving, processing, and staging of passengers; the receipting, transit storage and marshalling of cargo; the loading and unloading of transport conveyances; and the manifesting and forwarding of cargo and passengers to a destination.⁵⁷ Terminal operations are a key element in supporting operational reach and endurance.

In austere environments, Army watercraft under the mission command of a TB(X) and TTB provides a vital asset in the water port opening process. Within the context of unified action, water transport operations have the most profound impact on military and economic instruments of national power. Army water transport forces and assets provide operational maneuver and distributed support and sustainment capability at the confluence of the land and sea domains; they can also extend operations within the land domain, using inland waterways and navigable rivers. Given the demographics and the centers of global military and economic power, access and the ease with which we can transition capability between off-shore (sea) and on-shore (land) domains becomes more and more important to setting conditions for success and enabling national security.

Military Surface Deployment and Distribution Command (SDDC)

SDDC is the Army component of USTRANSCOM. OPCON to USTRANSCOM and ADCON to Army Materiel Command, its primary mission is to serve as the single port manager for all common user seaports of debarkation. It is responsible for developing policy, advising the GCC on port management, recommending adequate ports to meet operational demands, and directing the operations at the seaport. TSCs, ESCs and their subordinate Sustainment Brigades, Terminal Battalions and Seaport Operating Companies perform the port operator functions at SPODs. These functions can include port preparations and improvement, cargo discharge and upload operations, harbor craft services, port clearance and cargo documentation activities.

If the operational environment allows, SDDC may have the ability to contract locally for port operator support eliminating or decreasing the requirement for the TSC and its subordinate units.

The single port manager may have OPCON of a port support activity which is an ad hoc organization consisting of military and/or contracted personnel with specific skills to add in port operations. The TSC and SDDC will coordinate the port support activity (PSA) requirement to assist in moving unit equipment from piers to the staging/marshaling/loading areas, assisting the aviation support element with movement of helicopters in preparation for flight from the port, providing limited maintenance support for equipment being offloaded from vessels, and providing limited medical support, logistics support, and security for port operations.

⁵⁶ For additional information, see ADRP 4-0.

⁵⁷ See (JP 4-01.5) for additional information.

Ideally, the SPOD will include berths capable of discharging large medium speed roll-on/roll-off ships. The SPOD can be a fixed facility capable of discharging a variety of vessels, an austere port requiring ships to be equipped with the capability to conduct their own offloading, or beaches requiring the conducting of joint logistics over the shore (JLOTS) operations.

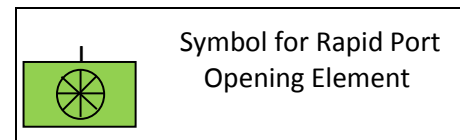
When vessels arrive at the SPOD, the TSC and/or SDDC is responsible for discharging the unit equipment, staging the equipment, maintaining control and in-transit visibility (ITV), and releasing it to the unit. This includes minimum standards that are critical for the physical security/processing of DoD sensitive conventional arms, ammunition, and explosives, including non-nuclear missiles and rockets.

Concurrently, the Theater Gateway Personnel Accounting Team and supporting human resource units will clear personnel as movement control teams facilitate port clearance of equipment. The movement control team that has responsibility for the SPOD, coordinates personnel accounting with the supporting CSSB or sustainment brigade for executing life support functions, including billeting, feeding, and transportation of personnel who are transiting into or out of the theater.

It is important to note that SDDC's role and function in port opening and operation is not duplicative of those of the TSC and its subordinate units. To the contrary, they are complementary. SDDC is a strategic-level asset that bridges to the operational level. It operates primarily through contracts to perform its logistics missions. It is unique in that it is capable of coordinating movement from forts, depots, etc. all the way to forward combat units, forward operating bases, etc. With that said, the environment must be conducive to the use commercial operations for that to occur. On the other hand, TSC units are able to tackle more austere conditions without necessarily requiring contract augmentation. The TSC and its subordinate units are able to conduct operations with Army-owned assets, e.g. medium boat companies, seaport operations companies, harbormaster detachments, etc.

1. Rapid Port Opening Element (RPO)

The Rapid Port Opening Element (RPO) is an Army unit under the mission command of SDDC and operational control of TRANSCOM's Joint Task Force-Port Opening, Transportation Terminal Battalion or an SDDC Terminal Transportation Battalion.



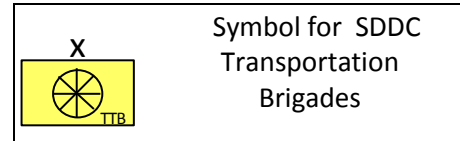
RPOs deploy as part of a joint expeditionary logistics force to establish a port of debarkation and forward distribution node. Originally, the RPO was only conceived to support air operations. Since then, it is tasked with supporting both airport and seaport of debarkation operations by:

- Providing in-transit visibility
- Establishing and operating a forward marshalling area (maximum of 10 kilometers from an APOD or SPOP) to receive and trans-load cargo and personnel for distribution and/or movement forward – maximum of 560 short tons of cargo and 600 personnel per day.
- Conducting clearance and distribution operations
- Receiving, transloading, and moving cargo and personnel forward as an initial-entry port opening force

There are three RPOs in the Total Army. All are in the active component.

2. SDDC Transportation Brigade

SDDC Transportation Brigades are GCC-aligned assets that serve as the Army Service component command of USTRANSCOM. SDDC is OPCON to USTRANSCOM. They provide single port management functions in an area of operations.



SDDC is a major subordinate command to Army Materiel Command with an ADCON relationship. This connection allows the SDDC Transportation Brigade to establish linkage to the joint deployment and distribution enterprise and Army Materiel Command's materiel enterprise. The brigade also works with commercial transportation industry as a coordinating link between DoD surface transportation requirements and the capability industry provides.

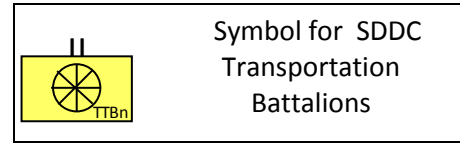
There are six SDDC transportation brigades in the Total Army. All are in the active component. These are TDA organizations. One brigade is dedicated to the two Army ammunition ports at Sunny Point, NC, and Concord, Calif. The other five units are permanently located to support the six COCOMs. Since they have COCOM-area responsibilities they do not deploy.



SDDC Transportation Brigades are aligned with COCOMs. In the map above, the brigades are shown with their areas of responsibility and their permanent duty station location.

3. SDDC Transportation Battalion (TTBn)

SDDC transportation battalions are SDDC TDA units under the command and control of an SDDC Transportation Brigade. It is designed to conduct surface deployment, distribution, and water terminal port operations in its assigned area of responsibility.



More specifically, the battalion:

- Plans, establishes, and conducts port operations to include cargo reception, staging, load planning, vessel load/discharge operations
- Commands and controls Terminal Management Teams engaged in supervising and managing civilian contract operations at a SPOE/SPOD
- Transition from mission command of TOE terminal operating units to managing and supervising civilian contract capabilities at SPODs/APODs
- Provides a port common operational picture
- Serves as a single port manager (SPM) of a strategic seaport
- Supports port opening operations

There are 12 SDDC Transportation battalions in the Total Army. All are in the active component.

SDDC Terminal Battalion locations:

595th Transportation Brigade (CENTCOM)

- 831st Transportation Battalion, Kandahar Air Field, Afghanistan
 - Detachments in Bahrain\Hairaton, Leatherneck, Mazar-E-Sharif, and Bagram
- 840th Transportation Battalion, Port of Ash Shuaiba, Kuwait
 - Detachments in Qatar, Dubai and Oman

596th Transportation Brigade (CONUS ammunition ports)

- 832nd Transportation Battalion, Jacksonville, FL
 - Detachments in Cape Canaveral, Fla. and Puerto Rico
- 834th Transportation Battalion, Concord, CA

597th Transportation Brigade (NORTHCOM & SOUTHCOM)

- 833rd Transportation Battalion, Joint Base Langley-Eustis, VA
 - Detachment in Seattle, WA
- 841st Transportation Battalion, Charleston, SC
- 842nd Transportation Battalion, Beaumont, TX

598th Transportation Brigade (EUCOM & AFRICOM)

- 838th Transportation Battalion, Kleber Kaserne, Kaiserslautern, Germany
 - Detachments in Azores, Rhine River, U. K., Greece and Rotterdam
 - 950th Transportation Co., Bremerhaven, Germany
- 839th Transportation Battalion, Livorno, Italy
 - Detachments in Italy and Turkey

599th Transportation Brigade (PACOM)

- 835th Transportation Battalion, Okinawa, Japan
 - Detachment in Singapore
- 836th Transportation Battalion, Yokohama, Japan
 - Detachments in Guam and Alaska
- 837th Transportation Battalion, Pusan, Korea

Joint Task Force-Port Opening (APOD)

The JTF-PO (APOD) is a joint capability provided by USTRANSCOM that is designed to rapidly establish and initially operate an APOD, establish a distribution node, and facilitate port throughput within an AOR. The JTF-PO (APOD) is not a standing task force, but is a jointly trained, ready set of forces constituted as a joint task force at the time of need. The JTF-PO (APOD) is normally under the mission command of an Air Force AMC Contingency Response Wing or Group commander. Army elements of a JTF-PO (APOD) will normally include a rapid port opening transportation detachment (RPOE).

JTF-POs have limited movement control functions, cargo transfer capabilities, and transportation assets. It does not include heavy equipment truck, Rough Terrain Cargo Handler equipment, or crane assets. It must rely on contracted assets/personnel or theater opening forces provided by the GCC. The JTF-PO is designed to deploy and operate for up to 60 days and then transfer mission responsibilities to arriving sustainment brigade forces or contracted capabilities transition.

Although they have no mission command of the JTF-PO, the TSC or ESC should work closely with the JTF-PO in order to seamlessly transfer robust theater opening capabilities within the AO/JOA.

Joint Task Force-Port Opening (SPOD)

Similar to the JTF-PO (APOD), the JTF-PO (SPOD) is a joint capability provided by USTRANSCOM that is designed to rapidly establish and initially operate an SPOD, establish a distribution node, and facilitate port throughput within a theater of operations. Unlike the JTF-PO (APOD), the JTF-PO (SPOD) is under the mission command of an Army SDDC battalion or Navy Expeditionary Port Unit commander. They are comprised of Army and Navy elements, and may be augmented by additional port opening enablers such as expeditionary contracting, SDDC subject matter experts, and ship husbandry subject matter experts.

Like the JTF-PO (APOD), the JTF-PO (SPOD) does not have organic cargo handling capability and must rely on contracted assets/personnel or theater opening forces provided by the GCC. The JTF-PO is designed to deploy and operate for up to 60 days and then transfer mission responsibilities to arriving sustainment brigade forces or contracted capabilities transition.

Sustainment Brigade Role

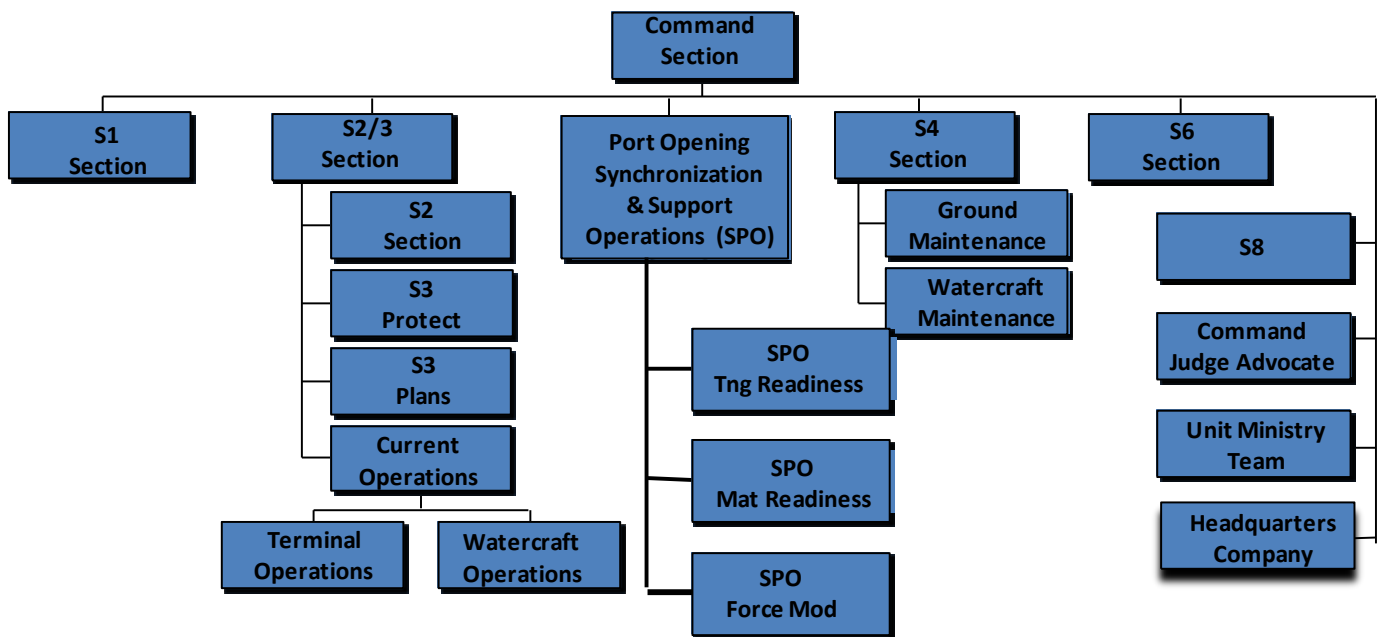
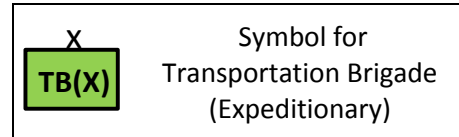
When tasked with conducting port opening, sustainment brigades serve as the primary command for overseeing the initial port opening operations. In this mission, the SUST BDE is normally augmented with a TTOE, Terminal Transportation Battalion, a CSSB, and a Movement Control Team (MCT). Other units, including Army watercraft, may also be assigned.

When tasked with conducting port opening, the SUST BDE must coordinate with other services, joint assets, agencies, contractors, and, on occasion, host nation authorities. Direct interaction occurs between the SUST BDE and the JDDOC, SDDC Transportation Battalion, and any Joint Task Force-Port Opening (JTF-PO) assigned to the JOA.

Areas of coordination include all of the areas of RSOI.

Transportation Brigade (Expeditionary) (TB(X))

The TB(X) is a logistics command specifically designed to support port opening and mission command Army watercraft. Under the mission command of an ESC or TSC, the TB(X) provides mission command of assigned and attached port, terminal and watercraft units conducting expeditionary intermodal operations in support of unified land operations, including the mission command for port opening and operations of inland waterways, bare-beaches, and degraded and improved seaports. Additionally, water terminal and watercraft units are assigned to the TB(X) to conduct deployment, re-deployment, and distribution support.



Rules of allocation allow for the TB(X) to mission command and provide technical supervision for as many as seven terminal battalions when fully deployed. The TB(X) is specifically responsible for:

- Planning and management of watercraft and water terminal support for a theater of operations, control of port opening operations, to include: receiving, loading/discharging, staging, maintaining control and in-transit visibility (ITV), and releasing equipment and materiel to the receiving unit or command
- Monitoring and maintaining the status of terminal watercraft assets to ensure they are properly employed and not over-tasked
- Terminal infrastructure assessment and inspection

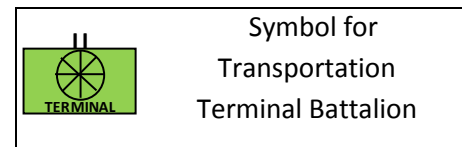
- Monitoring and coordination of water terminal and watercraft operations in theater provides control and supervision for watercraft operations, including coordination with the Harbormaster Company for matters pertaining to berthing, tug assistance, and employment of floating cranes
- Operational control, administration, logistics, and supervision of assigned and attached units
- Planning/conduct of re-deployment operations and deployment of assigned units to contingency or home station
- Global oversight of all Army terminal and watercraft capabilities in order to develop and synchronize plans, make recommendations on employment, and provide expertise to supported COCOMs and other key Army organizations on all issues related to water terminal and watercraft readiness, training, and employment
- Operating as a Contracting Officers Representative (COR) for port operations contracts
- Coordinates with sister service and Joint organizations including various USTRANSCOM, USN Fleet Forces Command, Naval Expeditionary Logistics Support Groups (ELSG), Naval Beach Groups (NBG), and Naval Riverine Groups
- Operational planning and execution of theater JLOTS requirements
 - Develops and administers programs to mitigate potential terrorist threats to operations
 - Conducts assessments and surveys of LOTS sites and port facilities to determine their adequacy and need for rehabilitation
 - Surveys fixed/floating bridges to ensure safety and load classification
 - Conducts reconnaissance and surveys of potential marshalling yards to ensure adequacy, and to assess usefulness and protection

The Terminals Section of the brigade also determines and plans for throughput capacity for reception, discharge, transfer, and storage and clearance operation in both tactical and non-tactical environments.

There are two TB(X)s in the Total Army – the 7th TB(X) in the active component and 3rd TB(X) in the USAR.

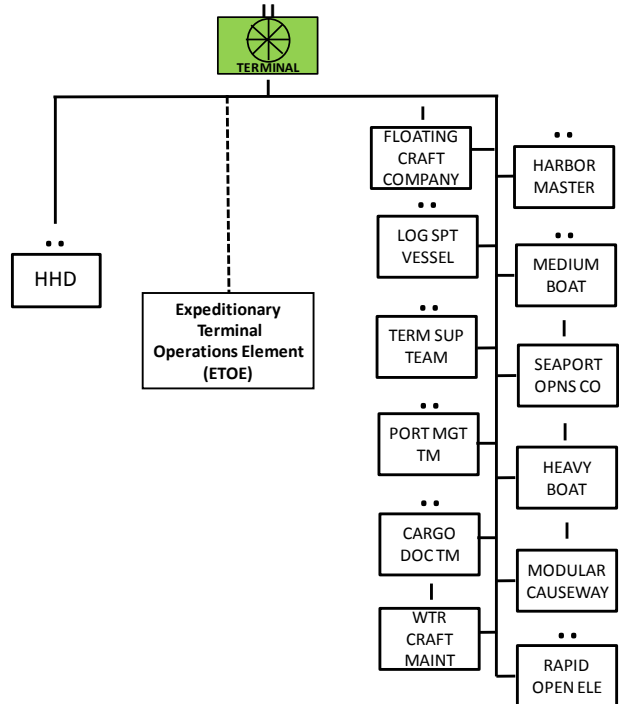
Transportation Terminal Battalion (TTBn)

Under the mission command of a sustainment brigade or TB(X), the Transportation Terminal Battalion maintains mission command, planning, direction and supervision of attached and assigned water terminal units to include those involved in fixed port, LOTS, or JLOTS operations.⁵⁸



More specifically, the TTBn provides:

- Mission command and support for organic and attached units of the battalion, including any of the following:
 - Auto Cargo Documentation Team (ACD)
 - Expeditionary Theater Opening Element (ETOE)
 - Heavy Boat Company
 - Medium Boat Company
 - Harbormaster Company
 - Seaport Operations Company (SOC)
 - Floating Craft Company
 - Causeway Company
 - Logistics Support Vessel Company (LSV)
- Terminal/Transportation operational staff and command support
- Control and supervision of the daily cargo transfer support operations in subordinate transportation units operating terminals
- Control and supervision of the daily watercraft transportation operations provided by subordinate transportation units

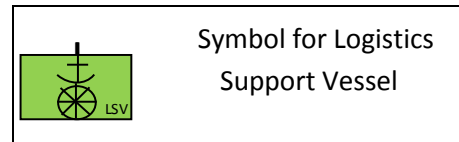


Rules of allocation provide for one TTBn per three to seven subordinate transportation companies or equivalent units. There are eight TTBns in the Total Army – two in the active component (10th TTBn and 11th TTBn) and six in the USAR.

⁵⁸ As a point of clarification, the difference between a LOTS operation and a JLOTS operation is that a LOTS operation only involves only Army assets. As “joint” implies, JLOTS involves other services or joint forces.

1. Logistics Support Vessel (LSV)

Under the command of a Chief Warrant Officer 4 (CW4), the Logistical Support Vessel provides water transportation for vehicles, containers, and/or general cargo to remote, underdeveloped areas along coastal main supply routes (MSRs), coastlines, and inland waterways. As a sea-going vessel with a range between 6,386 to 7,480 miles, the LSV is able to support unit deployments, relocations, and conduct port-to-port operations to assist in discharging and back loading of ships in a roll-on/roll-off (RO/RO) or LOTS operation. Each unit consists of one LSV that only drafts six feet.

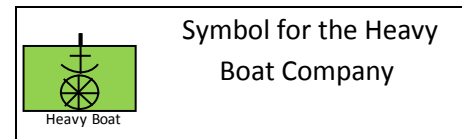


The cargo deck is designed to handle any vehicle in the Army inventory and can carry up to 15 M1 Abrams main battle tanks, 82 ISO standard containers, or 2,000 short tons of unit equipment/supplies per lift – the equivalent payload of 40 C-17s.

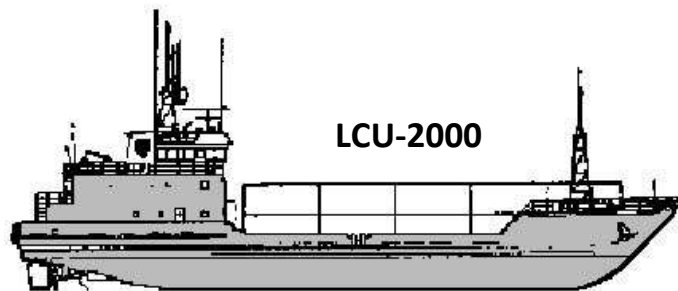
There are eight LSVs in the Total Army – five in the active component and three in the USAR.

2. Heavy Boat Company

Attached to a Transportation Terminal Battalion, Heavy Boat Companies perform waterborne transportation of personnel, cargo and equipment during intra-theater lift, water terminal, waterborne tactical and joint amphibious, riverine, LOTS or JLOTS operations. It can also be used for deployment and relocation of unit equipment and executing cargo operations along coastal LOC. The basis of allocation is one per TSC.



Consisting of ten ocean-going Landing Craft Utility-2000 (LCU-2000) vessels (five in each of the two sections), the Heavy Boat Company is capable of self deployment with a range of 4,500 miles without refueling. It can also be transported aboard a float-on/float-off (FLO/FLO) or lift-on/lift-off (LO/LO) ship.



The company consists of two platoons, each with an with an LCU-2000 capable of moving 400 Soldiers, five M1A1 battle tanks, 250 short tons of cargo, 24 20-foot containers per lift.

It provides intra-theater movement of cargo and equipment and can conduct tactical resupply missions to remote, underdeveloped coastlines and inland waterways, including LOTS/JLOTS operations in remote areas with austere shore facilities or unimproved beaches.

Because of its shallow draft, the LCU-2000 can carry cargo from deep-draft ships to shore ports or areas too shallow for larger strategic lift ships. All tracked and wheeled vehicles, including main battle tanks, bulldozers, and container-handling equipment, can be transported in LOTS/JLOTS operations. The ships are specially equipped with a bow ramp for RO/RO cargo and can beach and self-extract from the shore during LOTS/JLOTS operations.

The LCU-2000 is ideally suited for the discharge or back load of sealift, including RO/RO vessels such as an LMSR.

There are three Heavy Boat Companies in the Total Army – one in the active component (97th Heavy Boat) and two in the USAR.

3. Port Opening – Medium Boat Company

Under the mission command of a Transportation Terminal Battalion, the Medium Boat Company performs waterborne transportation of personnel, cargo and equipment during water

terminal, waterborne tactical and joint amphibious, riverine and LOTS/JLOTS operations. The basis of allocation is one per Sustainment Brigade – or TB(X) – with a Theater Opening Element.

The primary workhorses of the company are eight LCM-8s –four

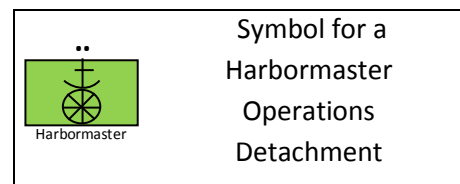
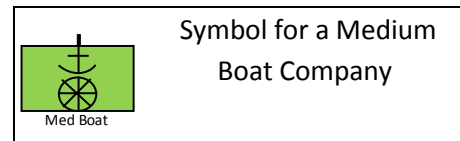
in each of two sections. LCM-8s (also known as “mike boats”) can transport cargo, troops, and vehicles from ship to shore or in retrograde movements. It is also utilized in harbor lighterage and utility work where its small size and shallow draft (4 ft. 6 in.) allow its use in confined areas. It’s designed for use in rough or exposed waters and is capable of operating through breakers and grounding on a beach. The bow ramp permits RO/RO operations with wheeled and tracked vehicles.

The company also has one LCM-8 (MOD 2) that serves as the mission command vessel and can be used as a transport for Army stevedores between shore points and a ship in a protected environment, a medical evacuation vessel, a diver support platform, a firefighting boat and a light salvage boat.

There are two medium boat companies in the Total Army – one in the active component (1098th Medium Boat) and one in the USAR.

4. Harbormaster Operations Detachment

Under the mission command of a Transportation Terminal Battalion, the Harbormaster Operations Detachment is essential the movement control element for Army watercraft operating in a port or harbor. It provides 24-hour operational control for Army vessels conducting intra-theater lift, water terminal, inland waterway and joint amphibious, riverine, and LOTS/JLOTS operations.



There is one harbormaster detachment per terminal battalion.

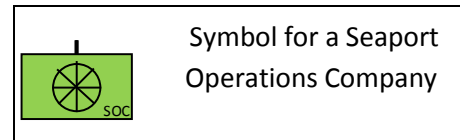
More specifically, the harbormaster detachment:

- Provides operational control for Army vessel movements into and out of port/harbor
- Coordinates berthing and anchorage assignments
- Controls vessel operations and monitors watercraft communications
- Operates Lighterage Control Center (LCC), Ship Lighterage Control Points (SLCP) and Beach Lighterage Control Points (BLCP)
- Controls watercraft operational planning and maintenance coordination

There are seven harbormaster detachments in the Total Army – three in active component and four in the USAR.

5. Seaport Operations Company (SOC)

The Seaport Operations Company (SOC) performs seaport terminal service operations to discharge and load containerized/break-bulk cargo and wheeled/tracked vehicles in fixed seaports or in LOTS/JLOTS sites. It operates under the mission command of a transportation terminal battalion.



Symbol for a Seaport Operations Company

The SOC has organic material handling equipment, including forklifts, Rough Terrain Container Handler (RTCH), yard dog⁵⁹, bulldozer, HEMTT wrecker and HEMTT-LHS. From a fixed port, the SOC is capable of discharging or uploading a total of 375 containers, 1,875 short tons of breakbulk cargo, or 750 wheeled or tracked vehicles. During LOTS/JLOTS operations, the SOC can discharge or upload up to 150 containers, 750 short tons of breakbulk cargo, or 450 wheeled or tracked vehicles. It also has a cargo documentation section for materiel accountability.



**Rough Terrain
Container Handler (RTCH)**

There are nine SOCs in the Total Army – two in the active component and seven in the USAR.

⁵⁹ A “yard dog” is a small truck with a 5th wheel capable of shuffling trailers around a port.

6. Floating Craft Company

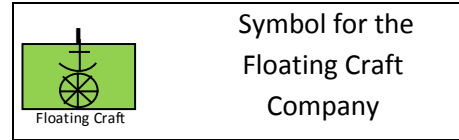
Under the mission command of a Transportation Terminal Battalion, the Floating Craft Company performs marine operations as part of intra-theater lift, water terminal, waterborne tactical and Joint Amphibious, riverine⁶⁰, or LOTS/JLOTS operations. The company deploys to a theater of operations to provide floating craft and harborcraft support along with heavy lift services for either pier or shipside operations in direct support of TTBN.

The company consists of:

- One large tugboat for ocean and coastal towing, salvage, and recovery operations, general purpose harbor duties, and firefighting service
- Two small tugboats for tug services in support of water terminal and inland waterway operations
- One floating crane to load and discharge heavy lift cargo that is beyond the capacity of ship's gear

The unit is modular in design and can deploy with only the personnel required to support the initial deployment and build incrementally to a full company operation. Normally, only one Floating Craft Company is used per SPOD.

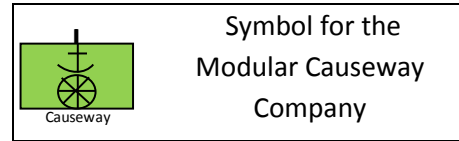
There are four Floating Craft Companies in the Total Army – one in the active component (73rd Floating Craft Company) and three in the USAR.



⁶⁰ Related to a river or riverbank.

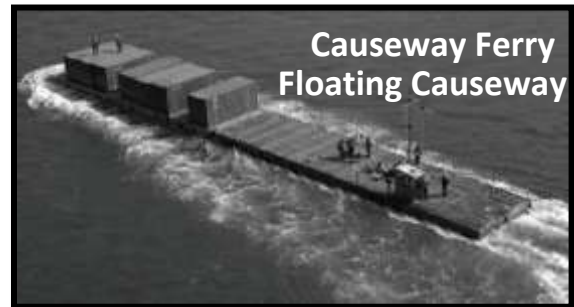
7. Modular Causeway Company

The Modular Causeway Company provides movement support for cargo and equipment during intra-theater lift, water terminal, water transport tactical and joint amphibious, riverine, LOTS and JLOTS operations. Modular causeway companies provide the Army with the capability to transfer cargo between ships or from ship to shore. Causeway systems provide the essential interface between Army lighterage⁶¹ and RO/RO ships. In a Sustainment Brigade area of operation, the company is attached to a Transportation Terminal Battalion for mission command.



Causeway Companies consist of:

- Floating Causeway (FC) pier consisting of 1-17 non-powered causeway sections (CSNP) up to 1,200 feet in length, with a dry bridge for the discharge of cargo and equipment from lighters directly to an unimproved shoreline or degraded fixed port facility
- Causeway Ferry (CF) consisting of one powered causeway section (CSP) and up to three non-powered causeway sections (CSNP) for moving rolling stock, break bulk, containerized cargo from ship to shore.
- Two Roll-On/Roll-Off Discharge Platforms (RRDF) consisting of up to 18 non-powered causeway sections (CSNP) each that interfaces between RO/RO ships and lighterage for the rapid discharge of vehicles



The Floating Causeway (FC) provides a dry bridge for the discharge of cargo from lighters directly to the beach. It can be emplaced in a number of configurations to meet the unique requirements of the vessels or the shore area being used. The FC is a key LOTS/JLOTS enabler to overcome beach



⁶¹ Lighterage is defined as transportation of goods on a lighter. A lighter is large flat-bottomed barge or boat used especially in unloading or loading ships.

obstacles and gradients in order to permit discharge of cargo across shallow waters onto shore.

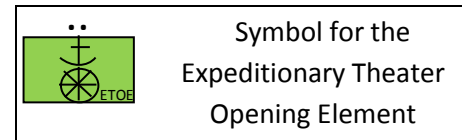
The Roll-on/Roll-off Discharge Facility (RRDF) provides the essential interface between Army lighters and RO/RO ships. It receives tracked and wheeled vehicles when driven across the RRDF from the RO/RO ship directly onto an Army lighter moored to the RRDF. It is also capable of receiving vehicles by lift on/lift off (LO/LO).

The Causeway Ferry (CF) moves rolling, break-bulk, and containerized cargo from an ocean-going vessel directly to the shore-side logistics operation or to a fixed or semi-permanent pier. It will support RO/RO and LO/LO operations.

There is only one Modular Causeway Company in the Total Army, the 331st Modular Causeway in the active component.

8. Expeditionary Theater Opening Element (ETOE)

Assigned to a Transportation Terminal Battalion, the Expeditionary Theater Opening Element (ETOE)⁶² manages terminal operations in seaports by providing organic, multi-modal, multi-ship, 24-hour supervision of contract labor hired to receive, clear, and move forward cargo and personnel from multi-modal conveyances and terminals located at ports or inland cargo transfer points. , and provides cargo documentation service and in-transit visibility (ITV) in seaports.



More specifically, the unit provides:

- Management of two vessel berths in seaport supporting 24-hour operations to include supervising, managing, administering, and monitoring contract labor for stevedore and related terminal services
- Stow-planning and automated cargo documentation support including vessel manifesting and stow planning using the Worldwide Port System (WPS)
- Capability to supervise Container Management functions at the terminal, performed by contracted or other HN labor forces
- Capability to support deployment and redeployment activities to units on an area basis using Transportation Coordinator's Automated Information System (TC-AIMS)
- Vessel and port reception and/or clearance
- In-transit visibility (ITV) of all cargo flowing through the port, i.e. tracking any cargo entering or leaving a port or terminal
- Contracting Officer's Representative (COR) for port operations contracts including the supervision and administer of contracts for stevedoring activities and operation of associated data processing equipment

There are 18 ETOEs in the Total Army – all are in the USAR.

⁶² Pronounced "E, Toe"

9. Automated Cargo Documentation Team (ACD)

Attached to the mission command of a Transportation Terminal Battalion, the Automated Cargo Documentation Team (ACD) provides automated documentation support for cargo discharged from ships.

Specifically, the unit documents receipt of cargo to reconcile it against the ship's manifest; it prepares Transportation Cargo

Manifest Documentation (TCMD) for first destination transportation; and it prepares discrepancy reports for the cargo accounting section of the TTBn. The basis of allocation is one per TTBn.

The ACD can provide these capabilities for breakbulk, container, and RO/RO cargo being discharged in fixed ports and LOTS/JLOTS operations.

There are 12 ACDs in the Total Army – two in the active component and 10 in the USAR.

10. Watercraft Field Maintenance Company

Under the mission command of a Transportation Terminal Battalion, the Watercraft Field Maintenance Company provides watercraft field maintenance supporting U.S. Army watercraft crews.

The unit provides:

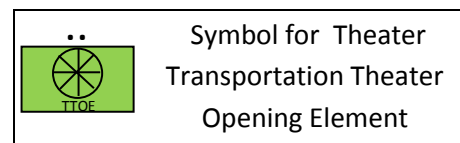
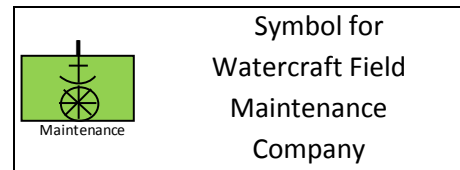
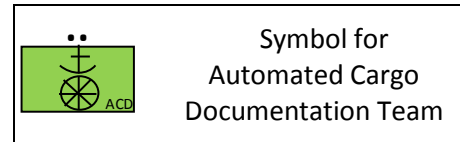
- Repair of Army watercraft on an area basis using organic maintenance teams.
- Augmentation of watercraft crew repair capabilities
- Maintenance management and production control functions for watercraft
- Maintains repair parts for shop operations and liaison with customers

There are two Watercraft Field Maintenance Companies in the Total Army – one in the active component (558th Watercraft Field Maintenance) and one in the USAR.

11. Transportation Theater Opening Element (TTOE)

The transportation theater opening element (TTOE)⁶³ is attached to a sustainment brigade when that brigade is assigned the mission of early entry and establishment of an area of operation's logistics base. The TTOE provides an additional 55 transportation personnel and allows the brigade to function as a seaport operator and distribution manager. With this capability, the brigade establishes the initial surface distribution system for an area of operations.

TTOE capabilities provide a sustainment brigade with the staff augmentation and functional expertise necessary to efficiently and effectively conduct theater opening operations (less health service support) that include RSOI of deploying Army forces. RSOI functions include coordinating, synchronizing, and clearing of aerial ports of debarkation/sea ports of debarkation (APOD/SPOD) holding areas, staging areas, and marshalling areas; personnel and unit equipment integration; life support; and the multi-



⁶³ Pronounced "T-TOW"

modal onward movement of units and/or supplies to tactical assembly areas and/or distribution hubs. The execution of RSOI functions require close coordination with supported commanders, the TSC, joint partners, and the HN.

Other TTOE functions include:

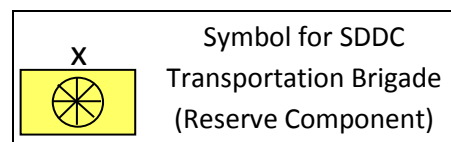
- Evaluating and ensuring that the appropriate mode is employed and fully integrated with materiel distribution requirements
- Providing advice on the use and implementation of assigned, attached, contracted, and HN motor transport assets
- Providing guidance on positioning of motor transport, air, and rail assets throughout the AO
- Monitoring and maintaining the status of all modal transportations assets in the AO and ensuring proper tasking
- Providing advice on the use and implementation of assigned, contracted, and HN terminal and watercraft operations
- Providing terminal infrastructure assessment
- Monitoring and coordinating operations and positioning of all terminal operations in the AO, to include motor, rail, inter-modal, air and sea
- Monitoring and maintaining status of terminal assets in the AO to ensure they are properly employed and not over-tasked

At some point along the deployment-employment-sustainment continuum the TTOE may be attached to the ESC to facilitate theater-level movements in accordance with the TSC movement program and support ongoing deployment/redeployment operations.

There are 18 TTOEs in the Total Army – all are in the USAR.

SDDC Transportation Brigade (Reserve Component)

The is SDDC Transportation Brigades are USAR TDA headquarters that command, control, and technically supervise assigned or attached SDDC TDA and TOE battalions engaged in terminal operations, terminal supervision and management operations, movement control operations, and other mobility support operations, including Deployment and Distribution Support Battalions.⁶⁴ They are under the mission command of the Deployment Support Command (DSC) until mobilized. Once mobilized, they are under the mission command of SDDC.



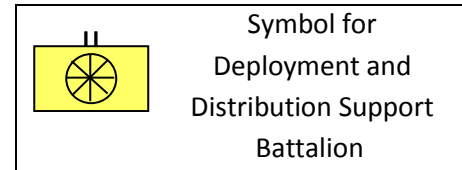
There are four in the Total Army.⁶⁵

⁶⁴ FM 3-35

⁶⁵ See Deployment and Distribution Support Battalion section for locations and non-mobilized assigned DDSBs.

Deployment and Distribution Support Battalion (DDSB)

The Deployment and Distribution Support Battalion (DDSB) is a USAR TDA headquarters designed to provide mission command and technical supervise TOE terminal companies and detachments operating at installations and seaports – mostly in CONUS. The strength of the DDSB is concentrated in its deployment expertise. Each battalion will have from one to three Deployment and Distribution Support Teams and a Terminal Management Team.



More specifically, the DDSB provides:

- Mission command to the DDSTs, which provide technical deployment related support to deploying units worldwide, and provide container management in theater
- Mission command to surface mobility units performing terminal operations in a SPOE/SPOD
- Mission command to USAR Terminal Management Teams engaged in supervising and managing civilian and contractor operations in a SPOE/SPOD
- Deploying units worldwide with support through the DDSTs
- Support for port opening operations

Attaching Port Management Teams and Terminal Supervision Teams increases the terminal management capability of the DDSB. The addition of the Automated Cargo Documentation Team capability increases the DDSB's berth capability. The exact number of teams in any given DDSB will depend on routine, daily operations in CONUS or OCONUS as well as theater wartime requirements. When deploying to new port areas they may be supplemented with teams from other active battalions and backfilled by USAR battalions.

There are 13 DDSBs in the Total Army. All are in the USAR. They are located in the following locations:

- 1190th Transportation Brigade, Baton Rouge, LA
 - 1181st Deployment and Distribution Support Battalion, Meridian, MS
 - 1184th Deployment and Distribution Support Battalion, Mobile, AL
 - 1192nd Deployment and Distribution Support Battalion, New Orleans, LA
- 1189th Transportation Brigade, North Charleston, SC
 - 1182nd Deployment and Distribution Support Battalion, North Charleston, SC
 - 1186th Deployment and Distribution Support Battalion, Jacksonville, FL
 - 1188th Deployment and Distribution Support Battalion, Decatur, GA
- 1179th Transportation Brigade, Fort Hamilton, NY
 - 1173rd Deployment and Distribution Support Battalion, Brockton, MA
 - 1174th Deployment and Distribution Support Battalion, Flushing, NY
 - 1185th Deployment and Distribution Support Battalion, Lancaster, PA
 - 1398th Deployment and Distribution Support Battalion, Baltimore, MD

- 1394th Transportation Brigade, Camp Pendleton, CA
 - 1395th Deployment and Distribution Support Battalion, Joint Base Lewis-McChord, WA
 - 1397th Deployment and Distribution Support Battalion, Vallejo, CA
 - 757th Transportation Battalion (RAIL), Milwaukee, WI

Deployment and Distribution Support Team (DDST)

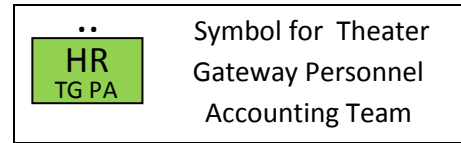
The Deployment and Distribution Support Teams (DDST) are USAR TDA units designed to assist other units with home station deployment planning, staging, and preparing unit equipment and personnel for worldwide movement by surface or air. When deployed to a theater of operations the DDST manages, controls, and maintains in-transit visibility of containers moving intra-theater. DDSTs can be attached to DDSBs or other transportation battalions. The DDST provides these battalions with integral, modular capability to meet deployment support mission requirements and can:

- Provide deployment assistance to the Brigade Mobility Officer or Installation Transportation Officer and the air/sea port operating units
- Assist units with movement to designated POE or POD
- Provide deployment support from fort to port through movement planning, preparation and communication
- Ensure accuracy of documentation associated with deploying equipment
- Provide liaison between the port and installation to minimize the frustrated cargo and equipment at the port.
- Ensure the conduct of safe operations (rail/line haul truck trucking) through effective management and control
- Provide technical guidance/assistance to unit in preparing, maintaining, and executing movement plans, unit movement data, and related documentation
- Inspect equipment to ensure that vehicles are correctly identified, cargo is properly loaded on the vehicles, and no equipment is missing that would impair the loading operations at the port
- Provide HAZMAT qualified personnel to assist unit HAZMAT certifiers in preparation of hazardous cargo documentation
- Coordinate with USCG Container Inspection & Training Assistance Team to conduct training and inspect containers/HAZMAT cargo at installations for OCONUS deployments and Redeployment Assistance Inspection Detachment Team for USCG mission support within theater
- Provide daily situation report and ITV updates
- Provide personnel to monitor and report on container movements in theater

There are 13 DDSTs in the Total Army. All are in the USAR.

Theater Gateway Personnel Accounting Team (TG PA)

Led by an Army captain, the Theater Gateway Personnel Accounting Team (TG PA) is assigned to the Human Resources Branch in a sustainment brigade. Its mission is to prepare personnel accountability plans and coordinate personnel accountability operations, transportation, and re-equipping for personnel in a theater of operations.



Joint Deployment and Distribution Center (JDDOC)

The JDDOC is a forward deployed element of representatives from the combatant command, TRANSCOM, DLA, and the service departments to provide the visibility and synchronization of personnel and materiel moving in DTS. They typically collocate with the theater distribution staff and have the ability and authority to reach back to their parent organizations to promote integration between the strategic and theater systems for deployment and distribution. The JDDOC maintains visibility of all of the personnel, supplies, and equipment moving into the theater and manages the distribution in accordance with the supported CCDR's priorities.

Logistics in Theater Closing

According to ADP 4-0, theater closing is the process of redeploying Army forces and equipment from a theater, the drawdown and removal or disposition of Army non-unit equipment and materiel, and the transition of materiel and facilities back to host nation or civil authorities. Theater closing begins with terminating joint operations which are an aspect of the CCDR's functional or theater strategy that links to achievement of national strategic objectives.

Army logistics organizations perform a number of terminating tasks including redeployment of remaining forces, drawdown of non-unit materiel, and transitioning of materiel, facilities and capabilities as specified in national agreements to host nation or civil authorities.

The CCDR defines the conditions for redeployment. The same elements that operate and manage the theater distribution system during deployment and sustainment perform support roles during redeployment. Redeployment planning is an integral part of employment planning and is coordinated with mission termination or transition plans.

By doctrine, most of the logistics of theater closing falls upon Army Materiel Command's Retrograde Property Assistance Teams.⁶⁶ These teams facilitate the turn-in of equipment for retrograde, redistribution and reset of the force. At the same time, the TSC and ESC work closely with the Defense Logistics Agency Support Team and Expeditionary Disposal Remediation Teams to provide expert advice and oversight on the preparation for and the closure of Army units.

Contracting for life support services and retrograde support must continue until the last troop leaves, but standards of support are reduced as much as possible prior to final contract closeout.

As a note of clarification, the term "theater closing" is often used synonymously with "retrograde." Although retrograde is part of theater closing, retrograde can, and does, occur during normal operations in a deployed theater. According to the 2008 Army Posture Statement, retrograde is "a process for the movement of equipment and materiel from a deployed theater to a reset (replace, recapitalize, or repair) program or to another theater of operations to replenish unit stocks or satisfy stock requirements." Equipment is redistributed in accordance with theater priorities to meet mission requirements within areas of responsibility and Department of Defense requirements worldwide. The Army Materiel Command is the Army's executive agent for retrograde.

As part of theater closing, TRANSCOM also executes port closing. As TRANSCOM's lead agent, SDDC is responsible for providing and managing strategic common-user sealift, and terminal services in support GCC's drawdown or termination requirements. As the single port manager, SDDC must integrate and synchronize strategic and theater re-deployment execution and distribution operations within each CCDR's area of responsibility. It ensures drawdown/termination requirements are met through the use of both military and commercial transportation assets based on the supported commander business rules and JDDE best business practices.

⁶⁶ ADP 4-0

Theater Logistics Overview

There is no cookie cutter answer as to how logistics will be conducted in a theater of operations. As always, METT-TC will dictate how commanders at all level provide the supplies and services to the lowest tactical level. That means that there are no cookie cutter solutions as to what units will need to be deployed into a theater at any given time. Recent history has shown that running logistics in a theater can be conducted in vastly different ways.

Conflicts in Iraq and Afghanistan heavily depended on contracted logistics capabilities. By law, TRANSCOM must use commercial assets (common user carriers) first. Government-owned vessels operated by the U.S. Navy branch of TRANSCOM, Military Sealift Command (MSC), can only be used if commercial carriers

cannot meet delivery requirements, will not accept the cargo (e.g. HAZMAT), determine not to bid for the move, or certain other conditions. Using the Universal Services Contract (USC) contract vehicle – USC 07 as of 2013 –TRANSCOM, through SDDC, booked most commercial transportation into CENTCOM.

SDDC and TRANSCOM also facilitated a “factory-to-foxhole” commercial contract system to move supplies from CONUS

to forward operating bases (FOB) by issuing a single contract. For example, SDDC would contract a single commercial carrier to transport and deliver building materials (Class IV) from a CONUS supplier (military or commercial) directly to a FOB. These contractors were largely the U.S. flagged ocean carriers who would subcontract many parts of the move to other American companies or host nation

Globally Responsive Logistics

Theater Responsibilities

- **TSCs** are aligned to COCOMs and plans, prepares, deploys, and executes operational-level logistics operations within an assigned theater; provides centralized logistics mission command structure for the theater Army.
- **ESCs** provide rotational depth with one forward deployed and three aligned to corps, plans and executes sustainment, distribution, theater opening, and RSO&I for Army forces; provide forward-based mission command of assigned units.
- **AFSBs** support the AMC role as a national-level provider and to assist in the coordination of acquisition, logistics and technology (ALT) support to Army units world-wide-- support jointly with maintenance, modifications, and retrograde.
- **CSBs** primary provide operational contract support. They provide a planning, advising and contracting command to the ASCC. They execute theater support contracting actions -- lead contracting authority for the DoD in support of their respective theaters.
- **SDDC** Transportation Brigades provide surface deployment and redeployment support and sustainment distribution services and serve as single port manager in support the joint force in surface deployment / redeployment and distribution in their (AOR).

companies. Movement of Army cargo by host nation commercial logistics assets was referred to as movement by “white truck”.⁶⁷

In the war in Afghanistan, the landlocked nation and political decisions required that Army planners use more multi-modal logistics methods, especially white trucks, to maintain the lines of communication. This created a unique challenge when it came to the theater responsibility for in-transit visibility and caused friction between a commander’s desire to know and control logistics and the commercial contractor’s lack of providing this information.

With the advantage of an improved seaport and cooperative political situation in Kuwait, the war in Iraq allowed for the direct shipment of personnel, equipment and supplies by military and civilian ocean transport. This allowed commanders more direct mission command over operations and ITV during those missions. Although the later stages of the war saw more use of contracted commercial transportation, a U.S. controlled and protected GLOC allowed more control of ground logistics and greater use of “green truck” – i.e. U.S. military owned – vehicles in tactical convoy operations.

⁶⁷ Common military slang refers to host-nation trucks as “white trucks” or “jingle trucks,” the latter in reference to the decoration used by host-nation drivers. “Green truck” refers to U.S. military-owned and operated vehicles. This is a reference to “Army green” and makes no differentiation on their actual paint scheme.

Logistics Contacting

Expeditionary Contracting Command (ECC)

Expeditionary Contracting Command is responsible for theater support contracting in support of deployed Army forces worldwide and garrison contracting support for OCONUS Army installations and associated forward station units. The ECC has mission command over the Contract Support Brigades and Army active component contracting force structure and is the Army's force provider of contingency contracting assets.

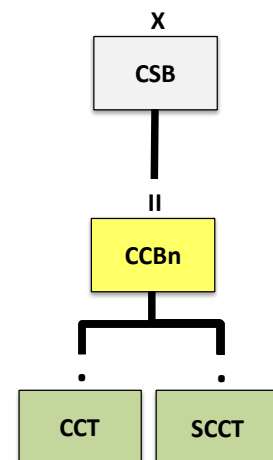
The ECC commander is appointed as a Head of Contracting Activity (HCA) by the Army senior procurement executive, thus giving him the overall responsibility for managing contracting activities.

Contracting Support Brigade

The six CSBs in the Total Force are each aligned with a specific regionally-focused ASCC. When deployed, the CSB has a direct support relationship with the Army Forces (ARFOR) commander in the operational area and executes its contracting mission under the direction and contracting authority of the ECC. The ARFOR commander may further delegate this DS relationship per METT-TC.⁶⁸

The CSB is the primary operational contract support planner, advisor and contracting commander to the ASCSB missions include:

- Providing mission command over all assigned/attached subordinate CCBNs, SCCTs and CCTs.
- Providing operational contract support advice (less system support contract related advice) and planning assistance to the ASCC (or subordinate Army Forces command) and the associated senior sustainment command. This assistance will include logistics civilian augmentation program (LOGCAP) planning done in coordination with the USAMC LOGCAP executive directorate provided planner and/or the supporting USAMC logistic support officer (LSO) from the Team LOGCAP-Forward (TLF).
- Leading the development of the contract support integration plan (CSIP) when requested by the ASCC and/or Army Forces commander.
- Serving, when designated by the GCC through their respective ASCC, as the lead Service contracting command or basis for a joint theater support contracting command (JTSCC) responsible for common contracting support.
- Coordinating and providing contracting support advice and planning assistance at major tactical unit-level (corps, division, BCT/brigade, and so forth).
- Serving as the ASCC/Army Forces command's theater support contracting authority during contingency operations.



⁶⁸ For additional information, see FM 4-92

- Providing theater support contracting in support of deployed Army, sister services, multinational units, and other governmental agencies (OGAs) as directed.
- Establishing and enforcing common contracting procedures within the operational area to include participation in, and/or lead for, any designated contracting related board or center.
- Establishing and maintaining liaison with TLF and other deployed contracting support elements such as, USACE, Surface Deployment and Distribution Command (SDDC), USAMEDCOM, sister Services, and so forth, as required.
- Performing contractor management planning for service contracts where contractor personnel will come in contact with US forces.
- Performing contract execution and contract administration for contracts executed under the CSB authority.
- Coordinating the deployment and tactical support of all assigned and attached CCBNs, SCCTs and CCTs.
- Providing support to units for the conduct of operational contract support related training and professional development.

Strategic-Level Connections & National Enterprise Partners

U.S. Army Sustainment Command (ASC)

ASC is responsible for a wide range of logistics missions (less medical) in support of combat operations, ongoing Army training cycles, and worldwide humanitarian and disaster relief efforts. ASC has brigades in CONUS and OCONUS with more than 60 battalions and logistical support elements dispersed around the globe. Major ASC responsibilities are:

- Field Support – ASC operates a network of Army field support brigades and battalions, logistics support elements, and brigade logistics support teams which identify and resolve equipment and maintenance problems, as well as materiel readiness issues for combatant commands.
- Materiel Management – ASC matches materiel to mission and assures logistics readiness in the ARFORGEN process. This includes issuing, maintaining and managing theater-provided equipment in combat theaters, and left-behind equipment that can be made available to non-deployed units for training. ASC reissues fully mission-capable equipment to deployed units upon their return.
- Contingency Contracting – ASC provides support services like food and lodging through commercial sources, freeing Soldiers for combat missions. The Logistics Civil Augmentation Program (LOGCAP) uses civilian firms to provide a wide range of support services to deployed forces worldwide, while contingency contracting brigades and battalions deploy with expeditionary forces.
- APS – ASC maintains, accounts for and manages combat equipment and supplies, and humanitarian mission stocks, at land- and sea-based positions strategically located around the globe. The US Army Medical Materiel Agency manages the Class VIII portion of APS.

U.S. Transportation Command (USTRANSCOM)⁶⁹

USTRANSCOM is a functional combatant command responsible for providing and managing strategic common-user airlift, sealift, and terminal services worldwide. As the distribution process owner, TRANSCOM is responsible for integrating and synchronizing strategic and theater deployment execution and distribution operations within each CCDR's area of responsibility. Ensures deployment/redeployment requirements are met through the use of both military and commercial transportation assets based on supported commander business rules and best business practices. Determines when commercial channels can meet requirements and relieve stress on limited military assets.

It accomplishes this requirement by providing personnel augmentation to the CCDR's JDDOC. USTRANSCOM's major subordinate commands include AMC as the USAF component command; Military Sealift Command (MSC) as the Navy component command; and the SDDC as the Army service component command.

⁶⁹ USTRANCOM is normally referred to as "TRANSCOM" since there is currently no other military organization with a similar acronym.

Air Mobility Command (AMC)⁷⁰

AMC is the USAF component command of the USTRANSCOM and serves as the SPM for air mobility. AMC aircraft provide the capability to deploy Army forces anywhere in the world and help sustain them in a conflict. AMC performs single port management functions necessary to support the strategic flow of deploying forces equipment and supplies from the APOE to the theater. APOEs/APODs are usually designated joint aerial complexes and managed by AMC. Where designated, AMC is also the operator of common-use APOEs/APODs. Air terminal operations include supervising cargo documentation, cargo loading and unloading, providing clearance, movement operations, and security.

Military Sealift Command (MSC)

MSC is the Navy's sea transportation component of USTRANSCOM. MSC's mission is to provide ocean transportation of equipment, fuel, supplies, and ammunition, as well as to perform ship husbandry to sustain US forces worldwide during peacetime and in war. Use of MSC assets is limited by USTRANSCOM's "commercial first" policy and some US Code.

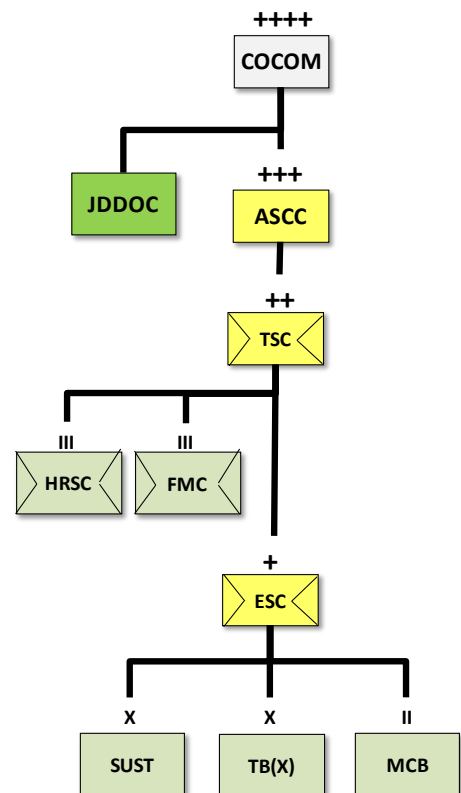
Military Surface Deployment and Distribution Command (SDDC)

SDDC is the Army's ground transportation component of USTRANSCOM.⁷¹

Army Service Component Command (ASCC)

When an Army Service component command (ASCC) is in support of a GCC, it is designated as a Theater Army (TA). The Theater Army is the primary vehicle for Army support to joint, interagency, intergovernmental, and multinational forces (MNFs). The TA HQ performs functions that include reception, staging, onward movement, and integration; logistics over-the-shore operations; and security coordination.

The Theater Army is responsible for providing support to Army forces and common sustainment/support to other Services as directed by the CCDR and other authoritative instructions. The Theater Sustainment Command (TSC) is assigned to the Theater Army and is the Army's senior logistics headquarters (HQ) within the theater of operations. When directed, the TSC provides lead Service and Sustainment of Unified Land Operations 31 July 2012 ADRP 4-0 2-9 executive agency support for designated logistics and services to other government agencies, MNFs, and nongovernmental organizations (NGO). When directed, the MEDCOM (DS) provides AHS support to other services.



⁷⁰ To keep from confusing two major commands with the same acronyms, the joint community normally refers to Air Mobility Command as "AMC-Blue" and Army Materiel Command as "AMC-Green."

⁷¹ See Page 86 for details on SDDC.

The TA exercises administrative control over all Army forces in the area of responsibility unless modified by DA. This includes Army forces assigned, attached, or OPCON to the combatant command. The TA coordinates with the TSC for operational sustainment planning and management. The TA defines theater policies and coordinates with the TSC for technical guidance and execution of force projection and sustainment.

Each GCC has Service component commanders from each Service-level organization (Army, Navy, Marines, and Air Force). In order to fulfill the requirement to provide a Service component commander, the combatant commander activates an Army Service component command (ASCC) headquarters.

The ASCC commander is specifically responsible for service-related United States Code (USC) Title 10 tasks to prepare, train, equip, administer, and provide supplies and services to Army forces assigned or attached to combatant commands. The ASCC may also have many lead service responsibilities, which entail common-user logistics (CUL) support to other services, multinational forces, other government agencies (OGAs), and/or nongovernmental organizations (NGOs).⁷²

At theater level, centralized movement control coordinates the flow of units, personnel, and material (including sustainment) into the theater and forward destinations. These actions are vital for processing deploying units and sustaining them in theater. The ASCC headquarters provides command and staff supervision of movement control units through the assigned TSC. The ASCC calls for deployment of a TSC, or elements of a TSC, to open lines of communications (LOC) in the theater. LOC components include facilities required to move, maintain, and sustain theater forces. LOC components consist of the following to create an intermodal distribution network:

- Aerial ports of embarkation and debarkation
- Seaports of embarkation and debarkation
- Water, rail, and route networks
- HN resources

Defense Logistics Agency (DLA)

DLA is the Department of Defense (DoD) strategic logistics provider. DLA supports each GCC with a DLA contingency support team as its focal point for coordinating DLA activities throughout the theater. The DLA contingency support team works directly with the TSC and the ESC and integrates materiel management support of DLA common commodities such as subsistence, clothing and other general supplies, package/bulk petroleum, and medical materiel. They provide disposal support as appropriate including the disposal of hazardous waste. The DLA contingency support team also provides contract administration services and support through attached defense contract management agency elements.

⁷² See FM 4-94 for more details

U.S. Army Contracting Command (ACC)

Army Contracting Command is a major subordinate command of AMC and provides both theater support contracting to deployed Army forces and installation contract support to garrison operations through its two subordinate commands – the Expeditionary Contracting Command (ECC) and the Mission and Installation Contracting Command (MICC). ACC has the responsibility to provide contracting, mission command, and management authority over theater support contracting and the Logistics Civil Augmentation Program (LOGCAP). All theater contracting units are assigned to and receive contracting authority from ACC. ACC also provides support to deployed Army forces via reach back contracting support from its CONUS-based acquisition centers and MICC directors of contracting (DOCs).

Defense Contract Management Agency (DCMA)

DCMA may be directed to provide administrative contract services for contracts awarded by all DoD components and other designated federal and state agencies, and foreign governments. DCMA is responsible for assuring that procured materiel and services are satisfactory and delivered when and where and supplies to and from the theater. SDDC is also responsible for providing management of all port operations within the port to include coordinating workload requirements, water-side port security, and port support activities.

Continuous coordination and collaboration between SDDC units and the TSC facilitates integrated and synchronized operations throughout the distribution system. This interface with joint partners will enable local direction and control of critical resources essential to achieving unity of effort.

Defense Finance and Accounting Service (DFAS)

The Defense Finance and Accounting Service (DFAS) is responsible for the delivery and responsive accounting and financial management services for DoD. They provide timely and useful business intelligence to decision-makers who, with the right information, can more effectively manage their resources in support of our troops at home and abroad. DFAS is an agency supporting the Office of the Under Secretary of Defense, Comptroller, and the principal advisor to the Secretary of Defense for budgetary and fiscal matters.

In a theater of operations, the primary interface Soldiers have with DFAS is through the Finance detachments and companies under the ultimate mission command of the TSC.

Joint Munitions Command (JMC)

The Joint Munitions Command serves as the DoD field operating agency for the single manager for conventional ammunition mission. The Joint Munitions Command manages the production, storage, issue and demilitarization of conventional ammunition for all US military Services – Army, Navy, Marine Corps, Air Force, and Coast Guard. Joint Munitions Command is the logistics integrator for life-cycle management of ammunition; providing a global presence of technical support to US forces.

U.S. Army Medical Command (USAMEDCOM)

The U.S. Army Medical Command (USAMEDCOM), commanded by the Army Surgeon General, provides AHS support for mobilization, deployment, sustainment, redeployment, and demobilization across a range of military operations. The USAMEDCOM integrates the capabilities of its subordinate operational

Army medical units with generating force assets such as medical treatment facilities and research, development, and acquisition capabilities. The USAMEDCOM's generating force capabilities not only augment those of operating forces but also provide significant assistance in coping with unanticipated health threats.

The U.S. Army Medical Command maintains the capability to provide continuity of care for patients returning from theater. It also provides individual AMEDD training, medical materiel, and research and development activities to support the Army mobilization force.

USAMEDCOM also has regional medical commands responsible for oversight of day-to-day operations in military treatment facilities, exercising mission command over the military treatment facilities (MTFs) in the supported region. See ATTP 4-02, Army Health System and FM 1-01, Generating Force Support for Operations for additional information.

US Army Financial Management Command (USAFMCOM)

USAFMCOM is an operating agency of the Assistant Secretary of the Army for Financial Management & Comptroller (ASA(FM&C)) that provides advice and management information to the ASA(FM&C) and interacts between the Army Staff, Army major commands, units, and DFAS on matters concerning finance and accounting policy, systems, procedures and reporting.

A supporting-to-supported relationship between USAFMCOM and the TSC/financial management center (FMC) provides the means to effectively interpret, disseminate, and implement financial management directives, policy, and guidance developed by national providers to include USAFMCOM.

U.S. Forces Command (FORSCOM)

FORSCOM is the Department of Army executing agent for CONUS force mobilization, deployment, and demobilization planning and execution in the Army Mobilization and Operations Planning and Execution System. The FORSCOM Mobilization and Deployment Planning System provides standardized policies and procedures for ASCCs to ensure coordinated action in mobilizing and deploying Army Forces to support approved operation plans and contingency operations. FORSCOM is the ASCC to JFCOM.

Human Resources Command (HRC)

Human Resources Command is the Army G-1's field operating agency responsible for executing personnel process policies. Process policy execution focuses on developing business rules and procedures to deal with current and anticipated functional processes. The execution activity links the supportive organizational operations to personnel strategy and measures overall progress towards established goals.

Although no formal command relationship exists between the Human Resources Command and the TSC/Human Resources Sustainment Center (HRSC), a supporting-to-supported relationship provides for the efficient and effective management of assigned active, USAR and ARNG Soldiers.

Installation Management Command (IMCOM)

IMCOM is a Direct Reporting Unit of the Assistant Chief of Staff for Installation Management, Headquarters, Department of the Army, and is responsible for managing Army installations in support of

readiness and mission execution (including deployment). In the CONUS installation, commanders have specific support responsibilities for movement planning and execution. In overseas commands, support groups have similar deployment support responsibilities. Installation responsibilities supporting deploying units range from maintaining a DACG and PSA capability to providing marshalling area support. Each CONUS installation is required to appoint a UMC as the unit's contact within the installation staff for deployment transportation support and instructions.

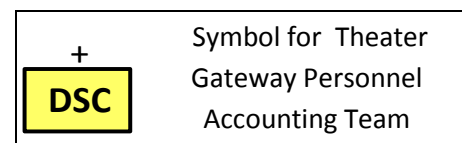
The A/DACG is an ad hoc organization provided by the supporting installation and is designed to assist AMC and the deploying unit in receiving, processing, and loading personnel and equipment. Its composition is mission dependent but cargo transfer companies are best suited for the role. In CONUS, the A/DACG is a shared responsibility between IMCOM installations and FORSCOM units.

The Unit Movement Coordinator (UMC) —

- Provides deployment guidance.
- Assists units with the OEL and UDL.
- Processes convoy clearances and special hauling permits.
- Verifies strategic lift requirements and assists in designating loading sites and times.
- Assists in identifying and obtaining BBPCT materials, containers, and pallets.
- Coordinates MHE.
- Ensures unit equipment is properly marked.
- Supports unit movement at railheads and airfields.
- Coordinates airlift requests.
- Reviews and approves deployment plans annually.
- Provides in-transit visibility support to deploying units.
- May conduct annual movement planning and execution workshops for Active Army unit movement officers

Deployment Support Command (DSC)

The Deployment Support Command (DSC) is a USAR TDA headquarters with the mission to provide mission of SDDC-aligned, assigned or attached Army Reserve units and provide standardized training and readiness oversight to all USAR units engaged in water terminal, deployment and distribution support, container management, and movement control operations. The DSC is a direct-reporting command of the 377th Theater Support Command in New Orleans, La., and is operationally controlled by SDDC.



Future of Army Logistics – Moving ahead

The one truism for Army force structure and mission is that it is always changing and evolving to meet the strategic needs of the nation. As our maneuver forces evolve in size, structure, and mission, the need to maintain and sustain the Soldiers and equipment within that structure are evolving with it. Technology, ingenuity and creativity – the merger of the art and science – will continue to be the order of the day for all military logisticians.

Key points from Globally Responsive Sustainment (GRS) that should shape our future force structure and force design include:

- Design and structure our units so that they are adaptive to a range of mission types.
- Seek agility and flexibility through habitual relationships and enabled mission command structure.
- Redefine responsibilities and authorities in formation headquarters.
- Organize early entry capability to meet deployment timelines.
- Integrate and optimize between AC/RC.
- Synthesize Joint, SOF, and CF capabilities.
- Reduce and protect sustainment in-theater footprint.
- Build partnership capacity.

As we reduce our strength in numbers, we will strengthen our unit designs. CASCOM is the Army’s Sustainment think tank, and as such, we need to build down in a smart and deliberate manner, rather than tear down organizations. Some of our force structure became out of balance when AC elements were eliminated to such a degree that it jeopardized early entry capability or reduced technical-functional skill sets to such a degree that it would have been unsustainable in the Army as a whole. Balancing AC/RC means we must calculate what capabilities can be provided based on when they are needed within COCOM war plans, and we also balance the sustained growth of functional capacity.

To be prepared for war is one of the most effective means of preserving peace.”
– GEN George Washington

Changing force design will occur as we technology modernizes the force and reevaluate the employment concept based on modularity lessons learned. Three recent examples include: 1) The Modular Fuel System Tank Rack Module had a significant impact on how units were redesigned, reducing Sustainment footprints, and provided agility to tactical concepts of support. 2) The recently approved redesign of the Petroleum Support Battalion merged the Petroleum Pipeline and Supply Battalions, provided the Army more depth at no cost, and provided planners greater flexibility for theater requirements. 3) The redesign of subordinate units to standardize twenty-one CSSBs provided significant force structure savings to the total Army with

“My logisticians are a humorless lot ... they know if my campaign fails, they are the first ones I will slay.” – Alexander the Great

economies of scale by echeloning capabilities from the BCT and rolling back some of the “hyper-modularity” which made planning difficult.

There are multiple near term opportunities to modernize legacy formations and evaluate organizational solutions to address unnecessary gaps and redundancies with potential savings. CASCOM has already submitted a force design update (FDU) to design a TOE retrograde organization to fill a serious gap from the last decade. Additionally, improvements are being made to all EOD organizations, Composite Supply

*“The line between disorder
and order lies in logistics...”*

– Sun Tsu

Companies, and Floating Craft Companies. Analysis is ongoing with the TSC, ESC, and Sustainment Brigade HQs to modernize their staffs, bring them in line with grade plate reductions, and update materiel management/distribution management responsibilities. The total Army reduction in end strength will require serious consideration on how to responsibly reduce SRCs

within COMPOs so they remain complimentary and meet deployment timelines. Finally, serious consideration must be given to eliminating or combining unit types that have not been employed well in the last 14 years.

Just as things change, others remain the same. “Beans and bullets,” combined with water and fuel consumption, drive the largest requirements for logistics units. Until consumption is reduced for liquid logistics, food, and ammunition; logisticians will be required to transport, account, issue, protect, manage, and maintain in roughly the same quantities (tooth to tail) that we have them today. Operational energy, robotics, and 3D printing holds great promise for revolutions in military affairs but even these changes will require a residual footprint to accomplish required logistics functions.

While the units, tools and their employment may evolve, the individual training and strength of leadership will be the ultimate measure of how well our Army performs. The mark of every successful logistician in the future will be technical and tactical proficiency, intellectual capacity to understand the complex contemporary environment, and professional stewardship; all combined with a tough individual battlefield skill and fighting spirit accentuated by honorable service. Sustainment is a warfighting function, and as such it must be integrated with all other warfighting functions, trained to the same proficiency, and fought by well equipped experts.

Logistics employment cannot just be left to the logisticians. Soldiers and leaders in all formations must be educated about how they receive, employ, and integrate support now and in the future. Sustainment Soldiers are in every formation, and must be employed properly to get the best effect. By taking the time to educate peers and superiors in the other warfighting functions, we build trust and understanding. Trust is the key element in successfully meeting the needs of maneuver formations and in decreasing friction on the battlefield. Habitual relationships at home station, when deployed, and through regional alignment will enable trust.

While guides offer a glimpse into the workings and the interrelationships of Army units, nothing compares to reading doctrine, cross-coordination between units and institutions, and engaging TRADOC in the evolution of Army capabilities. CASCOM integrates the ideas and experiences of field logisticians

into full DOTMLPF analysis through exercises, training, after action reviews, and capabilities and formations based assessments. It is incumbent upon you, the professional stewards, to contribute regardless of where you are assigned. Support Starts Here!

Appendixes

Classes of Supply.....	116
Breakdown of Logistics Functions.....	117
Acronyms and Abbreviations.....	118
Glossary of Key Terms.....	121
Logistics Related Automated Systems.....	128

MILITARY CLASSES OF SUPPLY

CLASSES OF SUPPLY	
Class	Description
Class I	Subsistence, including health and welfare items.
Class II	Clothing, individual equipment, tentage, tool sets and tool kits, hand tools, administrative, and housekeeping supplies and equipment (including maps). This includes items of equipment, other than major items, prescribed in authorization/allowance tables and items of supply (not including repair parts).
Class III	POL, petroleum and solid fuels, including bulk and packaged fuels, lubricating oils and lubricants, petroleum specialty products; solid fuels, coal, and related products.
Class IV	Construction materials, to include installed equipment and all fortification/barrier materials.
Class V	Ammunition of all types (including chemical, radiological, and special weapons), bombs, explosives, mines, fuses, detonators, pyrotechnics, missiles, rockets, propellants, and other associated items.
Class VI	Personal demand items (nonmilitary sales items.)
Class VII	Major items: A final combination of end products which is ready for its intended use: (principal item) for example, launchers, tanks, mobile machine shops, vehicles.
Class VIII	Medical materiel, including medical peculiar repair parts.
Class IX	Repair parts and components, including kits, assemblies and subassemblies, reparable and nonreparable, required for maintenance support of all equipment.
Class X	Material to support nonmilitary programs; such as, agricultural and economic development, not included in Class 1 through Class 9.

See ADRP 4-0

BREAKDOWN OF LOGISTICS FUNCTIONS

Elements of Logistics		
MAINTENANCE		
	<i>Field Maintenance</i>	
	<i>Sustainment Maintenance</i>	
TRANSPORTATION OPERATIONS		
	<i>Movement Control</i>	
	<i>Intermodal Operations</i>	
		<i>Terminal Operations</i>
		<i>Mode Operations</i>
	<i>Container Management</i>	
SUPPLY		
FIELD SERVICES		
	<i>Shower and Laundry</i>	
	<i>Field Feeding</i>	
	<i>Water Production and Distribution</i>	
	<i>Clothing and Light Textile Repair</i>	
	<i>Aerial Delivery</i>	
	<i>Mortuary Affairs</i>	
OPERATIONAL CONTRACT SUPPORT		
	<i>Contract Support Integration</i>	
	<i>Contractor Management</i>	
		<i>Theater Support Contracts</i>
		<i>External Support Contracts</i>
		<i>System Support Contracts</i>
GENERAL ENGINEERING SUPPORT		

See ADRP 4-0

ACRONYMS AND ABBREVIATIONS⁷³

A/DACG	Arrival/departure airfield control group
AALPS	Automated Air Load Planning System
ABCT	Armored Brigade Combat Team
ACSA	Acquisition Cross Servicing Agreement
ADCON	Administrative control
ADP	Army doctrine publication
ADRP	Army doctrine reference publication
AFSB	Army Field Support Brigade
AFSBn	Army Field Support Battalion
AHS	Army health system
ALD	Available-to-load date
ALOC	Air line of communication
AMC	Air Mobility Command
AMC	Army Materiel Command (also U.S. Army Materiel Command)
AMEDD	Army Medical Department
AO	Area of operations
AOE	Army of Excellence
AOR	Area of responsibility
APOD	Aerial port of debarkation
APOE	Aerial port of embarkation
APS	Army prepositioned stocks
ARFORGEN	Army Force Generation
ARNG	Army National Guard
ARSOC	Army Special Operations Component
ARSOF	Army Special Operations Forces
ASC	Army Sustainment Command
ASCC	Army Service Component Command
ASOS	Army support to other services
BCS3	Battle Command Sustainment Support System
BCT	Brigade Combat Team
BEB	Brigade Engineering Battalion
BLST	Brigade Logistics Support Team
BSB	Brigade Support Battalion
CBRN	Chemical, biological, radiological, and nuclear
CCDR	Combatant commander
CCIR	Commander's critical information requirements
CECOM	Communications-Electronics Command
CJFLCC	Combined Joint Forces Land Component Command
CLT	Casualty Liaison Teams
CMOS	Cargo Movement Operations System
COCOM	Combatant Command
CONUS	Continental United States

⁷³ Joint acronyms come from the Joint Publication 1-02, DOD Dictionary of Military and Associated Terms 08 November 2010, as amended through 15 December 2013. The DOD Dictionary is managed by the Joint Education and Doctrine Division, J-7, Joint Staff, and contains all approved joint definitions, acronyms, and abbreviations.

COP	Common operational picture
COSCOM	Corps Support Command
CPP	Convoy protection platform
CSA	Chief of Staff of the Army
CSB	Contracting Support Brigade
CSSB	Combat Sustainment Support Battalion
CUL	Common user logistics
DAFL	Directive authority for logistics
DFAS	Defense Finance and Accounting Service
DISCOM	Division Support Command
DLA	Defense Logistics Agency
DODD	Department of Defense Directive
DOL	Directorate of Logistics
DOTMLPF	Doctrinal, organizations, training, materiel, leadership and education, personnel, and facilities
DS	Deployment support
DTS	Defense Transportation System
EA	Executive agent
EAB	Echelons above brigade
ECC	Expeditionary Contracting Command
ESC	Expeditionary Sustainment Command
FHP	Force Health Protection
FDU	Force Design Update
FMC	Financial Management Center
FMSPO	Financial Management Support Operations
FSB	Forward Support Battalion
FSP	Fuel System Supply Point
GCC	Geographic combatant commander
GCCS	Global Command and Control System
GCSS-ARMY	Global Combat Support System-Army
GLOC	Ground line of communications
GRS	Globally Responsive Sustainment
GSB	Group support battalion
HN	Host nation
HNS	Host nation support
HQ	Headquarters
HR	Human resources
HRSC	Human Resources Sustainment Center
HSS	Health service support
IBCT	Infantry Brigade Combat Team
IBS	Integrated Booking System
ICODES	Integrated Computerized Deployment System
IGO	Intergovernmental organization
IMCOM	U.S. Army Installation Management Command
JLOTS	Joint logistics over the shore
JOA	Joint operations area
JTF	Joint task force

JTF-PO	Joint Task Force-Port Opening
LAD	Latest arrival date
LOGCAP	Logistic Civilian Augmentation Program
MA	Mortuary affairs
MEB	Maneuver Enhancement Brigade
MEDBDE	Medical Brigade
METT-TC	Mission, Enemy, Terrain and Weather, Troops, Time, Civilian considerations
MILSTAMP	Military Standard Transportation and Movement Procedures
MLMC	Medical Logistics Management Center
MMB	Multifunctional Medical Battalion
MNF	Multinational force
MRAP	Mine-Resistant Ambush Protected vehicle
MSB	Main Support Battalion
MTF	Military treatment facility
NATO	North Atlantic Treaty Organization
NGO	Nongovernmental organization
OCONUS	Outside of the Continental United States
OPCON	Operational Control
PA	Personnel accountability
PAT	Personnel Accountability Teams
PEO	Program Executive Officers
PMSII	Political, Military, Economic, Social, Information, and Infrastructure
RSOI	Reception, staging, onward movement, and integration
SBCT	Stryker Brigade Combat Team
SDDC	Surface Deployment and Distribution Command
SF	Special Forces
SFODA	Special Forces operational detachment A
SIMLM	Single Integrated Medical Logistics Manager
SMFT	Semi Mounted Flexible Water Tanks
SPOD	Sea port of debarkation
SPOE	Sea port of embarkation
STB	Special Troops Battalion
SUS	Sustainment Brigade
TA	Theater Army
TC-AIMS II	Transportation Coordinators' Automated Information for Movement System II
TLAMM	Theater lead agent for medical materiel
TO	Theater opening
TSC	Theater Sustainment Command
TSOC	Theater special operations command
U.S. or US	United States
USACC	U.S. Army Contracting Command
USAFMCOM	U.S. Army Financial Management Command
USAMC	Army Materiel Command (also U.S. Army Materiel Command)
USAR	United States Army Reserves
USASOC	United States Army Special Operations Command
V2PI	Visibility, velocity, precision and integration

GLOSSARY OF KEY TERMS⁷⁴

- **Administrative control (ADCON)** – Direction or exercise of authority over subordinate or other organizations in respect to administration and support. (JP 1)
- **Aerial delivery** – This function supports airborne insertions, airdrop and airland resupply. It includes parachute packing, air item maintenance, and rigging of supplies and equipment. See FM 4-20.41 for details. Also see **Airdrop**.
- **Afloat Pre-positioning Force (APF)** – Shipping maintained in full operational status to afloat pre-position military equipment and supplies in support of combatant commanders' operation plans, consisting of the three maritime pre-positioning ships squadrons, the Army's afloat pre-positioning stocks-3 ships, and the Defense Logistics Agency, and the Air Force ships. Also see **Army Prepositioned Stock**. (JP 4-01.2)
- **Airdrop** – The unloading of personnel or materiel from aircraft in flight. See also air movement; free drop; free fall; high velocity drop; low velocity drop. (JP 3-17)
- **Anticipation** – The ability to foresee events and requirements and initiate necessary actions that most appropriately satisfy a response without waiting for operations orders or fragmentary orders.
- **Area of Responsibility (AOR)** – The geographical area associated with a combatant command within which a combatant commander has authority to plan and conduct operations
- **Area support** – Support providing capabilities, typically on a geographic basis, that enable units to accomplish missions/tasks that they cannot otherwise execute within their organic sustainment structure. This can include providing supply, maintenance, transportation, field services, health services, personnel services and distribution. See "Direct support" for additional information.

⁷⁴ Joint definitions come from the Joint Publication 1-02, DOD Dictionary of Military and Associated Terms 08 November 2010, as amended through 15 December 2013. The DOD Dictionary is managed by the Joint Education and Doctrine Division, J-7, Joint Staff, and contains all approved joint definitions, acronyms, and abbreviations.

- **Army Force Generation (ARFORGEN)** – Structured progression process of unit readiness over time to produce trained, ready, and cohesive units prepared for operational deployment in support of (ISO) the combatant commander (CCDR) and other Army requirements. The ARFORGEN process is the Army’s core process for force generation, executed with supporting-to-supported relationships, that cycles units through three force pools: reset, train/ready, and available. Each of the three force pools contains a balanced force capability to provide a sustained flow of forces for current commitments and to hedge against unexpected contingencies. ARFORGEN establishes the basis to plan and execute Army-wide unit resourcing. As a model, ARFORGEN supports the Army’s planning, programming, budgeting, and execution (PPBE) process. As a process, it synchronizes the Army’s efforts to provide land forces and other national required capabilities.⁷⁵
- **Army Prepositioned Stocks (APS)** – APS is essential in facilitating strategic and operational reach. The APS program is a key Army strategic program. AMC manages and the ASC executes the APS program and provides accountability, storage, maintenance, and transfer (issue and receipt) of all equipment and stocks (except medical which is managed through a different system by DLA).
- **Army National Guard (ARNG)** – During peacetime each state National Guard answers to leadership in the 50 states, three territories and the District of Columbia. The state, territory or district leadership are the Commander-in-Chief for each Guard. Their Adjutants General are answerable to them for the training and readiness of the units. Guard units respond to battle fires or helping communities deal with floods, tornadoes, hurricanes, snowstorms or other emergency situations. During national emergencies the President reserves the right to mobilize the National Guard, putting them in federal duty status. While federalized, the units answer to the Combatant Commander of the theatre in which they are operating and to the President. When not federalized, the ARNG has a federal obligation to maintain properly trained and equipped units, available for prompt mobilization for war, national emergency, or as otherwise needed.
- **Army Service Component Command (ASCC)** – Command responsible for recommendations to the joint force commander on the allocation and employment of Army forces within a combatant command. (JP 3-31)
- **Army Special Operations Component (ARSOC)** – The Army component of a joint force special operations component. (JP 3-05.1)
- **Available-to-load date (ALD)** – A date specified for each unit in a time-phased force and deployment data indicating when that unit will be ready to load at the point of embarkation. (JP 5-0)

⁷⁵ AR 525–29

- **Basic load** – The quantity of supplies required to be on hand within, and which can be moved by, a unit or formation. It is expressed according to the wartime organization of the unit or formation and maintained at the prescribed levels. (JP 4-09)
- **Battle damage assessment (BDA)** – The estimate of damage composed of physical and functional damage assessment, as well as target system assessment, resulting from the application of lethal or nonlethal military force. (JP 3-0)
- **Battle damage repair (BDR)** – Essential repair, which may be improvised, carried out rapidly in a battle environment in order to return damaged or disabled equipment to temporary service. (JP 4-09)
- **Breakbulk cargo** – Any commodity that, because of its weight, dimensions, or incompatibility with other cargo, must be shipped by mode other than military van or military container moved via the sea. See also *breakbulk ship*. (JP 4-09)
- **Breakbulk ship** – A ship with conventional holds for stowage of breakbulk cargo, below or above deck, and equipped with cargo-handling gear. Ships also may be capable of carrying a limited number of containers, above or below deck. See also *breakbulk cargo*. (JP 4-09)
- **Bulk cargo** – That which is generally shipped in volume where the transportation conveyance is the only external container; such as liquids, ore, or grain. (JP 4-01.5)
- **Bulk petroleum product** – A liquid petroleum product transported by various means and stored in tanks or containers having an individual fill capacity greater than 250 liters. (JP 4-03)
- **Bulk storage** –
 1. Storage in a warehouse of supplies and equipment in large quantities, usually in original containers, as distinguished from bin storage. (JP 4-03)
 2. Storage of liquids, such as petroleum products in tanks, as distinguished from drum or packaged storage. (JP 4-03)
- **Closure** – In transportation, the process of a unit arriving at a specified location. (JP 4-01.5)
- **Combatant command (CCMD)** – A unified or specified command with a broad continuing mission under a single commander established and so designated by the President, through the Secretary of Defense and with the advice and assistance of the Chairman of the Joint Chiefs of Staff. Combatant command's command authority is a nontransferable command authority, which cannot be delegated. A combatant commander performs those functions of command over assigned forces involving organizing and employing commands and forces; assigning tasks; designating objectives; and giving authoritative direction over all aspects of military operations, joint training, and logistics necessary to accomplish the missions assigned to the command. (JP 1)
- **Combatant commander (CCMD)** – A commander of one of the unified or specified combatant commands established by the President. (JP 3-0)

- **Combat service support (CSS)** – The essential capabilities, functions, activities, and tasks necessary to sustain all elements of all operating forces in theater at all levels of war. Also called CSS. (JP 4-0)
- **Command and control (C2)** – The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. (JP 1)
- **Common-user logistics (CUL)** – Materiel or service support shared with or provided by two or more Services, Department of Defense agencies, or multinational partners to another Service, Department of Defense agency, non-Department of Defense agency, and/or multinational partner in an operation. Common-user logistics is usually restricted to a particular type of supply and/or service and may be further restricted to specific unit(s) or types of units, specific times, missions, and/or geographic areas. (JP 4-09)
- **Common-user transportation** – Transportation and transportation services provided on a common basis for two or more Department of Defense agencies and, as authorized, non-Department of Defense agencies. (JP 4-01.2)
- **Concept of logistic support (COLS)** – A verbal or graphic statement, in a broad outline, of how a commander intends to support and integrate with a concept of operations in an operation or campaign. (JP 4-0)
- **Convoy protection platform (CPP)** – Up-armored vehicles used in a convoy to protect and guard a convoy against enemy action. CPP may be organic to the unit or may be attached.
- **Container** – An article of transport equipment that meets American National Standards Institute/International Organization for Standardization standards that is designed to facilitate and optimize the carriage of goods by one or more modes of transportation without intermediate handling of the contents. (JP 4-01)
- **Container management** – The process of establishing and maintaining visibility and accountability of all cargo containers moving within the Defense Transportation System.
- **Contingency contract** – A legally binding agreement for supplies, services, and construction let by government contracting officers in the operational area as well as other contracts that have a prescribed area of performance within a designated operational area. See also external support contract; systems support contract; theater support contract. (JP 4-10)
- **Contingency contracting** – The process of obtaining goods, services, and construction via contracting means in support of contingency operations. (JP 4-10)
- **Continuity** – The uninterrupted provision of sustainment (logistics) across all levels of war.
- **Contracted logistic support** – Support in which maintenance operations for a particular military system are performed exclusively by contract support personnel. (JP 4-07)

- **Contractor management** – The process of managing and integrating contractor personnel and their equipment into military operations (ATTP 4-10). Contractor management includes planning and deployment/redeployment preparation; in-theater management; force protection and security; and executing government support requirements.
- **Debarkation** – The unloading of troops, equipment, or supplies from a ship or aircraft. (JP 3-02.1)
- **Direct support** – Providing supply and maintenance support directly to a using or consuming unit.
- **Directive authority for logistics** – The CCDR’s authority to issue directives to subordinate joint force commanders of service component commanders for as many common support capabilities required to accomplish the assigned mission (JP 3-33).
- **Distribution** –
 1. The synchronization of all elements of the logistical system to provide adequate support, i.e. giving the right things to the right people right on time.
 2. The operational process of synchronizing all elements of the logistic system to deliver the "right things" to the "right place" at the "right time" to support the geographic combatant commander. (JP 4-0)
- **Distribution system** – That complex of facilities, installations, methods, and procedures designed to receive, store, maintain, distribute, and control the flow of military materiel between the point of receipt into the military system and the point of issue to using activities and units. (JP 4-09)
- **Doctrine** – Fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgment in application.
- **Earliest arrival date (EAD)** – A day that is specified as the earliest date when a unit, a resupply shipment, or replacement personnel can be accepted at a port of debarkation during a deployment. (JP 5-0)
- **Economy** – Providing sustainment (logistics) resources in an efficient manner that enables the commander to employ all assets to the greatest effect possible.
- **Field feeding** – Preparing and serving food to provide Soldiers at all echelons three quality meals per day (AR 30-22). It also includes proper refuse and waste disposal to avoid unit signature trails and maintain field sanitation standards.

- **Field maintenance** – Repair and return to user and is generally characterized by on-(or near) system maintenance, often utilizing line replaceable unit, component replacement, battle damage assessment, repair, and recovery (see ATTP 4-33). It is focused on returning a system to an operational status. This represents the maintenance capability within a unit and does not require passing back maintenance to any other echelon.
- **Field services** – Feeding, clothing, and showering Soldiers as well as laundering and repairing their clothing.
- **Financial management (FM)** – The combination of the two core functions of resource management and finance support. (JP 1-06)
- **Fixed port** – Terminals with an improved network of cargo-handling facilities designed for the transfer of freight. See also maritime terminal. (JP 4-01.5)
- **Forward area** – An area in proximity to combat. (JP 4-02)
- **Forward operations base (FOB)** – In special operations, a base usually located in friendly territory or afloat that is established to extend command and control or communications or to provide support for training and tactical operations. Facilities may be established for temporary or longer duration operations and may include an airfield or an unimproved airstrip, an anchorage, or a pier. A forward operations base may be the location of special operations component headquarters or a smaller unit that is controlled and/or supported by a main operations base. (JP 3-05.1)
- **Force design update (FDU)** – In simplest terms, the FDU process is used to gain consensus within the Army on new organizations and changes to existing organizations. It begins when Army force developers determine a need to change Army doctrinal, organizations, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) capabilities to accomplish Army missions and functions. Conceptual changes in organizational structure become recognized and codified and the combat development community develops a proposed organization, as well as its mission and functions, to meet the required mission capabilities.⁷⁶
- **General engineering support** – Engineers combine and apply capabilities from all three engineer disciplines (combat, general, and geospatial engineering) to establish and maintain primarily general engineering tasks that consist largely of building, repairing, and maintaining roads, bridges, airfields, and other structures and facilities needed for APODS, SPODS, main supply routes, and base camps.

⁷⁶ See *“How the Army Runs: A Senior Leader Reference Handbook, 2011-2012”* for additional information on the force development process.

- **General support** – Support given to a supported force as a whole and not to any particular subdivision thereof. (JP 3-09.3)
- **Ground line of communication (GLOC)** – A line of communication is the route that connects an operating military unit with its supply base. Supplies and reinforcements are transported along the line of communication; therefore, a secure and open line of communication is vital for any military operation. As the name implies, a GLOC is a line of communications based on ground logistics.
- **Homeland security** – A concerted national effort to prevent terrorist attacks within the United States; reduce America's vulnerability to terrorism, major disasters, and other emergencies; and minimize the damage and recover from attacks, major disasters, and other emergencies that occur. (JP 3-27)
- **Home station** – The permanent location of active duty units and Reserve Component units (e.g., location of armory or reserve center). (JP 4-05)
- **Host nation support (HNS)** – HNS is civil and military assistance rendered by a nation to foreign forces within its territory during peacetime, crises or emergencies, or war based on agreements mutually concluded between nations. Logistics-related HNS agreements may address labor support arrangements for port and terminal operations, using available transportation assets in country, using bulk petroleum distribution and storage facilities, possible supply of Class III (Bulk) and Class IV items, and developing and using field services.
- **Hub** – An organization that sorts and distributes inbound cargo from wholesale supply sources (airlifted, sealifted, and ground transportable) and/or from within the theater. (JP 4-09)
- **Improvisation** – The ability to adapt sustainment (logistics) operations to unexpected situations or circumstances affecting a mission.
- **Integration** – Combining all of the sustainment elements within operations assuring unity of command and effort.
- **Interagency Coordination** – The coordination that occurs between elements of Department of Defense and engaged U.S. Government agencies and departments for the purpose of achieving an objective. (JP 3-0)
- **Intermodal operations** – The process of using multiple modes (air, sea, highway, rail) and conveyances (i.e. truck, barge, containers, pallets) to move troops, supplies and equipment through expeditionary entry points and the network of specialized transportation nodes to sustain land forces.

- **In-transit visibility** – The ability to track the identity, status, and location of DoD units, and non-unit cargo (excluding bulk petroleum, oils, and lubricants) and passengers; patients and personal property from origin to consignee, or destination across the range of military operations. (JP 4-01.2)
- **Inventory control** – That phase of military logistics that includes managing, cataloging, requirements determinations, procurement, distribution, overhaul, and disposal of materiel. Also called *inventory management; materiel control; materiel management; supply management*. (JP 4-09)
- **Joint** – Connotes activities, operations, organizations, etc., in which elements of two or more Military Departments participate. (JP 1-0)
- **Joint deployment and distribution enterprise** – The complex of equipment, procedures, doctrine, leaders, technical connectivity, information, shared knowledge, organizations, facilities, training, and materiel necessary to conduct joint distribution operations. Also called JDDE. (JP 4-0)
- **Joint Deployment and Distribution Operations Center (JDDOC)** – A combatant command movement control organization designed to synchronize and optimize national and theater multimodal resources for deployment, distribution, and sustainment. (JP 4-09)
- **Joint Interdependence** – The purposeful reliance by one Service's forces on another Service's capabilities to maximize the complementary and reinforcing effects of both. Army forces operate as part of an interdependent joint force. (JP 3-0).
- **Joint logistics** – The coordinated use, synchronization, and sharing of two or more Military Departments' logistic resources to support the joint force. See also logistics. (JP 4-0)
- **Joint Logistics Operations Center** – The Joint Logistics Operations Center is the current operations division within the Logistics Directorate of the Joint Staff, which monitors crises, exercises, and interagency actions and works acquisition and cross-servicing agreements as well as international logistics. Also called JLOC. (JP 4-01)
- **Joint Logistics Over-the-Shore operations** – Operations in which Navy and Army logistics over-the-shore forces conduct logistics over-the-shore operations together under a joint force commander. (JP 4-01.6)
- **Joint operations area** – An area of land, sea, and airspace, defined by a geographic combatant commander or subordinate unified commander, in which a joint force commander (normally a joint task force commander) conducts military operations to accomplish a specific mission. Also called JOA. (JP 3-0)

- **Joint reception, staging, onward movement, and integration** – A phase of joint force projection occurring in the operational area during which arriving personnel, equipment, and materiel transition into forces capable of meeting operational requirements. Also called JRSOI. (JP 3-35)
- **Latest arrival date (LAD)** – A day that is specified by the supported combatant commander as the latest date when a unit, a resupply shipment, or replacement personnel can arrive at the port of debarkation and support the concept of operations. (JP 5-0)
- **Lead agency** – The US Government agency designated to coordinate the interagency oversight of the day-to-day conduct of an ongoing operation. (JP 3-08)
- **Lighterage** – The transportation of goods on a lighter. A lighter is large flat-bottomed barge or boat used especially in unloading or loading ships.
- **Logistician** – Logisticians analyze and coordinate an organization’s supply chain—the system that moves a product from supplier to consumer. They manage the entire life cycle of a product, which includes how a product is acquired, distributed, allocated, and delivered.
- **Logistics** – Planning and executing the movement and support of forces. It includes those aspects of military operations that deal with: design and development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of materiel; acquisition or construction, maintenance, operation, and disposition of facilities; and acquisition or furnishing of services.
- **Logistics over-the-shore operations** – The loading and unloading of ships without the benefit of deep draft-capable, fixed port facilities; or as a means of moving forces closer to tactical assembly areas dependent on threat force capabilities. Also called LOTS operations. See also joint logistics over-the-shore operations. (JP 4-01.6)
- **Logistics over-the-shore operation area** – The geographic area required to conduct a logistics over-the-shore operation. Also called LOA. See also logistics over-the-shore operations. JP 4-01.6
- **Logistics supportability analysis (LSA)** – Combatant command internal assessment for the Joint Strategic Capabilities Plan on capabilities and shortfalls of key logistic capabilities required to execute and sustain the concept of support conducted on all level three plans with the time phased force deployment data. (JP 4-0)
- **Maintenance** – The preserving materiel in serviceable and operational condition, fixing it, or updating/upgrading its capability.

- **Military Standard Transportation and Movement Procedures (MILSTAMP)** – Uniform and standard transportation data, documentation, and control procedures applicable to all cargo movements in the Department of Defense transportation system. (JP 4-01.5)
- **Mission command** –
 1. Mission command is the exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander’s intent to empower agile and adaptive leaders in the conduct of unified land operations (ADP 6-0). It blends the art of command and the science of control while integrating the warfighting functions to accomplish decisive action. Mission command is a pivotal aspect of providing sustainment to operational forces.
 2. The conduct of military operations through decentralized execution based upon mission-type orders. (JP 3-31)
- **Mobilization** – The process by which the Armed Forces or part of them are brought to a state of readiness for war or other national emergency. This includes activating all or part of the Reserve Component as well as assembling and organizing personnel, supplies, and materiel. (JP 4-05)
- **Mode of transport** – (JP 4-09) One of the various modes used for a movement. For each mode, there are several means of transport. They are:
 - a. inland surface transportation (rail, road, and inland waterway);
 - b. sea transport (coastal and ocean);
 - c. air transportation; and
 - d. pipelines.
- **Mode operations** – The execution of movements using various conveyances (truck, lighterage, railcar, aircraft) to transport cargo.
- **Mortuary affairs** – Broadly based military program to provide for the necessary care and disposition of deceased personnel. The Army is designated as the Executive Agent for the Joint Mortuary Affairs Program (JP 4-06, Mortuary Affairs).
- **Movement control** –
 1. The dual process of committing allocated transportation assets and regulating movements according to command priorities to synchronize distribution flow over lines of communications to sustain land forces. (ATP 4-16)
 2. The planning, routing, scheduling, and control of personnel and cargo movements over lines of communications; includes maintaining in-transit visibility of forces and material through the deployment and/or redeployment process. See also line of communications; movement control teams; non-unit cargo; non-unit-related personnel. (JP 4-01.5)

- **Multinational logistics** – Any coordinated logistic activity involving two or more nations supporting a multinational force conducting military operations under the auspices of an alliance or coalition, including those conducted under United Nations mandate. (JP 4-08)
- **Node** – A location in a mobility system where a movement requirement is originated, processed for onward movement, or terminated. (JP 3-17)
- **Operational contract support** – The integration of commercial sector support into military operations. Operational contract support consists of two complementary functions: contract support integration and contractor management. Operational contract support has three types of contract support: theater support, external support, and systems support. See ATTP 4-10.
- **Operational control (OPCON)** – The authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. (JP 1)
- **Operational level of war** -- The level of war at which campaigns and major operations are planned, conducted, and sustained to achieve strategic objectives within theaters or other operational areas. (JP 3-0) In Army logistics, this is primarily at the TSC and ESC levels.
- **Organic support** – Includes capabilities inherent within a unit that allow it to manage and execute requirements without external support. Examples include maintenance, supply handling, supply storage, distribution, transportation and materiel handling. These are prioritized by and are under a unit commander's control.
- **Packaged petroleum product** – A petroleum product (generally a lubricant, oil, grease, or specialty item) normally packaged by a manufacturer and procured, stored, transported, and issued in containers having a fill capacity of 55 United States gallons (or 45 Imperial gallons, or 205 liters) or less.
- **Petroleum, Oils, and Lubricants (POL)** – A broad term that includes all petroleum and associated products used by the Armed Forces. (JP 4-01.6)
- **Port of debarkation (POD)** – The geographic point at which cargo or personnel are discharged. (JP 4-0)
- **Port of embarkation (POE)** – The geographic point in a routing scheme from which cargo or personnel depart. (JP 4-01.2)
- **Port opening** – The ability to establish, initially operate and facilitate throughput for ports of debarkation (POD) to support unified land operations. Port opening is a subordinate function of theater opening.

- **Port closing** – An SDDC responsibility, this is usually executed as part of theater closing. It involves integrating and synchronizing strategic and theater re-deployment execution and distribution operations within each CCDR's AOR.
- **Port support activity (PSA)** – A tailorable support organization composed of mobilization station assets that ensure the equipment of the deploying units is ready to load. Also called PSA. (JP 3-35)
- **Quay** – A structure of solid construction along a shore or bank that provides berthing and generally provides cargo-handling facilities. (JP 4-01.5)
- **Railhead** – A point on a railway where loads are transferred between trains and other means of transport. (JP 4-09)
- **Rangers** – Rapidly deployable airborne light infantry organized and trained to conduct highly complex joint direct action operations in coordination with or in support of other special operations units of all Services.
- **Redeployment** – The return of personnel, equipment, and materiel to home and/or demobilization stations and is considered as an operational movement critical in reestablishing force readiness (FM 3-35). Under the ARFORGEN model deployment and redeployment of forces in support of extended operations is a cyclic process. However, for terminating joint operations, Army forces may be completely redeployed from the joint operational area.
- **Remain-behind equipment** – Unit equipment left by deploying forces at their bases when they deploy. (JP 4-05)
- **Required delivery date (RDD)** – The date that a force must arrive at the destination and complete unloading. (JP 5-0)
- **Responsiveness** – The ability to react to changing requirements and respond to meet the needs to maintain support.
- **Resupply** – The act of replenishing stocks in order to maintain required levels of supply. (JP 4-09)
- **Retrograde** –
 1. The process for the movement of equipment and materiel from a deployed theater to a reset program or to another theater of operations to replenish unit stocks or satisfy stock requirements. The Army Materiel Command is the Army's executive agent for retrograde.
 2. The process for the movement of non-unit equipment and materiel from a forward location to a reset (replenishment, repair, or recapitalization) program or to another directed area of operations to replenish unit stocks, or to satisfy stock requirements. (JP 4-09)

- **Roll-on/roll-off (RO-RO)** – An operation, vessel or facility that allows vehicles to be driven or towed to load or offload without the need for material handling equipment, e.g. a crane.
- **Roll-on/roll-off discharge facility (RRDF)** – A platform made up of causeway sections that provide a means of embarking and disembarking vehicles from a roll-on and roll-off (RO-RO) ship at sea to lighterage. (JP 4-01.6)
- **Seaport** – A land facility designated for reception of personnel or materiel moved by sea, and that serves as an authorized port of entrance into or departure from the country in which located. (JP 4-01.2)
- **Secondary loads** – Unit equipment, supplies, and major end items that are transported in the beds of organic vehicles.
- **Simplicity** – Relates to processes and procedures to minimize the complexity of sustainment (logistics).
- **Single port manager (SPM)** – The transportation component, designated by the Department of Defense through the US Transportation Command, responsible for management of all common-user aerial and seaports worldwide. This is currently Military Surface Deployment and Distribution Command. (JP 4-01.5)
- **Special Forces (SF)** – U.S. Army forces organized, trained, and equipped to conduct special operations with an emphasis on unconventional warfare capabilities.
- **Special operations forces (SOF)** – Active and Reserve Component forces of the Military Services designated by the Secretary of Defense and specifically organized, trained, and equipped to conduct and support special operations.
- **Stuffing** – The loading of cargo into a shipping container. Opposite of *unstuffing*. (JP 4-09)
- **Supply** – Acquiring, managing, receiving, storing, and issuing all classes of supply required to equip and sustain Army forces.
- **Supply Support Activity (SSA)** – Activities assigned a Department of Defense activity address code and that have a supply support mission, i.e., direct support supply units, missile support elements, and maintenance support units. (JP 4-09)

- **Supported Commander** –
 1. The commander having primary responsibility for all aspects of a task assigned by the Joint Strategic Capabilities Plan or other joint operation planning authority. (JP 3-0)
 2. In the context of a support command relationship, the commander who receives assistance from another commander's force or capabilities, and who is responsible for ensuring that the supporting commander understands the assistance required. (JP 3-0)

- **Sustainment** – The provision of logistics, personnel services, and health service support necessary to maintain operations until successful mission completion (ADP 4-0).

- **Sustainment maintenance** – Generally characterized as “off system” and “repair rear” (see ATTP 4-33). The intent is to perform commodity-oriented repairs on all supported items. Off-system maintenance consists of overhaul and remanufacturing activities designed to return components, modules, assemblies, and end items to the supply system or to units, resulting in extended or improved operational life expectancies. This is not a substitute for or back-up for field maintenance.

- **Sustainment preparation of the operational environment** – The analysis to determine infrastructure, physical environment, and resources in the operational environment that will optimize or adversely impact friendly forces means for supporting and sustaining the commander's operations plan.

- **Sustainment warfighting function** – The related tasks and systems that provide support and services to ensure freedom of action, extended operational reach, and prolong endurance (ADRP 3-0).

- **Terminal operations** – Consist of the receiving, processing, and staging of passengers; the receipt, transit storage and marshalling of cargo; the loading and unloading of transport conveyances; and the manifesting and forwarding of cargo and passengers to a destination (JP 4-01.5). Terminal operations are a key element in supporting operational reach and endurance. They are essential in supporting deployment, redeployment and sustainment operations. There are three types of terminals: air, water, and land. (JP 4-01.5)

- **Theater closing** – The process of redeploying Army forces and equipment from a theater, the drawdown and removal or disposition of Army non-unit equipment and materiel, and the transition of materiel and facilities back to host nation or civil authorities.

- **Theater distribution** – The flow of equipment, personnel, and materiel within theater to meet the CCDR's mission.

- **Theater opening** – The ability to establish and operate ports of debarkation (air, sea, and rail), establish a distribution system and sustainment bases, and to facilitate port throughput for the reception, staging, onward movement and integration of forces within a theater of operations.
- **Theater opening (TO)** – The ability to establish and operate ports of debarkation (air, sea, and rail) to establish a distribution system and sustainment bases, and to facilitate port throughput for the reception, staging, onward movement and integration of forces (RSOI) within a theater of operations (ADP 4-0).
- **Theater Special Operations Command (TSOC)** – A subordinate unified command established by a combatant commander to plan, coordinate, conduct, and support joint special operations.
- **Third party logistics support services (3PL)** – The use of preplanned civilian contracting to perform selected sustainment/logistics. The aim is to enable competent commercial partners to provide a proportion of deployed sustainment/logistics so that such support is assured for the commander and optimizes the most efficient and effective use of resources. 3PL is most likely to be used once the operational environment is secure. DoD agencies, including AMC, TRANSCOM, DLA, and SDDC, often use 3PL, especially for logistics.
- **Total Army** – Refers to all three components of the U.S. Army – the active component, the Army National Guard, and the U.S. Army Reserves.
- **Transportation** – The movement of units, personnel, equipment, and supplies via air, water or land conveyance.
- **Transportation system** – All the land, water, and air routes and transportation assets engaged in the movement of United States forces and their supplies during military operations, involving both mature and immature theaters and at the strategic, operational, and tactical levels of war. (JP 4-01)
- **Transshipment point** – A location where material is transferred between vehicles. (JP 4-01.5)
- **Unit Movement Control Center (UMCC)** – A temporary organization activated by major subordinate commands and subordinate units during deployment to control and manage marshalling and movement. (JP 3-35)
- **Unstuffing** – The removal of cargo from a shipping container. Also called stripping. Opposite of *stuffing*. (JP 4-09)

- **U.S. Army Reserve (USAR)** – The Army Reserve's mission, under Title X of the U.S. Code, is to provide trained, equipped, and ready Soldiers and cohesive units to meet the global requirements across the full spectrum of operations. The Army Reserve is a key element in The Army multi-component unit force, training with Active and National Guard units to ensure all three components work as a fully integrated team.
- **Visibility, velocity, precision, and integration (V2PI)** – V2PI is the performance metrics used to express gaps or proposed solutions in a manner that is easily understood and readily demonstrates the potential impact on future operations.
- **Voluntary Intermodal Sealift Agreement (VISA)** – An agreement that provides the Department of Defense with assured access to United States flag assets, both vessel capacity and intermodal systems, to meet Department of Defense contingency requirements. See also *intermodal*. (JP 4-01.2)
- **Wharf** – A structure built of open rather than solid construction along a shore or a bank that provides cargo-handling facilities. See also quay. (JP 4-01.5)

LOGISTICS-RELATED AUTOMATED SYSTEMS

Automated Air Load Planning System (AALPS) -- AALPS is a knowledge-based expert system that assists with loading military cargo aircraft for large scale air deployments. It is designed to serve four basic functions: generate and valid air load plans; generate and validate user defined air load plans; modify existing air load plans; and track movement statistics during actual deployments. AALPS is used by contingency planners and force designers to perform air load planning and execution. This entails the use of preplanned data (estimates) and the use of actual data for both "real-world" and "what-if" scenarios. AALPS is used for estimating airlift requirements (by specific aircraft type and delivery method) producing USAF certified "flyable" load plans, providing airlift/movement summary data and load reports ranging from a single mission to full-scale division deployments. AALPS can interface with TC-AIMS II, Global Air Transportation Execution System (GATES), Cargo Movement Operations System (CMOS) and Integrated Development Environment/Global Transportation Network (IDE GTN) Convergence (IGC).

Battle Command Sustainment Support System (BCS3) – BCS3 supports sustainment operations by providing a COP with map-centric functionalities that enable end users to access, scale, and tailor critical sustainment information in near-real time. Specifically, BCS3 offers its user's access to a Logistics Reporting Tool (LRT) that provides a standardized format for submission of sustainment status reports, in-transit visibility (ITV) of supplies and equipment in the distribution pipeline, and asset visibility (AV) of resources with the units and supply points. Designed as the logistics Sustainment support system-of-record, this mission command system operates on classified and unclassified enterprise networks. BCS3 displays and data on workstations receiving logistics sustainment information feeds from other authorized system servers used to collect data from numerous other non-MC systems. Such data sources include but are not limited to the Logistics Information Warehouse (LIW) and the Joint Automatic Identification Technology (JAIT) national servers.

Battle Command Sustainment Support System Node-Management (BCS3-NM) – BCS3-NM is a distribution management software application derived from the "core" BCS3 application, employing strategic extensions to current BCS3 capabilities, integration of additional joint ITV and AV data sources and with improved ease of use. It allows users to track and manage Transportation Control Numbers (TCNs), containers, and pallets from the source of supply to the tactical supply activity. This capability provides commanders situational understanding of the sustainment pipeline and a complete assessment of the logistics situation. BCS3-NM seamlessly integrates logistical information elements from the Army, Air Force, Navy, Marine Corps, other DoD agencies, and multinational elements. It fuses numerous data points from various systems, i.e., Integrated Development Environment/Global Transportation Network (IDE/GTN) Convergence (IGC), Joint-Automatic Identification Technology (J-AIT), In-Transit Visibility (ITV) Server, and Business Systems Modernization-Energy (BSM-E), all of which manage various segments of the distribution pipeline.

Cargo Movement Operations System (CMOS) – Originally an Air Force program, the Army adopted it as another transportation system. CMOS is a combat support system that automates and streamlines installation level cargo movement processes for peacetime, deployment, and contingency cargo. Workstations in installation transportation officer functional areas support one-time data capture for the preparation of documentation for all modes of shipment. The specific functional areas supported are the receipt, preparation, and movement of cargo; the reporting of movement for in-transit visibility (ITV), and military airlift passenger travel. Currently the system runs on workstations, but will eventually move to an Enterprise environment in FY14. CMOS was designed to meet the emerging requirements of TC-AIMS II blocks four and five.

Integrated Booking System (IBS) – IBS is the execution system for the defense transportation system (DTS) to move international cargo. IBS provides a worldwide, automated booking system to move military cargo OCONUS. IBS allows DoD shippers to automatically process movement requests directly using Surface Deployment and Distribution Command's (SDDC) booking offices. IBS automatically determines the best value ocean carrier supporting the move. IBS supports the deployment, employment, and sustainment. IBS interfaces with the ocean carrier industry, GATES, and IGC.

Integrated Computerized Deployment System (ICODES) – ICODES is an automated information system that develops both ship and rail stowage plans for deployments. It utilizes artificial intelligence (AI) principles and techniques to assist embarkation specialists in the rapid development of cargo stow-plans. It includes expert agents with knowledge in specific domains (e.g., hazardous material handling, trim and stability, ramps, cranes, and internal access paths) to evaluate and propose loading alternatives and recommendations. ICODES is designed to support division sized moves and cargo planning across the available fleet of ships. It supports multi-ship planning while maintaining unit integrity. ICODES is responsive to unplanned changes and contingencies. It interfaces with TC-AIMS II and GATES.

Global Air Transport Execution System (GATES) – GATES is a system used at aerial ports that integrates mission command operations, passenger operations, and cargo movement processes. It assists management of cargo manifested for air shipment, cargo awaiting air shipment, and cargo departed from aerial ports via air or ground transportation. Additionally, GATES OCEAN provides ship loading planning capabilities, concurrent planning for multi-ship operations and replaces the Worldwide Port System (WPS). Specifically, GATES:

- Processes and tracks cargo and passenger information;
- Supports management of resources;
- Provides logistical support information;
- Supports scheduling and forecasting;
- Provides tracking and tracing of aerial port assets (including personnel, vehicles, equipment, and supplies);
- Supports processing service short-term cargo requirements and long term passenger and cargo requirements;
- Supports channel mission management;
- Manages tariff data regarding baggage, passenger, and pet fares;

- Manages passenger reservations;
- Provides reports and transportation status for customers.

Global Combat Support System-Army (GCSS-Army) – GCSS-Army is an emerging system that will establish a web-based capability to provide the battle commander with a seamless flow of timely, accurate, accessible, and secure information. GCSS-Army will support commanders whether in garrison or during military operations by providing essential operational capabilities that includes materiel management, maintenance management for ground and an interface to air, property accountability operations to include unit basic load, warehousing, limited distribution, materiel requirement planning, human resources, integrated financial capabilities, and procurement functionality. It will integrate enterprise information and provide both tactical and installation capabilities. It is currently awaiting a full fielding decision. It will replace: Property Book Unit Supply Enhanced (PBUSE), Standard Army Maintenance System-Enhanced (SAMS-E), and Standard Army Retail Supply System (SARSS).

Global Command and Control System – Army (GCCS-A) – GCCS-A provides combat commanders with a single source of secure information with coordinating air, land, sea, and space operations of widely dispersed units in fast moving operations. It is flexible enough for combat operations or humanitarian assistance missions. Commanders can establish their own secure homepage and communicate worldwide using e-mail. Additionally, this automated information system provides situational understanding and deliberate and crisis planning with the use of integrated set of analytical tools and flexible data transfer capabilities. GCCS-A will be the single C4I system to support the war fighter from the foxhole to the command post.

Property Book Unit Supply Enhanced (PBUSE) – PBUS is an unclassified system employed in the Active Army, Army Reserve, and the National Guard to provide real time property accountability, LOGTAADS updates, serial number tracking, unique item identifier traceability, asset adjustments, lateral transfers, authorization updates, and manages basic and operational loads, hand receipts and provides the capability to digitally sign and store documents for the user. It is slotted to be replaced by GCSS-Army.

Standard Army Maintenance System-Enhanced (SAMS-E) – SAMS-E is located across the battlefield from brigade-level down to companies to provide maintenance and CL IX requisitions data management. SAMS-E modernizes unit level automated maintenance status reporting including weapon systems, subcomponents, day-to-day maintenance supply related and readiness repair part issues. It currently provides interfaces with other logistics systems, including SARSS, ULLS-AE, and LOGSA/LIW. It is slotted to be replaced by GCSS-Army.

Standard Army Retail Supply System (SARSS) – SARSS is the primary automation system used in Army DS/GS supply units. It processes customer requests from ULLS-A (E), SAMS, and PBUSE. SARSS maintains stock record balances and reports them to the higher echelon SARSS. SARSS provides requisition status (estimated order-ship date, back ordered items, etc.) feedback to its supported customer units. SARSS functions are financial management, asset visibility, redistribution/referral, accountable records materiel release control system. It is slotted to be replaced by GCSS-Army.

Standard Army Ammunition System Modernization (SAAS-MOD) – SAAS-MOD integrates all retail munitions supply functions and processes. It is used at three levels: corps and theater MMCs, ammunition supply points (ASPs), and the division ammunition office (DAO). The primary purpose of SAAS-MOD is to provide conventional ammunition assets to tactical commanders during wartime conditions. SAAS-MOD manages all conventional ammunition, guided missile large rockets (GMLRs) and their related components, and packaging material. The system uses desktop-type computers and associated AIT to accomplish these tasks. It provides in-transit visibility and stock record accounting for ammunition at the retail level. SAAS-MOD can interface with the following systems: SAAS, Logistics Modernization Program (LMP), Worldwide Ammunition Reporting System (WARS) and Property Book Unit Supply Enhanced (PBUSE).

Transportation Coordinators' Automated Information for Movement System II (TC-AIMS II) – TC-AIMS II provides automated day-to-day operations for Unit Movement Officers (UMO) and organizations providing movement control at various levels in a theater of operations. TC-AIMS II improves and expedites unit movements and distribution while providing a source of timely and accurate deployment information for use at all Joint Deployment Community (JDC) command levels. Under TCAIMS II, unit movement, installation transportation, and loading functionality are accessible from a single client platform at the unit/installation level. The processing, tracking, and reporting of data is available to decision makers at all command levels. Additionally, TC-AIMS II has the capability of running on an Enterprise. TC-AIMS II provides In-Transit and Total Asset Visibility to users and will be the basic building block of source data that IGC and BCS3 force tracking software will translate into ITV and force tracking information.

Unit Level Logistics System Aviation (Enhanced) (ULLS-A(E)) – The ULLS-A (E) system provides an enhanced aviation maintenance management capability that links the functions of tech supply, production control and quality control, phase team, and back shop sections within the aviation field maintenance organization. The program incorporates a back shops module that gives the maintenance units the capability to initiate and complete work orders. The Centralized Aviation Flight Record System (CAFRS), provides the Individual Flight Records Folder (IFRF) and will allow the user to send the DA Form 759 (Individual Flight Record and Flight Certificate – closeout) data to flight operations.