GROUND COMBAT ELEMENT

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FMF WARFARE STUDY GUIDE

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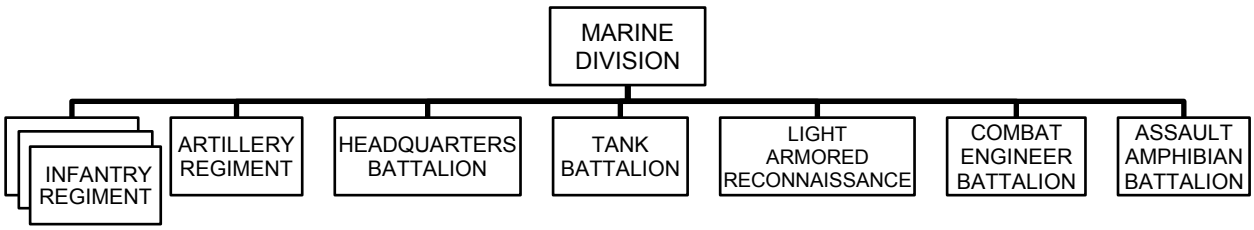
115 GROUND COMBAT ELEMENT (GCE), INFANTRY FUNDAMENTALS

References:

[a] MCRP 5-12D, Organization of Marine Corps Forces (PCN 14400005000)
[b] MCWP 3-11.2, Marine Rifle Squad (PCN 14300011200)

115.1 Discuss the mission and organization of a Marine Division. [ref. a, p. 4-1]

The mission of the Marine Division is to execute amphibious assault operations and such other operations as may be directed. The Marine Division, approximately 18,000 personnel, must be able to provide the ground amphibious forcible-entry capability to an amphibious task force (ATF) and conduct subsequent land operations in any operational environment. The Division commander fights by using combined-arms tactics and tailors the force to the demands of each mission.



115.2 Define the mission and organization of Headquarters Battalion of a Marine Division [ref. a, p. 4-2]

The primary mission of the Headquarters Battalion is to exercise command, control, and administration of the Marine Division. It contains an H&S Company, a Division Headquarters with an H&S Company, a Reconnaissance Company, a Special Security Communications team, a Communications Company, a Military Police (MP) company, the Division Band, and a Truck Company.

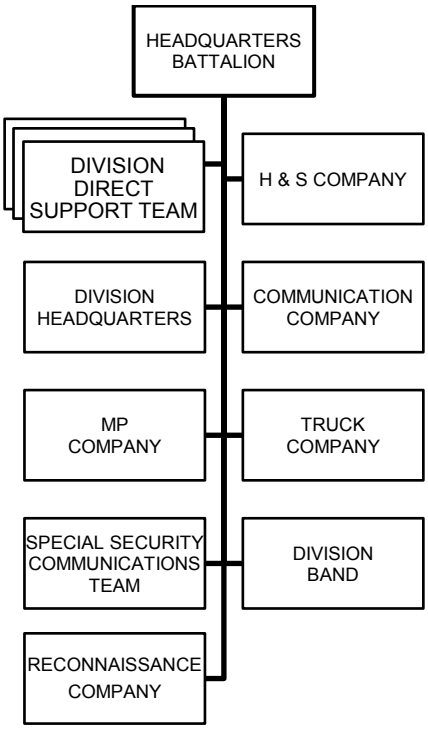
The H&S Company provides command, administrative, and security functions as well as organic supply for the Headquarters Battalion.

The Reconnaissance Company provides ground reconnaissance and surveillance in support of the Division or its subordinates elements. The Company consists of a Company Headquarters section and six Reconnaissance Platoons. Employment of the company exercises directed reconnaissance rather than passive surveillance.

The MP Company provides route reconnaissance, evacuation and control of enemy prisoners of war (EPW), beach and perimeter defense, area security, crowd control, and investigative services.

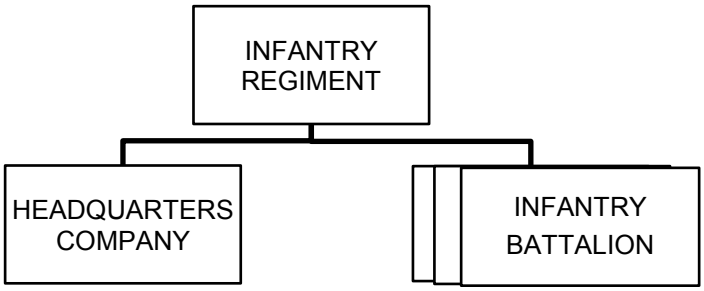
The Communications Company installs, operates, and maintains communications facilities for the Division Headquarters, including multichannel radio, wire, and communications center facilities.

The Truck Company provides general support motor transport to the Marine Division.



115.3 Discuss the mission and organization of the Marine Corps Infantry Regiment. [ref. a, pp. 4-3, 4-4]

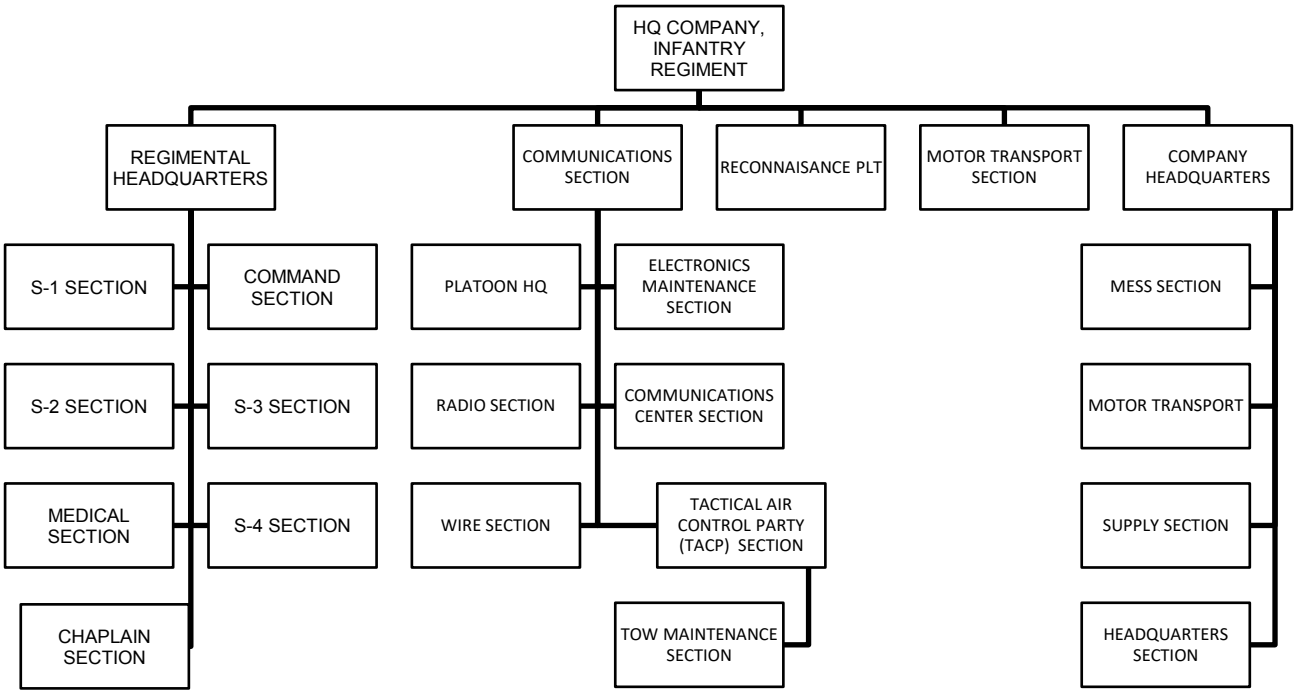
The primary mission of the Infantry Regiment is to locate, close with, and destroy the enemy by fire and maneuver or to repel his assault by fire and close combat. The Infantry Regiment consists of a Headquarters Company and two or more Infantry Battalions (normally three infantry battalions, approximately 3,400 personnel in a Regiment). The Infantry Battalions are the basic tactical units with which the Regiment accomplishes its mission.



115.4 Discuss the organization of the Headquarters Company, Infantry Regiment. [ref. a, pp. 4-3, 4-4]

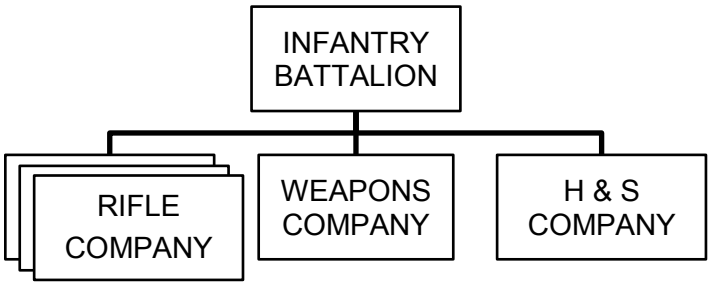
The Headquarters Company of the Infantry Regiment contains a Regimental Headquarters and a Reconnaissance Platoon. When combined with other combat support and CSS units, it will form a Regimental landing team. Command and staff functions for the Regiment are exercised through a compact operational command group that consists of the Commander and an executive staff. The staff is capable of integrating the efforts of attached units with those of supporting units. The staff can support a tactical, main, and rear command echelon

during displacement. The basic means of ground mobility of the Regiment is by foot, supplemented by small, lightweight vehicles for transportation of electronic equipment, weapons, and limited amounts of ammunition and supplies. All elements are helicopter transportable and compatible with other means of transportation (e.g., assault amphibious vehicles (AAVs), motor transport, fixed-wing aircraft, and ships).



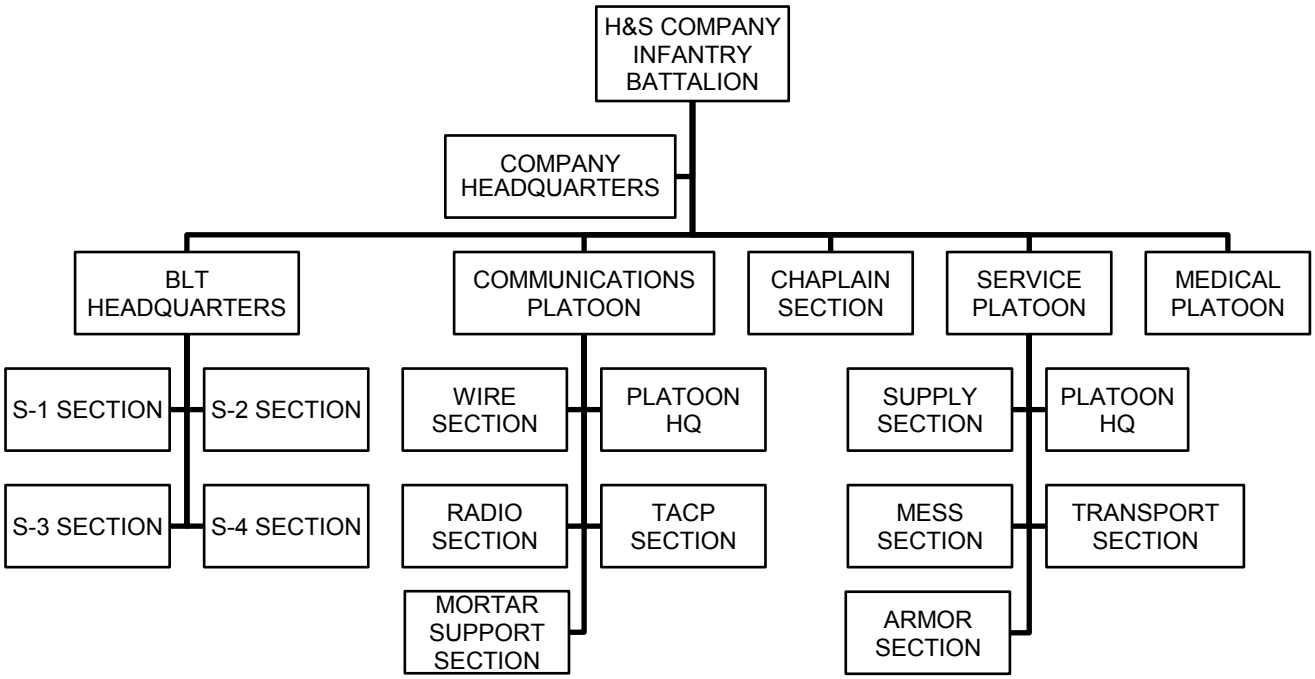
115.5 Discuss the mission and the organization of the Marine Corps Infantry Battalion. [ref. a, pp. 4-5 thru 4-8] see figure below.

The primary mission of the Infantry Battalion is to locate, close with, and destroy the enemy by fire and maneuver or to repel his assault by fire and close combat. The Infantry Battalion consists of an H&S company, a Weapons Company, and three Rifle Companies. The Rifle Companies are the basic tactical units with which the Battalion accomplishes its mission. When the Battalion is combined with combat support and CSS units, it forms a Battalion Landing Team (BLT).

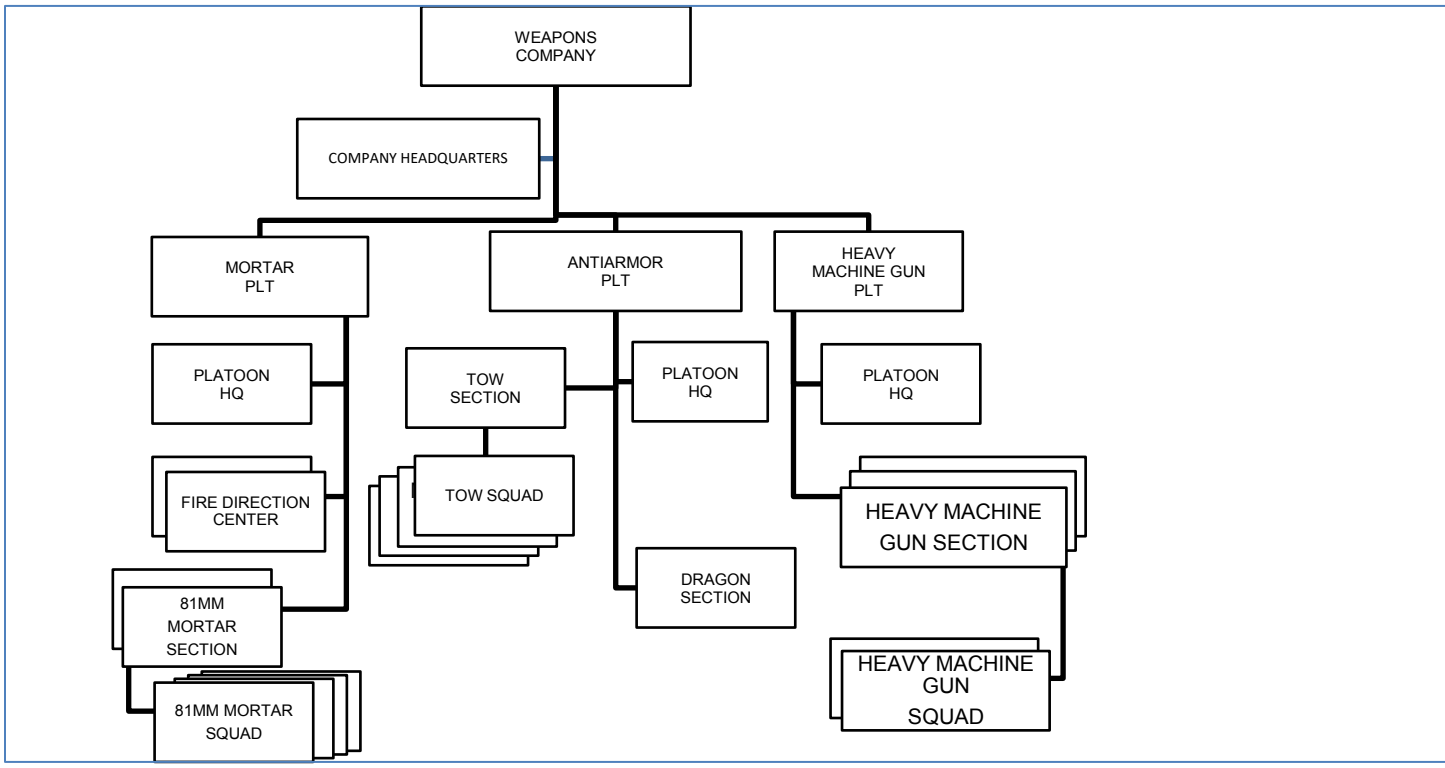


115 GROUND COMBAT ELEMENT (GCE), INFANTRY FUNDAMENTALS (CONT'D)

115.6 Discuss the organization of the H & S Company, Infantry Battalion [ref a, pp. 4-6].

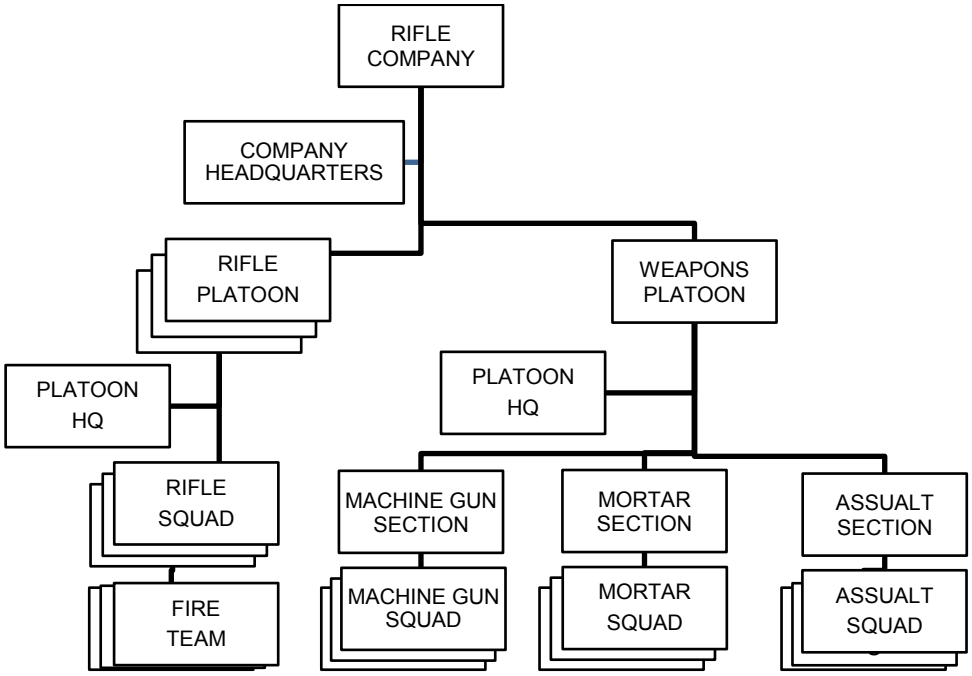


115.7 Discuss the organization of the Weapons Company, Infantry Battalion [ref a, pp. 4-7] see figure below.



115 GROUND COMBAT ELEMENT (GCE), INFANTRY FUNDAMENTALS (CONT'D)

115.8 Discuss the organization of the Rifle Company, Infantry Battalion. [ref a, pp. 4-8]



115.9 Discuss the weapons distribution within an Infantry Battalion. [ref. a, pp. 4-8, 4-9]

Within the Rifle Company, the fire team leader carries an M16A4 or M4 Carbine rifle and an M203 grenade launcher attached. The squad automatic rifleman carries the M249 squad automatic weapon (SAW); all other riflemen, including the assistant automatic rifleman, carry an M16A4 or M4. Squad leaders and the Officers and enlisted personnel of the platoon headquarters carry M4 rifles. The Weapons Platoon machine gun section has six M240G machine guns, the mortar section has three M224 60-mm mortars, and the assault section has six MK153 83-mm shoulder-launched multipurpose assault weapons (SMAWs).

The Weapons Company Mortar Platoon has 8 M252 81-mm mortars, the Anti-Armor Platoon has 12 M47 Dragons, and its tube-launched, optically tracked, wire command link guided missile (TOW) section has 8 TOWs. The Heavy Machine Gun Platoon has six each of M2 .50-cal machine guns and MK19 40-mm grenade machine guns.

115.10 Discuss the mission of a Rifle Squad. [ref. b, p. 1-1]

The mission of the Rifle Squad is to locate, close with, and destroy the enemy by fire and maneuver, or repel his assault by fire and close combat.

115.11 Discuss the organization of a Rifle Squad. [ref. b, p. 1-1]

The rifle squad consists of three fire teams, each of which is built around an automatic weapon and controlled by a fire team leader.

115 GROUND COMBAT ELEMENT (GCE), INFANTRY FUNDAMENTALS (CONT'D)

115.12 Discuss the duties and responsibilities of the following: [ref. b, p. 1-5]

Squad leader carries out the orders issued to him by the Platoon Commander. He is responsible for the discipline, appearance, training, control, conduct, and welfare of his squad at all times, as well as the condition, care, and economical use of its weapons and equipment. In combat, he is also responsible for the tactical employment, fore discipline, fire control, and maneuver of his squad. He takes position where he can best carry out his orders of the Platoon Commander and observe and control the squad.

Fire team leader/grenadier carries out the orders of the Squad leader. He is responsible for the fire discipline and control of his fire team and economical use of its weapons and equipment. In carrying out the orders of the Squad leader, he takes a position to best observe and control the fire team. Normally, he is close enough to the automatic rifleman to exercise effective control of his fires. In addition to his primary duties as a leader, but not to the detriment of them, he serves as a grenadier and is responsible for the effective employment of the grenade launcher, his rifle, and for the condition and care of his weapon and equipment. The senior fire team leader in the squad serves as assistant squad leader.

Automatic rifleman carries out the orders of the fire team leader. He is responsible for the effective employment of the automatic rifle and for the condition and care of his weapon and equipment.
Assistant automatic rifleman assists in the employment of the automatic rifle. He carries additional magazines and/or ammunition boxes for his automatic rifle and is prepared to assume the duties of the automatic rifleman. He is responsible for the effective employment of the automatic rifle and for the condition and care of his weapon and equipment.

Rifleman in the fire team carries out the orders of the fire team leader. He is responsible for the effective employment of his rifle and for the condition and care of his weapon and equipment. The rifleman is trained as a scout.

In general, every member of a squad must know the duties of the other team members, and in turn, the fire team leader and squad leader should be able to assume the duties of their next superior.

115.13 State the three fighting positions. [ref. b, pp. 5-3, 5-4]

A fighting position is a location on the ground from which fire is delivered by an individual, a fire unit (squad or fire team), or a crew-served weapon. Before selecting a firing position, the assigned sector of fire must be carefully examined from various locations using the prone position to ensure effective coverage of the sector of fire. The exact fighting position is then designated on the ground prior to digging in. The position must allow for good fields of fire, make maximum use of available cover and concealment, and facilitate exercise of fire control by the unit leader.

Primary Fighting Position – is the best available position from which the assigned sector of fire can be covered. Individuals, fire teams, squads, and crew-served weapons are assigned primary fighting positions.

Alternate Fighting Positions – are not normally assigned to individuals or units within the platoon. They are used primarily by crew-served weapons. An alternate fighting position is located so that a crew-served weapon can continue to accomplish its original mission when the primary position becomes untenable or unsuited for carrying out that mission.

Supplementary Fighting Position – One of the greatest threats to either the attacker or the defender lies in being surprised. The attacker seeks to surprise the defender by concealing his movements until the moment of the assault. The defender seeks to surprise the attacker by concealing the exact location and the extent of his dispositions, thus leading his opponent into a false estimate of the situation and consequently, a faulty decision. Supplementary positions are prepared to guard against attack from directions other than those from which the main attack is expected. A supplementary position is a secondary position and does not cover the same sector of fire as the primary position. In some situations, the most likely avenue of approach may vary between daylight and darkness of other periods of low visibility. Thus, the requirement to shift positions becomes an absolute necessity.

This situation is more the rule rather than the exception. Supplementary positions actually provide security. When occupied, they insure protection against attack from directions other than those covered by primary positions. Movement to supplementary position should be made by covered and concealed routes when available.

115.14 State the eight guidelines that should be observed when clearing the fields of fire. [ref. b, pp. 5-21 thru 5-23]

In clearing fields of fire forward of each fighting position, the following guidelines should be observed:

- Do not disclose the squad's fighting position by excessive or careless clearing.
- Start clearing near the fighting position and work forward to the limits of effective small arms fire.
- In all cases, leave a thin natural screen of foliage to hide fighting positions.
- In sparsely wooded areas, remove the lower branches of scattered large trees. It may be desirable to remove entire trees which might be used as reference points for enemy fire.
- In heavy woods, complete clearing of the field of fire is neither, possible or desirable. Restrict work to thinning undergrowth and removing lower branches of large trees. In addition, clear narrow lane of fire for automatic weapons.
- If practical, demolish buildings and walls forward of the fighting position which may obstruct fields of fire or provide cover and concealment to the enemy.
- Move cut brush to locations where it will not furnish concealment to the enemy or disclose the squad's fighting position.
- Extreme care must be taken by the fire team leader to insure that fields of fire are cleared of obstructions which might cause premature detonation of M203 projectiles.

115.15 Define the acronym FPF. [ref. b, p. 5-31]

Final Protective Fires - If the enemy's attack is not broken and he begins his assault, final protective fires are called. Final Protective Fires are the final attempt to stop the enemy attack before he reaches the platoon's battle position. When final protective fires are called for, all squad members fire in their assigned sectors (normally the fire team's sector of fire). Rifles and M203's continue to fire at an average rate; the automatic rifleman will increase their volume of fire to the rapid rate, if they have not yet reached this rate prior to the calling for final protective fires. Riflemen engage enemy personnel within the fire team sector; fire team leaders fire the M-203 at the largest concentration of enemy personnel within the fire team sector. Normally the largest concentrations will be along the PDF's of the automatic rifles if the PDF's were properly positioned.

115 GROUND COMBAT ELEMENT (GCE), INFANTRY FUNDAMENTALS (CONT'D)

115.16 Identify the five types of patrols used by the Marine Corps rifle squad. [ref. b, p. 8-34]

Combat patrols are assigned missions who usually require them to actively engage the enemy. As a secondary mission, they collect and report information about the enemy and terrain. Combat patrols are employed in both offensive and defensive operations. Combat patrols can inflict damage on the enemy, establish or maintain contact with friendly or enemy forces, deny the enemy access to key terrain, probe the enemy positions, and protect against surprise and ambush.

Raid patrols – destroy or capture enemy personnel or equipment, destroy installations, or free friendly personnel who have been captured by the enemy.

Contact Patrols – establish and/or maintain contact with friendly or enemy forces.

Economy of Force Patrols – perform limited objective missions such as seizing and holding key terrain to allow maximum forces to be used elsewhere.

Ambush patrols – conduct ambushes of enemy patrols, carrying parties, foot columns, and convoys.

Security patrols – detect infiltration by the enemy, kill or capture infiltrators, and protect against surprise or ambush.

115.17 Define the term checkpoint. [ref. b, p. 8-23]

A checkpoint is a predetermined point on the ground used as a means of controlling movement. During his map study or physical reconnaissance, the patrol leader decides the number and locations of checkpoints plotted along the patrol route. These are coordinated with his parent unit before the patrol leaves. Checkpoints are assigned numbers, not in sequential order. Normally, the patrol leader will call upon reaching checkpoints so that the parent unit will be able to follow the progress of the patrol toward the objective and on its return to friendly lines/area.

115.18 Define the term rally point. [ref. b, p. 8-23]

A rally point is an easily identifiable point on the ground, designated by the patrol leader, where the patrol can reassemble/reorganize if it becomes dispersed. It should provide cover and concealment and be defensible for a short time. All rally points are considered tentative until they are reached, found to be suitable, and designated by the patrol leader. He ensures that all patrol members are notified when rally point is so designated, either by arm-and-signal or by passing the word orally. He also points out identifying features, which mark the limits of the rally point.

115.19 Define the following types of rally points: [ref. b, pp. 8-23, 8-24]

Initial - This is a point within the friendly area where the patrol can reassemble if it becomes dispersed before departing the friendly area or before reaching the first rally point designated en route. It may be the patrol assembly area. The initial rally point location must be coordinated with the Commander in whose area it lies.

En route - These are points selected along the patrol's route to the objective and from the objective back to friendly lines/area. The patrol leader selects them as the patrol passes through likely areas for which rally points are needed.

Objective - This is the rally point nearest the objective at which the patrol reassembles after the mission is accomplished. It may be located short of, to a flank, or beyond the objective. This may also be used as the final preparation point.

115.20 Discuss and explain the tactics used to react to an ambush. [ref. b, pp. 8-28, 8-29]

COUNTERAMBUSH DRILLS - When a patrol is ambushed, the IA drill used is determined by whether the ambush is near (enemy within fifty meters of the patrol) or far (enemy beyond fifty meters of patrol). Fifty meters is considered the limit from which the ambush can launch an assault against the enemy.

In a NEAR ambush, the killing zone is under very heavy, highly concentrated, close range fires. There is little time or space for men to maneuver or seek cover. The longer they remain in the killing zone, the more certain of their deaths. If attacked from a near ambush:

- Men in the killing zone immediately assault the enemy's position without waiting for any order or signal. The assault should be swift, violent and destructive. The men fire their weapons at the maximum rate, throw hand grenades, and yell as loudly as possible - anything to kill as many enemy as they can, and confuse the enemy survivors. Once they reach the ambush position, they continue with their assault, or break contact, as directed.
- Men not in the killing zone maneuver against the ambush force, firing in support of those assaulting.

If the ambush force is small enough to be routed or destroyed, the patrol members should continue with their assault and supporting fire. If the force is well-disciplined and holds its ground, then the patrol members should make every effort to break contact as quickly as possible, and move to the last en route rally point to reorganize.

In a FAR ambush, the killing zone is also under very heavy, highly concentrated fires, but from greater range. The greater range precludes those caught in the killing zone from conducting an assault. The greater range does, however, permit some opportunity for the men to maneuver and seek cover. If attacked from a FAR ambush:

- Men in the killing zone immediately return fire, take the best available cover, and continue firing until directed otherwise.
- Men not in the killing zone maneuver against the ambush force, as directed.
- The patrol, leader either directs his unit and team leaders to fire and maneuvers against the ambush force, or to break contact, depending on his rapid assessment of the situation.

In each situation, the success of the counter ambush drill employed is dependent on the men being well-trained in recognizing the nature of an ambush and well-rehearsed in the proper actions to take. Each man has to be confident in himself, his abilities, and those of his fellow Marines. He can't wait for someone to tell him what to do, as his leaders may become casualties. Training gives the Marine the confidence and ability to do whatever it takes to accomplish the mission.

116 GROUND COMBAT ELEMENT (GCE), MARINE ARTILLERY FUNDAMENTALS

References:

[a] MCRP 5-12D, Organization of Marine Corps Forces (PCN 14400005000)
[b] MARINE CORPS TM-11166A-OR
[c] MARINE CORPS TM-10407C-OR/1
[d] MARINE CORPS TM-9-1055-1646-13&P
[e] MARINE CORPS TM-9-2300-310-14&P
[f] USMC STOCKLIST (PCN 12310407000)
[g] MARADMIN 582/06

116.1 Discuss the mission and organization of an Artillery Regiment. [ref. a, p. 4-9, ref g]

The mission of artillery in the Marine Division is to furnish close and continuous fire support by neutralizing, destroying, or suppressing targets that threaten the success of the supported unit. All Artillery Regiments have a Headquarters Battery. There are four Artillery Battalions in the 11th Marine Regiment and two in the 10th and 12th Marine Regiments. Each of these Battalions is capable of performing the responsibilities associated with any of the four standard Artillery tactical missions. Artillery Regimental functions are discharged through a command group, which consists of the commander and executive staff, augmented by sufficient technical personnel. The staff is capable of integrating the efforts of any attached, reinforcing, or supporting units. The staff is capable of supporting a tactical, main, and rear command echelon during displacements and, when augmented, can operate as an alternate Division COC for short periods of time. The basic means of ground mobility is organic vehicular transportation. All CEs and some fire support assets is helicopter transportable.

116.2 Discuss the mission and organization of an Artillery Battalion. [ref. a, pp. 4-10, 4-11]

The mission of the Artillery Battalion in the Marine Division is to furnish close and continuous fire support by neutralizing, destroying, or suppressing targets that threaten the success of the supported unit. An Artillery Battalion consists of a Headquarters Battery and Firing Batteries. The Headquarters Battery provides the equipment and personnel to assist the Battalion Commander in controlling and supporting his Battalion. Like the Regiment, the Battalion Headquarters may be employed in a main or rear echelon configuration. Artillery Battalions have three or four firing Batteries of six howitzers. Marine Artillery currently employs the M777, 155mm towed howitzer, M327 120mm rifled towed mortar system, and the M142 High Mobility Artillery Rocket System (HIMARS), equipped only by the 11th and 14th Regiment.

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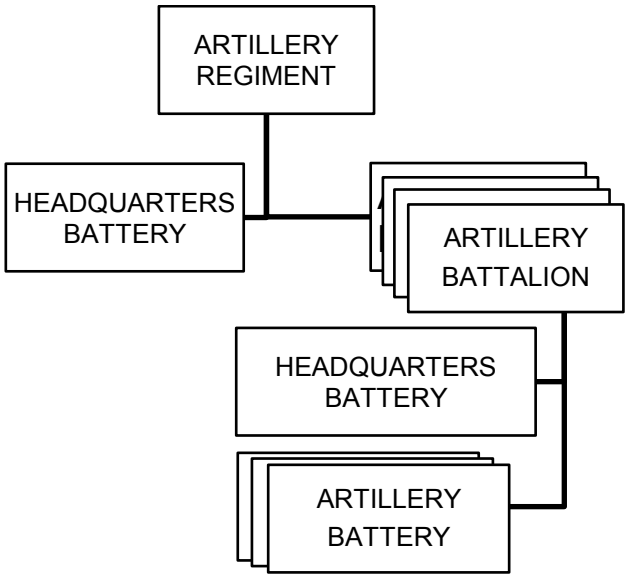


116.3 Discuss the primary function of the M777 howitzer. [ref. c]

Provides field artillery fire support for all Marine Corps Air Ground Task Force organizations.

116 GROUND COMBAT ELEMENT (GCE), MARINE ARTILLERY FUNDAMENTALS (CONT'D)

116.4 Discuss the following characteristics of the M777 howitzer: [ref. c]

Bore diameter - 155mm
Rate of fire: - Maximum: 4 rounds per minute for 2 minutes
Sustained: 2 rounds per minute
Crew: - 9 enlisted, at least 7 to operate the howitzer.
- Section Chief
- Assistant Gunner
- Recorder
- Cannoneer: 1-5
- Driver

Range of Conventional ammunition - 22,400 meters (13.92 miles)
Range of Rocket assisted projectiles - 30,000 meters (18.64 miles)

Helicopter transportable by CH-46, CH-53D, CH-53E, or the MV-22
Fixed wing transportable by C-5, C-17, C-130, and C-141

116.5 Discuss the primary function of the M327 Mortar system. [ref. b]

To provide artillery fire in support of ground-gaining troops.

116.6 Discuss the following characteristic of the M327 Mortar system [ref. b]

Bore – rifled 120mm
Crew – 5 Enlisted, at least 3 Enlisted to operate the weapon system
- Section Chief
- Gunner
- Cannoneer 1-3

Types of Projectiles – 3 types
- M1101 Cartridge, 120mm Mortar, High Explosives, Rifled
- Effective Casualty Radius of 45 meters
- M1103 Cartridge, 120mm Mortar, Obscurant (Smoke), Rifled
- Contains 6.17lbs of white phosphorus to provide screening and marking for friendly troops
- M1105 Cartridge, 120mm Mortar, Visible Illuminant, Rifled
- Provides 1.5 million candle power for approximately 65 seconds

116 GROUND COMBAT ELEMENT (GCE), MARINE ARTILLERY FUNDAMENTALS (CONT'D)

116.7 Discuss the primary function of the M142 HIMARS weapon system [ref. d]

HIMARS Launcher is an indirect fire, field artillery surface-to-surface rocket and guided missile system that is capable of firing all rockets and missiles in the current Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM).

116.8 Discuss the following characteristics of the HIMARS weapon system [ref. d, ref. e]

The M142 Launcher utilizes the M1140 variant of the U.S. Army's Family of Medium Tactical Vehicles (FMTV), is a modified 5-ton, 6x6, long wheel base truck chassis and cab. The FMTV crew cab has seating for the three-man crew and provides protection from toxic gases, tube cover impact, and debris penetration during firing activities.

Crew: 3 Enlisted
- Driver
- Gunner
- Launcher Chief

Range of munitions utilized by the USMC

Munition	Range (in meters)
- Conventional	8,000 - 32,000
- Guided Missile	15,000 - 300,000

Air Transportable by the C-130

117 GROUND COMBAT ELEMENT (GCE), TANK BATTALION FUNDAMENTALS

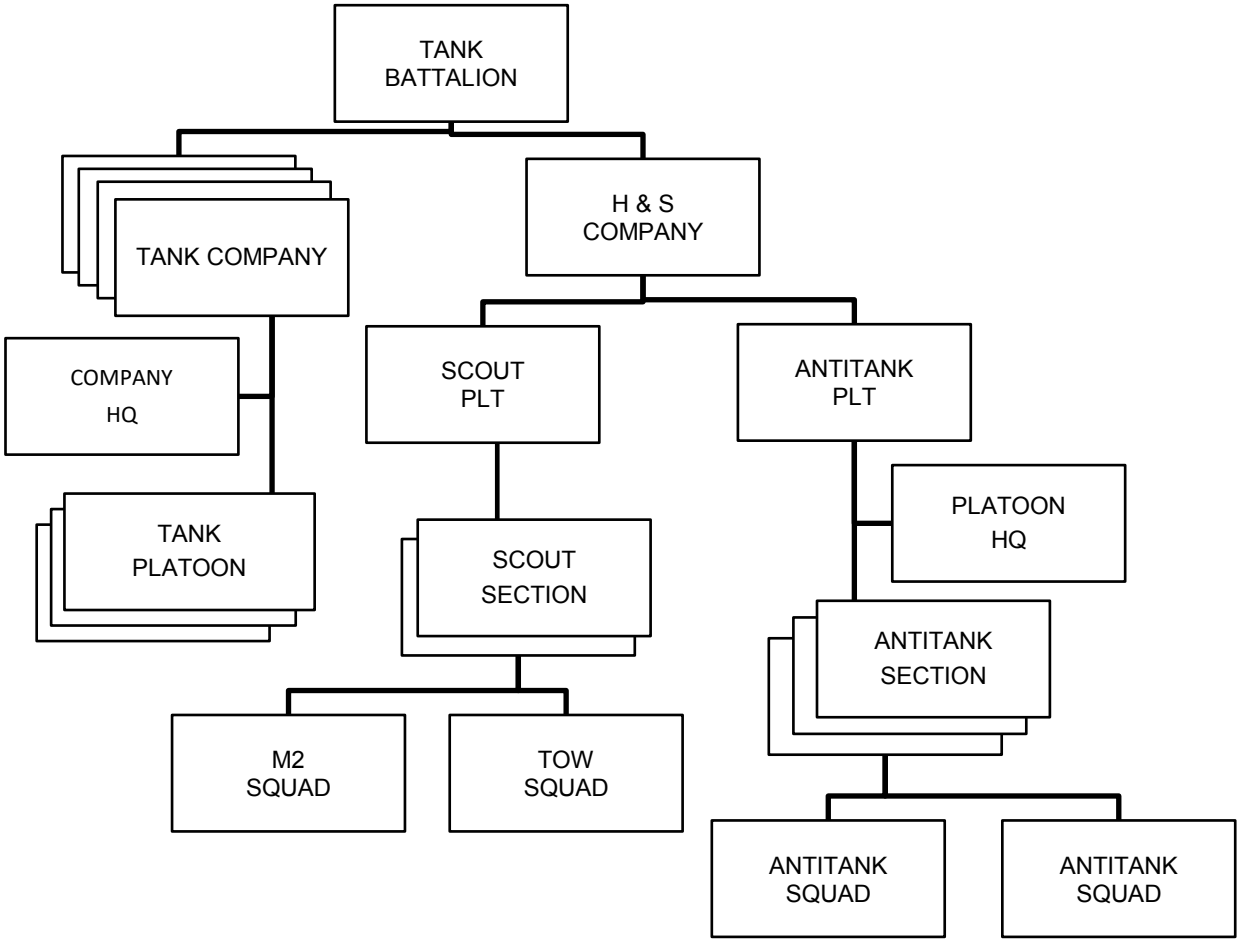
References:

[a] MCRP 5-12D, Organization of Marine Corps Forces (PCN 14400005000)
[b] MCWP 3-12, Marine Corps Tank Employment

117.1 Discuss the mission and organization of a Marine Tank Battalion. [ref. a, p. 4-11]

The mission of the Tank Battalion is to close with and destroy the enemy by using armor-protected firepower, shock effect, and maneuver and to provide anti-mechanized fire in support of the Marine Division.

The Tank Battalion consists of an H&S company, one antitank platoon, and four Tank Companies. The tank companies are the basic tactical unit with which the Battalion accomplishes its mission, the antitank platoon provides anti mechanized support to the Division.



117 GROUND COMBAT ELEMENT (GCE), TANK BATTALION FUNDAMENTALS (CONT'D)

Employment- the Battalion is best employed as a maneuver force without detaching units. However, the Division Commander may task organized forces of tanks, mechanized infantry, and other Division resources based on mission, enemy terrain and weather, troops and support available-time available (METT-T) that require cross-attachment of Tank Battalion and Infantry Regiment assets. Employment of the Tank Battalion must take advantage of the speed, mobility and firepower of the organization.

117.2 Discuss the following characteristics of the M1A1: [ref. b]

Cruising Range: 273 to 298 miles @ 25 mph

Maximum Speed: 42 mph (Governed)

Crew: A four-man crew composed of a driver, loader, gunner, and Tank Commander

117.3 Discuss the following characteristics of the M1A1 armaments: [ref. b]

Warheads - M1A1 tank is capable of delivering kinetic energy (sabot), chemical energy (heat) and anti-personnel (APERS) rounds.

Main weapon - 120mm M256A1 main gun

Secondary weapons - .50 caliber M48 stabilized machine gun
- 7.62mm M240 machine guns
- M250 Grenade Launcher

117.4 Discuss the features for the M1A1 main battle tank. [ref. b]

The M1A1 is an improved version of the M1 Main Battle Tank (MBT). It includes a 120mm smoothbore main gun, an NBC overpressure protection system, and an improved armor package. This tank significantly increases the capabilities of the Fleet Marine Forces across the full spectrum of conflict in the near and midterm. Engagement ranges approaching 4000 meters were successfully demonstrated during Operation Desert Storm. The M1A1 Tank, in addition to the improved armor, 120mm smoothbore gun and the NBC overpressure system, has a Deep

117 GROUND COMBAT ELEMENT (GCE), TANK BATTALION FUNDAMENTALS (CONT'D)

Water Fording Kit (DWFK), a Position Location Reporting Systems (PLRS), enhanced ship tie downs, Digital Electronic Control Unit (DECU) (which allows significant fuel savings),and Battlefield Override. The M1A1 MBT has the capability to conduct operations ashore. It is compatible with all US Navy amphibious ships and craft (to include the LCAC) and Maritime Prepositioning Ships (MPS).

117.5 Discuss the mission of Marine Tube Launched, Optically Tracked, Wire Guided (TOW) missile weapons system. [ref. b]

To engage and destroy enemy armored vehicles, primarily tanks. Secondary mission is to destroy other point targets such as non-armored vehicles, crew-served weapons and launchers.

117.6 State the maximum effective range of the TOW missile weapons system. [ref. b]

2.33 miles (3.75 kilometers)

117.7 Discuss the features of the TOW missile weapons system. [ref. b]

The basic TOW Weapon System was fielded in 1970. This system is designed to attack and defeat tanks and other armored vehicles. It is primarily used in antitank warfare, and is a command to line of sight, wire-guided weapon. The system will operate in all weather conditions and on the "dirty" battlefield. The TOW 2 launcher is the most recent launcher upgrade. It is compatible with all TOW missiles. The TOW 2 Weapon System is composed of a reusable launcher, missile guidance set, and sight system. The system can be tripod mounted. However because it is heavy, it is generally employed from the HMMWV and LAV-AT. The missile has a 20-year maintenance-free storage life. All versions of the TOW missile can be fired from the current launcher.

117.8 Discuss the primary role and features of the following vehicle: [ref. b]

M88A2 Hercules Recovery Vehicle (M88A2 HRV) - Improved recovery vehicle for main battle tanks. System improvements consist of an upgraded power pack (engine and transmission), higher winch and hoist capacities, increased tow/breaking performance, and increased armor protection. The Hercules includes additional weight (approximately 70 tons), an upgraded suspension, power-assisted brakes, and an improved hydraulic system. The Hercules possesses an auxiliary power unit to operate no-load recovery components and

impact tools without running the engine. Additionally, the Hercules will be transportable worldwide by highway, rail, marine, and air in accordance with the Military Traffic Management Command Transportation Engineering Agency (MTMCTEA) transportability engineering analysis.

118 GROUND COMBAT ELEMENT (GCE), ASSAULT AMPHIBIAN BATTALION FUNDAMENTALS

References:

[a] NAVMC 3500.2B Training and Reference Manual
[b] 09674A-10/3D Training Manual of Technical Data
[c] AAC-100 M10AHY3, Assault Amphibian Crewman Course Communication
[d] MCWP 3-13 Employment of Amphibious Assault Vehicles

118.1 Discuss the mission and organization of the Assault Amphibian Battalion. [ref. a, pp. 3-3 and 3-4, d]

The mission of the Assault Amphibian Battalion is to transport troops and supplies from assault shipping to shore via amphibious forcible entry and conduct subsequent mechanized operations ashore.

The 1st AABN and 3DAABN is organized with an H&S Company and four Assault Amphibian Companies. 2DAABN is organized with an H&S Company and three Assault Amphibian Companies.

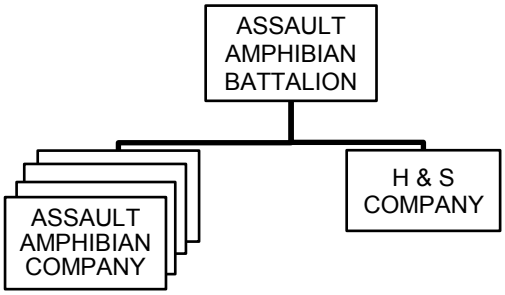


Figure 1. 1ST & 3D AABN

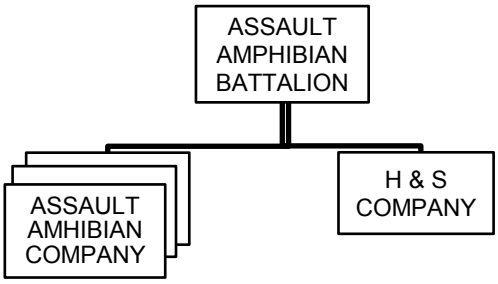


Figure 2. 2D AABN

The mission of the Assault Amphibian Headquarters and Service Company is to provide the Battalion Commander the means to train, maintain, prepare and sustain subordinate units in order to provide the Ground Combat Element with force protection, command and control and logistics.

The mission of the Assault Amphibian Company is to provide the Ground Combat Element with the general support lift, staff expertise, and command and control assets to plan and execute amphibious forcible entry and subsequent mechanized operations ashore. The AAV Company consists of 3 Assault Amphibian platoons, a headquarters platoon, and a maintenance platoon.

118 .2 Discuss the following for the Assault Amphibian Vehicle Personnel 7A1 (AAVP7A1): [ref. b, pp. 1-13 and 1-14, d]

The mission of the AAVP7A1 is to land the surface assault elements of the landing force and their equipment in a single lift from assault shipping during amphibious operations to inland objectives and to conduct subsequent mechanized operations ashore. The AAVP7A1 is a fully tracked amphibious landing vehicle.

118 GROUND COMBAT ELEMENT (GCE), ASSAULT AMPHIBIAN BATTALION FUNDAMENTALS (CONT'D)

Cruising ranges (land/water)
- Land at 25 MPH for 200 Miles
- Water at 2600 RPM for 7 Hours

Cruising speeds (land/water)
- Land: 20 to 30 MPH
- Water: 6 MPH

Maximum Speed Forward
- Land: 45 MPH
- Water: 8.2 MPH

Maximum Speed Reverse
- Land: 12 MPH
- Water: 4.5 MPH

Crew – 3

Armaments - HBM2 .50 Caliber Machine Gun and MK 19 MOD3 40 MM Machine Gun

Troop Capacity - 21 Combat Equipped Troops (285 Pounds per troop) or 10,000 Pounds of cargo

118 .3 Discuss the following for the Assault Amphibian Vehicle Command Model 7A1 (AAVC7A1): [ref. b, pp. 1-13 and 1-14, d]

The mission of the AAVC7A1 is to provide the Commander with a mobile communication center to communicate between amphibious assault forces and assault shipping while conducting amphibious forcible entry and inland operations.

Communication Center: The Command communication system contains equipment to provide external secure radio transmission between the AAVC7A1 and other vehicles and radios. 1 UHF net; 1 Blue Force Tracker; 1 SatCom net; 1 HF net; 6 VHF nets connected to 6 staff stations with toughbook work stations. Internal communication between each crew station is provided.

118 GROUND COMBAT ELEMENT (GCE), ASSAULT AMPHIBIAN BATTALION FUNDAMENTALS (CONT'D)

Cruising ranges (land/water)
- Land at 25 MPH for 200 Miles
- Water at 2600 RPM for 7 Hours

Cruising speeds (land/water)
- Land: 20 to 30 MPH
- Water: 6 MPH

Maximum Speed Forward
- Land: 45 MPH
- Water: 8.2 MPH

Maximum Speed Reverse
- Land: 12 MPH
- Water: 4.5 MPH

Crew - 3

Armaments - 7.62mm M240B/G machine gun

118.4 Discuss the following for the Assault Amphibian Vehicle Recovery Model 7A1 (AAVR7A1): [ref. b, pp. 1-13 and 1-14, d]

The mission of the AAVR7A1 is to recover similar or smaller sized vehicles. It also carries basic maintenance equipment to provide field support maintenance to vehicles in the field.

Cruising ranges (land/water)
- Land at 25 MPH for 200 Miles
- Water at 2600 RPM for 7 Hours

118 GROUND COMBAT ELEMENT (GCE), ASSAULT AMPHIBIAN BATTALION FUNDAMENTALS (CONT'D)

Cruising speeds (land/water)
- Land: 20 to 30 MPH
- Water: 6 MPH

Maximum Speed Forward
- Land: 45 MPH
- Water: 8.2 MPH

Maximum Speed Reverse
- Land: 12 MPH
- Water: 4.5 MPH

Crew - 4

Armaments – 7.62mm M240B/G machine gun

119 GROUND COMBAT ELEMENT (GCE), COMBAT ENGINEER BATTALION FUNDAMENTALS

References:

[a] MCRP 5-12D, Organization of Marine Corps Forces (PCN 14400005000)
[b] 1ST CEB Mobility Assault Company Tactical SOP
[c] General Dynamics Land Systems <http://www.gdls.com>
[d] Critical Solutions International <http://c-s-i.com>
[e] Marines - Operating Forces http://www.marines.com/operating-forces/equipment/vehicles/assault-breacher-vehicle

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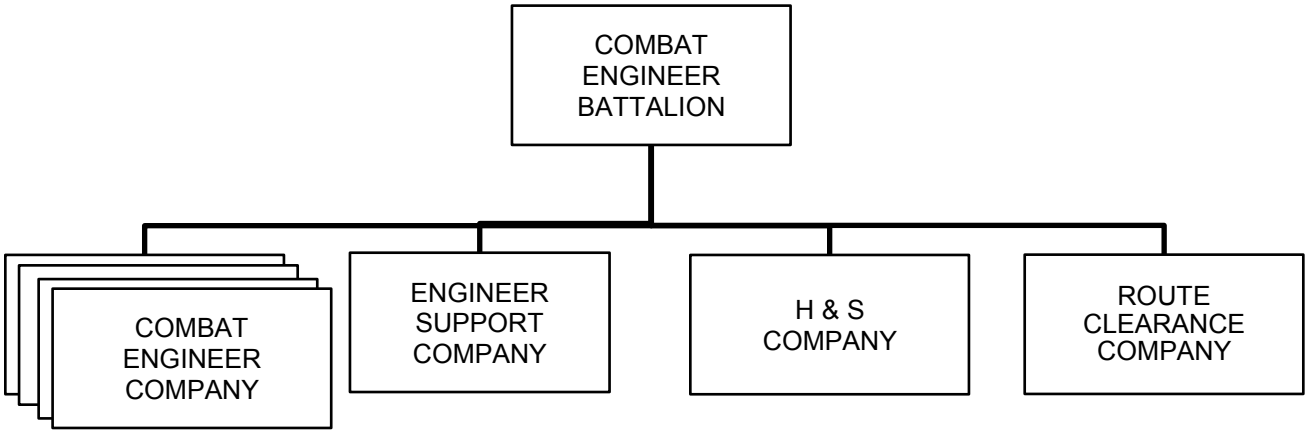
119.1 Discuss the mission and organization of a Combat Engineer Battalion. [ref. a, pp. 4-14 and 4-15]

The mission of the Combat Engineer Battalion is to enhance the mobility, counter-mobility, and survivability of the Marine Division through close combat engineer support and to provide the limited general engineering support that is required for the functioning of the Marine Division.



The Combat Engineer Battalion consists of an H&S company, an engineer support company, a route clearance company and three combat engineer companies. The H&S Company consists of elements that provide the battalion commander with facilities for command and control functions and communications support for subordinate elements of the Battalion. The engineer support company consists of a company Headquarters, an engineer equipment platoon, a utilities platoon, and a motor transport platoon. The route clearance company consists of a company Headquarters, an Assault Breaching Vehicle (ABV) platoon and three route clearance Platoons. Three combat engineer Companies are included in the Battalion organization to provide support to Infantry Regiments and other Division units, as required. Each of the combat engineer companies consists of a Company Headquarters and three Combat Engineer Platoons.

119.2 Discuss the six mobility tasks of a combat Engineer Battalion. [ref. a, p. 4-15]

Conduct engineer reconnaissance and support intelligence collection within the division zone or sector. In areas not under division control, support will be required when conducting this reconnaissance. Provide personnel to augment other division

elements conducting reconnaissance missions that include requirements for engineer intelligence.

Plan, organize, and coordinate the assault breaching of explosive and nonexplosive obstacles from the high-water mark inland.

Employ assault bridge systems. When augmented, employ other standard bridge systems.

Provide expedient repair and reinforcement of existing bridges.

Construct expedient, short-span bridges from local materials in support of ground combat operations.

Provide temporary repair of existing roads and limited new construction of combat roads and trails, including the maintenance that is necessary to support combat operations of the division.

119.3 Discuss the three counter-mobility tasks of a Combat Engineer Battalion. [ref. a, p. 4-15]

Plan, organize, and coordinate the construction of simple and compound explosive and nonexplosive obstacle systems.

Plan and construct obstacles that require special engineering equipment and technical skills.

Perform specialized demolition missions that are beyond the capability of other Division units

119.4 Discuss the survivability task of a Combat Engineer Battalion. [ref. a, p. 4-15]

The Combat Engineer Battalion should provide technical assistance and the necessary equipment for the development of temporary protective positions for personnel and equipment.

119.5 Discuss the three general engineering tasks of a Combat Engineer Battalion. [ref. a, p. 4-15]

Provide essential construction support that is temporary and designed to meet minimum combat requirements.

Provide utility support, including mobile electric power equipment and potable water for essential troop consumption, bath services, and equipment operational and maintenance requirements.

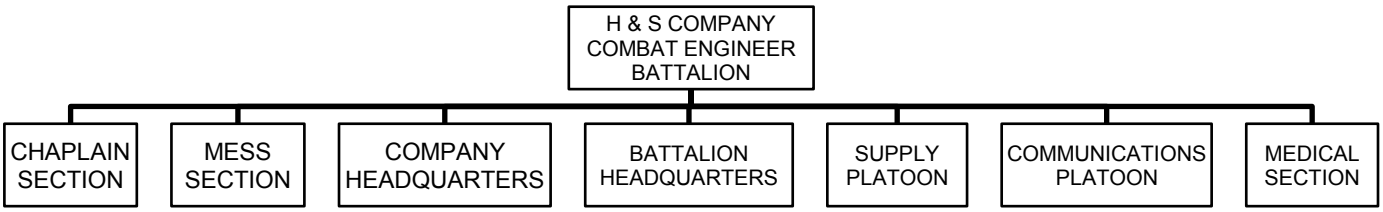
Construct and improve expedient VTOL sites in support of division operations.

119.6 Discuss the mission and organization of the H & S Company, Combat Engineer Battalion. [ref. a, pp. 4-16 and 4-17]

The mission of the H&S Company is to provide command, control, and administrative elements to supervise the operations of the Battalion, including the provision of supply, food services, communications, chaplain services, administration, and medical support.

119 GROUND COMBAT ELEMENT (GCE), COMBAT ENGINEER BATTALION FUNDAMENTALS (CONT'D)

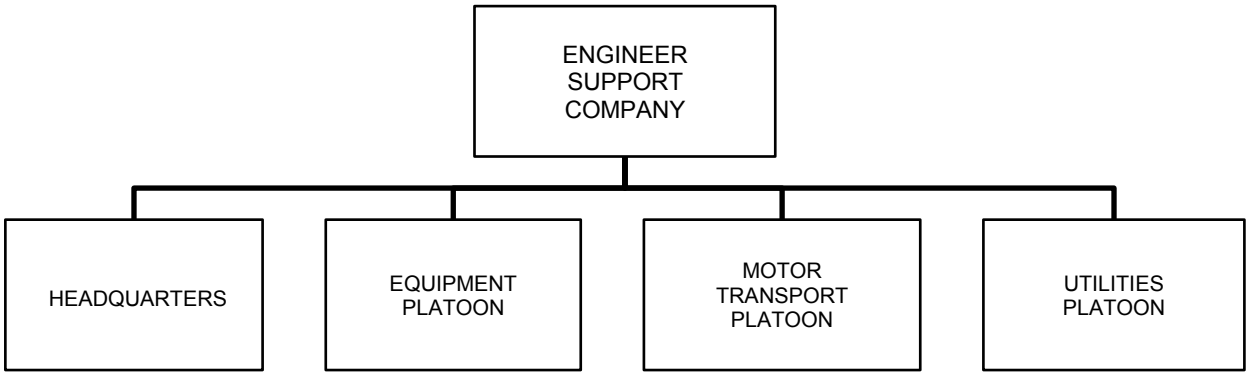
The H&S Company consists of the Battalion Headquarters, which contains a Headquarters section, an S-1/adjutant section, an S-2 section, an S-3 section, and an S-4 section; a Supply Platoon; a mess section; a Communications Platoon; a medical section; a chaplain section; and a Company Headquarters



119.7 Discuss the mission and organization of the Engineer Support Company, Combat Engineer Battalion. [ref. a, pp. 4-18 and 4-19]

The mission of the engineer support company is to provide personnel, equipment, and appropriate task units to other elements of the battalion in support of operational requirements and to provide minimum potable water for the Marine Division and electrical power for designated elements of the Marine Division.

The engineer support company consists of a Company Headquarters, an Equipment Platoon, Motor transport Platoon, and a Utilities Platoon. The functional support requirements of the Company are provided by the three Platoons, which are structured to permit task organization of the equipment and personnel as required.



119.8 Discuss the four tasks of the Engineer Support Company, Combat Engineer Battalion. [ref. a, p. 4-18]

Provide construction, materials handling and lifting equipment, and operators in support of other Battalion elements or to perform separate mission assignments within the Battalion.

Provide potable water and hygienic services to the Marine Division.

Provide electrical power to Division organizations that are not authorized generators and provide backup power to the Division, as required.

119 GROUND COMBAT ELEMENT (GCE), COMBAT ENGINEER BATTALION FUNDAMENTALS (CONT'D)

Provide motor transport equipment and operations, as required, to support all Battalion elements.

119.9 Discuss the mission and organization of the Route Clearance Company, Combat Engineer Battalion. [ref. b]

The mission of the route clearance company is to detect road-emplaced explosive hazards, verify their presence and neutralize them using the proper assets.

The route clearance company consists of a company headquarters, an ABV Platoon and three Combat Engineer Platoons. The company provides route clearance support to supported units during mounted operations.

119.10 Discuss the mission responsibilities of the Route Clearance Company, Combat Engineer Battalion during interrogation operations. [ref. b]

IED interrogation is a combined effort of the Combat Engineer and Explosive Ordinance Disposal (EOD) technicians. IED neutralization is mainly in the scope of EOD. Currently the Combat Engineer Scope is detection and interrogation of IED's with limited blow in place (BIP) capability.

During the conduct of the patrol, the Buffalo vehicle commander is in control of interrogations.

Prior to interrogating, the Buffalo vehicle commander (VC) will report to the Command Post (CP) when the arm is deployed and interrogation is beginning.

A visual of 5 and 25 meter scan of the area will be conducted to ensure that no secondaries are located within the immediate vicinity.
Security vehicles establish a cordon around the possible IED (PIED) and Buffalo during interrogation.

During IED interrogation, the Buffalo VC pushes information about the IED to the EOD team leader and CP. EOD team leader can then make the determination of when they want the engineer interrogation to stop and EOD to begin exploitation of the device.

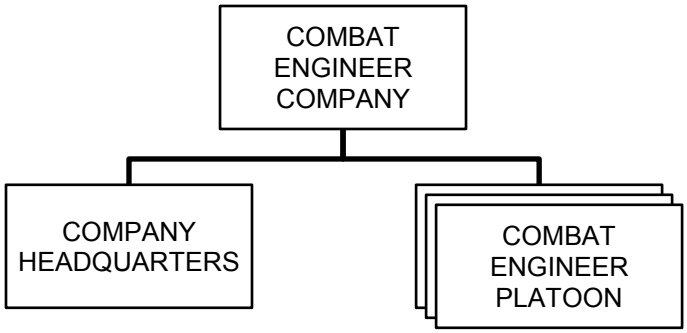
Upon IED confirmation, the Buffalo VC will provide the CP a description of the IED by component and ten-digit grid for the IED location.
After the discovery of IED, EOD will exploit the device for intelligence and will neutralize (BIP).

119.11 Discuss the mission and organization of the Combat Engineer Company, Combat Engineer Battalion. [ref. a, pp. 4-20 and 4-22]

The mission of the combat engineer company is to provide close combat support of an engineering nature as necessary to meet the essential requirements of an Infantry Regiment and other Division elements in combat operations.

The combat engineer company consists of a Company Headquarters and three combat Engineer Platoons. The Company provides direct Combat Engineer Support to infantry task groupings for operations. It can provide one Combat Engineer Platoon for close support of each infantry battalion and associated task elements.

119 GROUND COMBAT ELEMENT (GCE), COMBAT ENGINEER BATTALION FUNDAMENTALS (CONT'D)



119.12 Discuss the thirteen tasks of the Combat Engineer Company, Combat Engineer Battalion. [ref. a, p. 4-20]

- Provide engineer reconnaissance, as required.
- Provide assistance for the cross-country movement of tracked and light wheeled vehicles.
- Erect temporary engineer-type structures to assist in the movement of light vehicles and personnel across dry and wet gaps, subject to the availability of local materials.
- Construct and operate light rafts, subject to the availability of materials.
- Reinforce and repair existing bridges with local materials for the passage of light vehicles.
- Improve existing terrain for use as helicopter terminal points.
- Furnish technical assistance in the fabrication and positioning of light obstacles.
- Supervise the emplacement of minefields and booby traps.
- Furnish technical and mechanical assistance in the installation of temporary cut-and-cover type field fortifications.
- Perform specialized demolition missions that are beyond the capability of the infantryman.
- Provide specialized assistance in breaching obstacles, including mines, from the high-water mark inland.
- Supervise extensive or sensitive minefield clearance.
- Perform any combat engineer related tasks when augmented with the necessary elements of the Engineer Support Company

119.13 Discuss the following for the FPII ISS COUGAR CAT I Mine-Resistant Ambush-Protected Vehicle (MRAP) Cougar 4x4: [ref. c]

Primary mission - The CAT I MRAP is mine-resistant ambush-protected, wheeled vehicle. The MRAP has a V-shaped hull that extends to the engine bay. Such design is intended to direct the blast away from the vehicle. Supports small unit combat operations in urban or confined areas such as mounted patrols, reconnaissance, communications, Command and Control.

Cruising ranges – 420 Miles

Cruising speeds – 20 to 30 MPH

Maximum Speed Forward – 65 MPH

119 GROUND COMBAT ELEMENT (GCE), COMBAT ENGINEER BATTALION FUNDAMENTALS (CONT'D)

Crew – Driver, Vehicle Commander, Gunner

Armaments – M240 7.62 mm machine gun or HBM2 Caliber.50 Machine Gun or MK 19 MOD3 40 MM Machine Gun

Troop Capacity – 4

119.14 Discuss the following for the FPII ISS COUGAR CAT II Mine-Resistant Ambush-Protected Vehicle (MRAP) Cougar 6x6: [ref. c]

Primary mission - The CAT 1 MRAP is mine-resistant ambush-protected, wheeled vehicle. The MRAP has a V-shaped hull that extends to the engine bay. Such design is intended to direct the blast away from the vehicle. Supports small unit combat operations in urban or confined areas such as mounted patrols, reconnaissance, communications, Command and Control.

Cruising ranges – 350 Miles

Cruising speeds – 20 to 30 MPH

Maximum Speed Forward – 65 MPH

Crew – Driver, Vehicle Commander, Gunner

Armaments – M240 7.62 mm machine gun or HBM2 Caliber.50 Machine Gun or MK 19 MOD3 40 MM Machine Gun

Troop Capacity – 10

119 GROUND COMBAT ELEMENT (GCE), COMBAT ENGINEER BATTALION FUNDAMENTALS (CONT'D)

119.15 Discuss the following for the FPI CAT III/A1 (Buffalo): [ref. c]

Primary mission – The FPI CAT III MRAP Buffalo is a heavy-category vehicle which provides route clearance capability and personnel protection against anti-personnel (AP) and anti-tank (AT) mines. It is fitted with a large articulated arm, used for ordnance disposal. It also incorporates a "V" shaped monohull chassis, to direct the force of the blast away from the occupants. The Buffalo is designed to take multiple hits without experiencing disruption to its normal operation and function.

Cruising ranges - 330 Miles

Cruising speeds – 20 to 30 MPH

Maximum Speed Forward – 55 MPH

Crew – Driver, Vehicle Commander

Armaments – None

Troop Capacity – 4

119.16 Discuss the following for the Husky Mk III (Husky): [ref. d]

Primary mission – The Husky Mk III is used for IED Detection. It is fitted with a Ground Penetrating Radar (GPR) panels and a rear-facing mine rake for the detection of emplaced IED's. Operator survivability is achieved through the Husky's V-shaped hull and ability to shed secondary components in a predictable fashion - taken together, these two design features shield the driver from the worst impact of an IED blast.

Cruising ranges - 497 Miles

Cruising speeds – 20 to 45 MPH

Maximum Speed Forward – 62 MPH

Crew – Driver

Armaments – None

Troop Capacity – None

119 GROUND COMBAT ELEMENT (GCE), COMBAT ENGINEER BATTALION FUNDAMENTALS (CONT'D)

119.17 Discuss the primary role and features of the following vehicles: [ref. e]

M1 Assault Breacher Vehicle (M1 ABV) - On December 3, 2009, the Marine Corps' newest vehicle detonated its first path-clearing line charge in Afghanistan. This occasion would mark the Assault Breacher Vehicle's (ABV) first combat action and was introduce to a new method for combating Improvised Explosive Devices (IEDs). Built on the chassis of a M1A1 Abrams Tank, the tracked ABV is equipped with a mine-clearing plow, a .50 cal machine gun and a device that fires a rocket-propelled line of C4 explosives up to 150 yards. Assault Breacher Vehicles ensure Marines can get to the battlefield without going through a minefield.

M60A1 Armored Vehicle Launched Bridge (M60A1 AVLB) - The M60A1 AVLB is an armored vehicle used for launching and retrieving a 60-foot scissors-type bridge. The AVLB consists of three major sections: the launcher, the hull, and the bridge. The launcher is mounted as an integral part of the chassis. The bridge, when emplaced, is capable of supporting tracked and wheeled vehicles with a military load bearing capacity up to Class 60. The bridge can be retrieved from either end. The roadway width of the AVLB is 12 feet, 6 inches. Bridge emplacement can be accomplished in 2 to 5 minutes, and retrieval can be accomplished in 10 minutes under armor.

120 GROUND COMBAT ELEMENT (GCE), LIGHT ARMORED RECONNAISSANCE (LAR) BATTALION FUNDAMENTALS

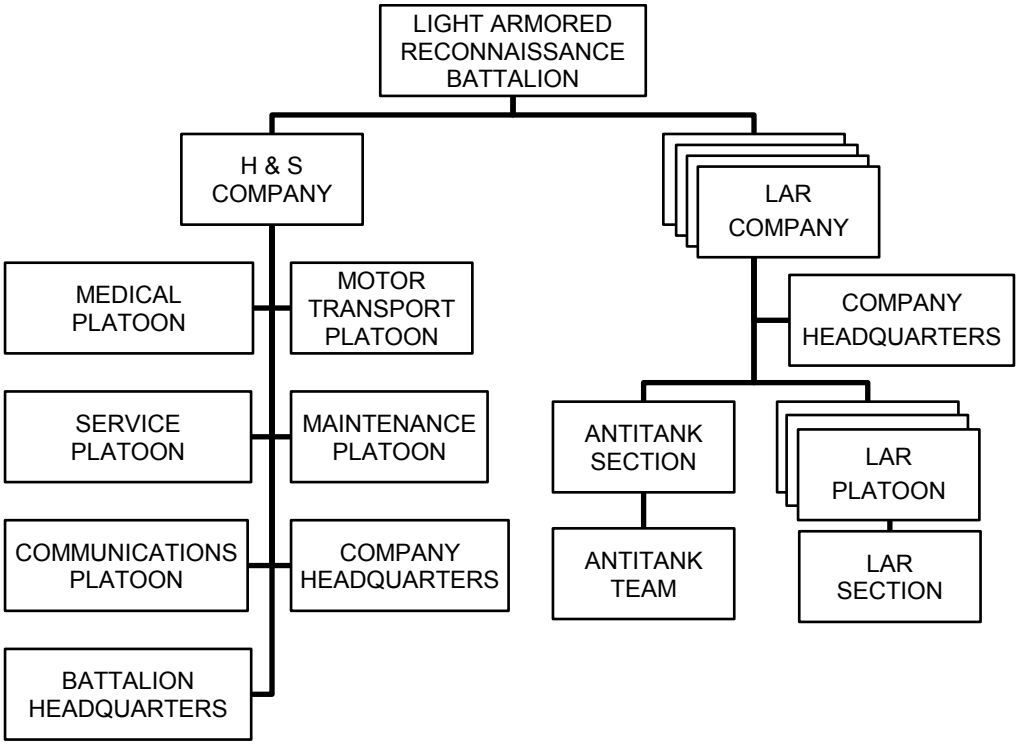
References:

[a] MCRP 5-12D, Organization of Marine Corps Forces (PCN 14400005000)
[b] MCWP 3-14, Employment of the Light Armored Reconnaissance Battalion (PCN14300011500)

120.1 State the mission and organization of the Light Armored Reconnaissance Battalion. [ref. a, pp. 4-22 and 4-23]

The mission of the LAR Battalion is to conduct reconnaissance, security, and economy-of-force operations and, within capabilities, conduct limited offensive or delaying operations that exploit the unit's mobility and firepower.

The LAR Battalion consists of an H&S Company and four LAR Companies.



120.2 Discuss the following for the Light Armored Vehicle-25 (LAV-25): [ref. b]

Primary function is to provide strategic mobility to reach and engage the threat, tactical mobility for effective use of fire power, fire power to defeat soft and armored targets, battlefield survivability to carry out combat missions.

Ranges – 410 miles

Speeds (land/water) –
- Land = 62 mph
- Water = 6 mph

120 GROUND COMBAT ELEMENT (GCE), LIGHT ARMORED RECONNAISSANCE (LAR) BATTALION FUNDAMENTALS (CONT'D)

*****Ranges and speeds applies to all LAV variations without BPUP armor

*The LAV possesses a limited swim capability and cannot cross the surf line. The LAV is capable of crossing bodies of water with a current less than 8.2 feet per second and is capable of crossing many streams, lakes, and slow running rivers

Crew / Troop Capacity – Driver, Gunner, Commander and 4 troops

Armaments – Primary: M242 25mm chain gun
Secondary: 7.62mm machine gun mounted coaxial to the main gun
Supplementary: M240E1 7.62mm machine gun (pintle mounted)
M257 Self Screening Smoke Grenade Launcher

Features – The LAV-25 is an all-terrain, all-weather vehicle with night capabilities. It is air transportable via C-130, C-141, C-5 and CH-53 E. When combat loaded there are 210 ready rounds and 420 stowed rounds of 25 mm ammunition as well as 400 ready rounds and 1200 stowed rounds of 7.62mm. There are 8 ready rounds and 8 stowed rounds of smoke grenades. The LAV-25 is fully amphibious with a maximum of 3 minutes preparation.

120.3 Discuss the following for the Light Armored Vehicle-Anti-Tank (LAV-AT): [ref. b]

Primary function is to provide highly mobile, protected anti-armor fire support to light infantry and reconnaissance forces and provide capability to defeat heavy, armored targets at long ranges.

Armaments – Primary: Emerson 901A1 Turret system
Secondary: M240E 7.62mm machine gun
Supplementary: M257 Self Screening Smoke Grenade Launcher

120 GROUND COMBAT ELEMENT (GCE), LIGHT ARMORED RECONNAISSANCE (LAR) BATTALION FUNDAMENTALS (CONT'D)

Features – The LAV-AT is an all-terrain, all-weather vehicle with night capabilities. It is air transportable via C-130, C-141, C-5 and CH-53 E. When combat loaded there are 2 ready and 14 stowed TOW II ATGMs as well as 200 ready rounds and 800 stowed rounds of 7.62mm ammunition. There are 8 ready rounds and 8 stowed rounds of smoke grenades. The missiles can be loaded under armor. There is an additional stowed TOW II ground mount kit available. The vehicle can be made fully amphibious within 3 minutes.

120.4 Discuss the following for the Light Armored Vehicle-Command and Control (LAV-C2): [ref. b]

Primary function is a mobile Command Station providing field Commanders with all necessary resources to control and coordinate light armored units in all assigned roles.

Armaments – M240E 7.62mm machine gun
Supplementary: M257 Self Screening Smoke Grenade Launcher

Features – The LAV-C2 is an all-terrain, all-weather vehicle with night capabilities. It is air transportable via C-130, C-141, C-5 and CH-53 E. When combat loaded there are 200 ready rounds and 800 stowed rounds of 7.62mm ammunition. There are 8 ready rounds and 8 stowed rounds of smoke grenades. The vehicle can be made fully amphibious within 3 minutes.

120.5 Discuss the following for the Light Armored Vehicle-Logistics (LAV-L): [ref. b]

Primary function provides ammunition, rations and POL (petroleum, oil and lubricant) supplies required to sustain operations of first-line armored vehicles.

Armaments – M240E 7.62mm machine gun
Supplementary: M257 Self Screening Smoke Grenade Launcher

120 GROUND COMBAT ELEMENT (GCE), LIGHT ARMORED RECONNAISSANCE (LAR) BATTALION FUNDAMENTALS (CONT'D)

Features – The LAV-L is an all-terrain, all-weather vehicle with night capabilities. It is air transportable via C-130, C-141, C-5 and CH-53 E. When combat loaded there are 200 ready rounds and 800 stowed rounds of 7.62mm ammunition. There are 8 ready rounds and 8 stowed rounds of smoke grenades. The vehicle can be made fully amphibious within 3 minutes.

120.6 Discuss the following for the Light Armored Vehicle-Mortar (LAV-M): [ref. b]

Primary function is to provide indirect fire support to light infantry and reconnaissance forces; providing high explosive area fire, covering smoke and illumination for first line-units.

Armaments – Primary: M252 81mm mortar
Secondary: M240E1 7.62mm machine gun
Supplementary: M257 Self Screening Smoke Grenade Launcher

Features – The LAV-M is an all-terrain, all-weather vehicle with night capabilities. It is air transportable via C-130, C-141, C-5 and CH-53 E. When combat loaded there are 5 ready and 94 stowed 81mm rounds as well as 200 ready rounds and 800 stowed rounds of 7.62mm ammunition. There are 8 ready rounds and 8 stowed rounds of smoke grenades. The base plate and bipod for the ground-mounted mortar is stowed on the back hatch of the vehicle. The vehicle can be made fully amphibious within 3 minutes.

120 GROUND COMBAT ELEMENT (GCE), LIGHT ARMORED RECONNAISSANCE (LAR) BATTALION FUNDAMENTALS (CONT'D)

120.7 Discuss the following for the Light Armored Vehicle-Recovery (LAV-R): [ref. b]

Primary function is a tactical mobility to reach and recover/support disabled vehicles.

Armaments –M240E 7.62mm machine gun

Features -The LAV-R is an all-terrain, all-weather vehicle with night capabilities. It is air transportable via C-130, C-141, C-5 and CH-53 E. When combat loaded there are 200 ready rounds and 800 stowed rounds of 7.62mm ammunition. There are 8 ready rounds and 8 stowed rounds of smoke grenades. The vehicle can be made fully amphibious within 3 minutes. The vehicle is equipped with 30,000 pounds winch recovery boom and a 9,000 pounds boom crane.

121 GROUND COMBAT ELEMENT (GCE), AMPHIBIOUS RECONNAISSANCE BATTALION FUNDAMENTALS

References:

[a] MCI 03.32G, Reconnaissance Marine (http://www.doctrine.quantico.usmc.mil)
[b] MCO P3500.73, Recon T&R Manual (http://www.usmc.mil/news/publications/Documents/MCO%20P3500.73.pdf)
[c] NAVMC 3500.55A, Recon T&R Manual (http://www.usmc.mil/news/publications/Documents/NAVMC%203500.55A.pdf)

121.1 Discuss the primary mission of a Reconnaissance Battalion. [ref a, p. 1-4]

The primary mission of the Reconnaissance Battalion is to conduct ground reconnaissance and observation in support of the Marine Division and its elements.

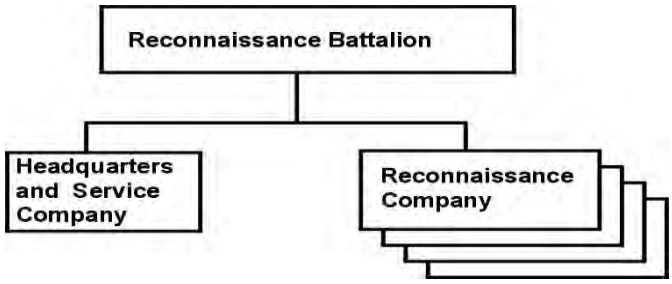
NOTE: There is a very basic mission difference between the two Reconnaissance Units. The force reconnaissance unit performs its mission farther behind enemy lines and is employed by the Marine Expeditionary Force. Battalion Reconnaissance performs its mission closer to friendly lines and is employed by the Division.

121.2 State the ten tasks performed by a Reconnaissance Battalion. [ref b, 2-A-1]

Conducts amphibious reconnaissance and advanced nautical navigation.
Conducts pre & post-assault ground reconnaissance.
Conducts surveillance to observe, identify, and report enemy activity, or other information of military significance, as deemed necessary by the Commander.
Conducts specialized reconnaissance.
Conducts long-range communications and digital imagery.
Assists in the emplacing and recovery of ground sensors.
Possesses specialized insert capability to include parachuting, combatant diving, and HRST.
Provides initial and terminal guidance for helicopters, landing craft, and parachute operations.
Conducts battlefield-shaping operations to include limited sniping and engagement of selected targets with supporting arms.
Conducts post-strike reconnaissance to determine battle damage assessment.

121.3 Discuss the organization of a Reconnaissance Battalion. [ref a, p. 1-4, 1-5]

The reconnaissance battalion is an organic unit of the Marine Division and is composed of a Headquarters and Service Company and four Reconnaissance Companies. Each Reconnaissance Company includes a Headquarters section and three Platoons consisting of surface swimmers and as many inflatable boat handlers as necessary. A limited number are trained as underwater swimmers and parachutists.



121 GROUND COMBAT ELEMENT (GCE), AMPHIBIOUS RECONNAISSANCE BATTALION FUNDAMENTALS (CONT'D)

121.4 Discuss the sole objective of reconnaissance training. [ref b, p. 1-6]

The sole objective of reconnaissance training is successful execution of the reconnaissance combat mission. Successful employment of pre-assault and post-assault ground reconnaissance requires that training programs develop reconnaissance teams which are capable of conducting undetected activities on enemy ground under conditions of limited support from sources outside the teams. Such undetected activities include entry into a reconnaissance area of operations (RAO), patrol movement within the operating area, execution of information collection and terminal guidance tasks, submission of patrol reports from within the operating areas, debriefing, and submission of final reports. These training concepts are accomplished by stressing team integrity, balance, and realism throughout all phases of reconnaissance training.

121.5 Explain the following progressive phases of reconnaissance training: [ref b, c]

a. Entry Level Training
b. Advanced Individual Training
c. Collection (**Collective**) Training

Reconnaissance training progresses through three phases: entry level training, advanced individual training, and collective training.

Entry Level Training (Core Skills – Level 1000 events)
This is the basic training that a Reconnaissance Marine receives at the Formal School in which the 0321 MOS is first attained (Basic Reconnaissance Course). These skills are the basic building blocks of the 0321.

Advanced Individual Training (Core-Plus Skills – Level 2000 events)
This is training that occurs at follow-on schools, or through monitored on-the-job training (MOJT) at the unit. Dive and jump tasks, even though central to the ground reconnaissance core capabilities, are 2000 level events since their initial training setting occurs at schools following attendance at BRC and the awarding of the 0321 MOS.

Collective Training (Unit Training – Level 4000 to 7000 events)
A collective event is an event that an established unit would perform in combat. This training goes from squad/team events (4000 level) all the way to Battalion events (7000 level). It is the training that allows a unit to be able to meet and perform its Mission Essential Tasks (METs), tasks listed in section 121.2.

The duty areas include: patrolling, urban Reconnaissance & Surveillance (R&S), mounted R&S, communications, fire support, initial terminal guidance (ITG), NBC, sensors & beacons, demolitions, amphibious – boats, amphibious – swimming, underwater, heliborne, parachuting, platoon events, and operations and planning. Events are organized in order of increasing complexity or skill levels required.

121.6 Discuss specific training requirements of the three reconnaissance training levels. [ref b, c]

Entry Level Training:
Execute duties within a reconnaissance patrols, basic weapons handling (M16/M4, SAW, M203), land navigation, basic communications, calling for fire (indirect), CBRNE, basic boat handling, operation and navigation, identifying foreign weapons, vehicles and equipment, emplacement of remote sensors, etc.

121 GROUND COMBAT ELEMENT (GCE), AMPHIBIOUS RECONNAISSANCE BATTALION FUNDAMENTALS (CONT'D)

Advanced Individual Training:
Write a patrol order, issue a warning order and operation order, lead a patrol, coordinate the resupply of a unit, operation of advanced weapon systems (240G, .50cal, MK-19, SASR, M40), demolitions, advanced nautical skills (over-the-horizon ops, cache a small craft), duties and operations in a Reconnaissance Operations Center (ROC), operating from a hide, leading ambushes and raids, calling Close Air Support (CAS) missions, ITG, jump and dive operations, etc.

Collective Training:
Execute a deliberate ambush, engage a target with CAS (rotary or fixed-wing), conduct submarine operations, conduct sub-surface infill/exfiltration, conduct heliborne operations, conduct helicast/soft duck operations, clear rooms, houses, and buildings, conduct mounted and dismounted patrols, etc.

Reconnaissance Team
The Recon Team is the Basic Reconnaissance Unit that will conduct ground and amphibious reconnaissance operations. The team possesses special insert/extract skills, in addition to special long-range communications and advanced information gathering equipment. Capable of performing in any environment, the team collects battlefield information for processing into intelligence.

"You are part of the world's most feared and trusted force. Engage your brain before you engage your weapon."

Then General James Mattis (CG, 1st Marine Division) wrote this and had it delivered to each of his Marines and Sailors on March 19, 2003, one day before the initial invasion of Iraq. In addition to providing words of encouragement, General Mattis implored his Marines and Sailors to remember who they are, where they come from, and who they represent.

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omb_MARFORRESFMF@usmc.mil

(504) 679-7054