[ENLISTED]

FLEET MARINE FORCE

STUDY GUIDE/PQS

FMF WARFARE DEVICE

The Eagle, Globe and Anchor (Marine Corps Emblem) is centered on the breast insignia as the capstone of the warfare device, making a clear statement that the wearer is a member of the Navy/Marine Corps team.

At the time the device was designed, “Forward…From the Sea” was the Navy and Marine Corps joint vision for the future. This is represented in the background of the device; a **surf wave crashing on the sandy beach** (the littoral zone), the place where Sailors have served alongside Marines as the earned their reputation, “on the shores of Tripoli” and the “sands of Iwo Jima”. The littoral (or costal) regions of the world are also where the Navy and Marine Corps team will exert the U.S. Interests in future conflicts as reflected in the doctrine of the time, “Operational Maneuver from the Sea”.

Warfare programs have served the purpose of instilling warrior ethos in Sailors as well as enhancing mission effectiveness in both individual and unit survivability since their inception. On ships and submarines, every Sailor is trained as a firefighter and damage control man to fight and save the ship in an emergency. With the Marines, it is essential in combat for every person to have the knowledge and skill of a rifleman, if the unit is to survive. The **two crossed rifles** symbolize the rifle ethic the warfare program is designed to instill in Sailors assigned to the Marines.

The scroll along the bottom of the breast insignia is emblazoned with **“Fleet Marine Force”** Although Marine componency was established in 1992, significantly changing the operational environment in which Marine Corps forces deploy and operate in a joint environment. The Navy continues to utilize the title Fleet Marine Force in their role as a Naval Type Commander, therefore since warfare programs are a distinct part of Navy culture, it is appropriate our warfare program be titled after the role in which Marine Forces are tied to the Navy.

TABLE OF CONTENTS

CORE

102 MARINE CORPS HISTORY, RANK STRUCTURE, AND COURTESIES FUNDAMENTALS

References:

[a] Marine Corps Common Skills Handbook, Book 1A (PCN 50600000900)
[b] Naval History and Heritage Command, http://www.history.navy.mil

102.1 Discuss what significant events occurred during the following years in Marine Corps history: [pp. 1-2-3 thru 1-2-5]

1775 - The Marine Corps was created on 10 November 1775 in Philadelphia, Pennsylvania at Tun Tavern by a resolution of the Continental Congress, which "raised two battalions of Marines." Captain Samuel Nicholas became the commander of these two battalions and is traditionally considered the first Commandant of the Marine Corps. In 1834, the Marines came under the Department of the Navy. The National Security Act of 1947, amended in 1952, states the present structure.

1776 - The first Marine landing took place during the Revolutionary War. Marines invaded New Providence Island in the Bahamas and seized guns and supplies. The uniform of the day had a stiff leather stock that was worn around the neck, thus the nickname "Leatherneck.

1805 - Marines stormed the Barbary pirates' stronghold at Burma on the "Shores of Tripoli." Marines raised the "Stars and Stripes" for the first time in the Eastern Hemisphere.

1847 - During the Mexican War, Marines occupied the "Halls of Montezuma" during the Battle of Chapultepec in Mexico City. The royal palace fell to invading Marines, who were among the first United States troops to enter the capital. Marines also helped take California.

1859 - Under the command of Colonel Robert E. Lee, U.S. Army, Marines stormed the United States arsenal at Harper's Ferry to put down an attempted slave revolt lead by abolitionist John Brown.

1868 - The Marine Corps adopted an emblem that consisted of an eagle, a globe, and an anchor. Brigadier General Jacob Zeilin, 7th Commandant, modified the British (Royal) Marine emblem to depict the Marines as both American and maritime. The globe and anchor signify worldwide service and sea traditions. The spread eagle is a symbol of the Nation itself.

1883 - The official motto of the Marine Corps, *"Semper Fideli*s," (Latin for "Always Faithful") was adopted. The phrase is more commonly heard as its abbreviation, *"Semper F*i".

1900 - In support of foreign policy, Marines from ships on the Asiatic station defended the American Legation in Peking, China during the Boxer Rebellion. The Marines were part of a multinational defense force that protected the Legation Quarter against attack. This small defense force held out against the Boxers until a relief force was able to reach Peking and end the rebellion.

1913 - The Marine Corps established its aviation unit. Marine Major Alfred A. Cunningham was the first pilot.

1917- Marines landed as part of the American force in France. Marines, participating in eight distinct operations, distinguished themselves and were awarded a number of decorations, among them the French Fourragere still worn by members of the 5th and 6th Marines.

1933 - The Marine Corps was reorganized into the Fleet Marine Force, formally establishing the "command and administrative relations" between the Fleet and the Marine Corps. The Marine Corps Equipment Board was established at Quantico, Virginia, and Marines began to devote long hours to testing and developing materials for landing operations and expeditionary service.

1965 - Marines landed in South Vietnam, which committed the Marine Corps to the longest war in its history. Marines conducted numerous large-scale offensive operations throughout the course of the war, as well as participating in the pacification program designed to win the support of the local populace. Also, in response to an attempted coup of the local government, Marines landed in the Dominican Republic to evacuate and protect U.S. citizens. The Marines formed the core of a multinational force that quickly restored the peace.

1982 - Marines deployed to Lebanon as part of a multinational peacekeeping force in an effort to restore peace and order to this war-torn country. This action further displayed the Marine concept of a "Force in Readiness." On 23 October 1983, a suicide truck bomb attack on the headquarters building killed 241 Americans and wounded 70 others. The last Marine unit withdrew in July of 1984.

1991 - Operation Desert Storm was launched after the Iraqi government refused to comply with United Nations resolutions. Marine aviation was heavily used when the air phase commenced in January of 1991. When massive bombing failed to dislodge Iraqi forces, Marine ground forces swept into Kuwait and liberated the country, causing severe damage to the Iraqi military capability.

2001 - **Operation Enduring Freedom** (OEF) is the official name used by the U.S. Government for the War in Afghanistan, together with three smaller military actions, under the umbrella of the Global War on Terror (GWOT). On October 7, 2001, early combat operations including a mix of strikes from land-based B-1 Lancer, B-2 Spirit and B-52 Stratofortress bombers; carrier-based F-14 Tomcat and F/A-18 Hornet fighters; and Tomahawk cruise missiles launched from both U.S. and British ships and submarines signaled the start of Operation Enduring Freedom.

2003 - The **2003 invasion of Iraq** (from March 20 to May 1, 2003) was led by the United States, alongside the United Kingdom and smaller contingents from Australia and Poland. Four countries participated with troops during the initial invasion phase, which lasted from March 20 to May 1.

2004 - The **First Battle of Fallujah**, codenamed **Operation Vigilant Resolve**, was an unsuccessful attempt by the United States Military to capture the city of Fallujah in April 2004.

2004 - The **Second Battle of Fallujah** — code-names **Operation *Al-Fajr*** (Arabic, "the dawn") and **Operation Phantom Fury** — was a joint U.S.-Iraqi -British offensive in November and December 2004. It was led by the U.S. Marine Corps against the Iraqi insurgency stronghold in the city of Fallujah and was authorized by the U.S.-appointed Iraqi Interim Government

102.2 Describe the importance of the following conflicts as they relate to Marine Corps history: [pp. 1-2-5, 1-2-6]

The Battle of Belleu Wood - Marines fought one of their greatest battles in history at Belleau Wood, France during World War I. Marines helped to crush a German offensive at Belleau Wood that threatened Paris. In honor of the Marines who fought there, the French renamed the area "the Wood of the Brigade of Marines." German intelligence evaluated the Marines as "storm troops" -- the highest rating on the enemy fighting scale. In reference to the Marine's ferocious fighting ability, German troops called their new enemy "Teufelhunden" or "Devil dogs," a nickname in which Marines share pride.

The Battle of Guadalcanal - On 7 August 1942, the 1st Marine Division landed on the beaches of Guadalcanal in the Solomon Islands and launched the first United States land offensive of World War II. This battle marked the first combat test of the new amphibious doctrine, and also provided a crucial turning point of the war in the Pacific by providing a base to launch further invasions of Japanese-held islands. Amphibious landings followed on the remaining Solomon Islands including New Georgia, Choiseul (Feint), and Bougainville.

The Battle of Tarawa -The Gilbert Islands were the first in the line of advance for the offensive in the Central Pacific. The prime objective was the Tarawa Atoll and Betio Island which had been fortified to the point that the Japanese commander proclaimed that it would take a million Americans 100 years to conquer it. On 20 November 1943, Marines landed and secured the island within 76 hours, but paid a heavy price in doing so. Because of an extended reef, landing craft could not cross it and Marines were offloaded hundreds of yards from the beaches. This led to heavy losses from enemy fire. Additionally, many Marines drowned while attempting to wade ashore.

The Battle of Mariana Islands - Due to the need for airfields by the Air Force and advanced bases for the Navy, the Marianas were invaded. Landings on the islands of Saipan, Guam, and Tinian accomplished this. During June and July of 1943, Lieutenant General Holland M. Smith led a combined invasion force of Marines and soldiers that totaled over 136,000. This was the greatest number of troops up to that time to operate in the field under Marine command.

The Battle of Iwo Jima - On 19 February 1945, Marines landed on Iwo Jima in what was the largest all-Marine battle in history. It was also the bloodiest in Marine Corps history. The Marine Corps suffered over 23,300 casualties. The capture of Iwo Jima greatly increased the air support and bombing operations against the Japanese home islands. Of the savage battle, Admiral Chester W. Nimitz said, "Among the Americans who served on Iwo Island, uncommon valor was a common virtue."

The Battle of Chosin Reservior - After pushing far into North Korea during November of 1950, Marines were cut off after the Chinese Communist Forces entered the war. Despite facing a 10-division force sent to annihilate them, Marines smashed seven enemy divisions in their march from the Chosin Reservoir. The major significance of this retrograde movement was that Marines brought out all operable equipment, properly evacuated their wounded and dead, and maintained tactical integrity.

The Battle of Hue City - During the Vietnamese holiday of Tet in January of 1968, Communist forces launched a surprise offensive by infiltrating large numbers of their troops into the major population centers of Hue City, South Vietnam. A near division-size unit of NVA troops occupied the city of Hue and the Citadel. Marines fought in built-up areas for the first time since the Korean War foregoing the application of heavy arms to minimize civilian casualties. Fighting was house-to-house with progress measured in yards. The city was secured on 25 February 1968.

102.3 Describe the accomplishments of the following noteworthy Marines/Sailors as related to Marine Corps history: [ref b. pp. 1-2-6, 1-2-7]

Archibald Henderson - Brevet Brigadier General Archibald Henderson became Commandant in 1820 and held his command for 39 years until his death in 1859. General Henderson led the Corps through the Indian Wars, the War with Mexico, the opening of China, and the disorders in Central America. The "Grand Old Man of the Marine Corps," as he is often called, introduced higher standards of personal appearance, training, discipline, and strived to have the Marine Corps known as a professional military force, capable of more than just sea and guard duties

John Quick - Sergeant Major Quick is remembered for his performance at Cuzco Well (Guantanamo Bay, Cuba) where he participated in an operation to seize an advanced base for the Atlantic Fleet battalion of Marines. The Sergeant Major won the Medal of Honor for semaphoring for an emergency lift of the naval bombardment while under Spanish and American shellfire. The landing at Guantanamo demonstrated the usefulness of Marines as assault troops. When employed with the fleet, Marines gave added strength for the capture and defense of advanced bases, becoming a primary mission of the Marine Corps (1898).

Dan Daly - Sergeant Major Daly is recognized for earning two Medals of Honor: (1) Chinese Boxer Rebellion and (2) First Caco War in Haiti. When his unit had been pinned down and their attack was stalled during the Battle of Belleau Wood, then Gunnery Sergeant Daly yelled to his men, "Come on, you sons of a b-----, do you want to live forever?"

Louis B. "Chesty" Puller - Lieutenant General Puller served in Nicaragua through several periods of political unrest and rebellious activity. Puller and a force of about 32 Marines became famous for their ability to engage rebel groups and bandits while scouring the jungles in a wide area of Nicaragua to the Honduran border. Puller became known as the "Tiger of the Mountains" (1930). The Marine Corps' mascot, an English bulldog named "Chesty," is named for this brave and fine Marine Corps officer.

Gregory R. "Pappy" Boyington - Major Boyington is recognized for Marine prowess in aerial dogfights. "Pappy" commanded VMH-214, the "Black Sheep," during World War II. By the end of the War, the Major was recognized as the Marine Corps' top ranking flying ace with 28 victories ("kills") (1945).

Ira H. Hayes - The Fifth Amphibious Corps of Marines, commanded by Major General Harry Schmidt, was assigned to take Iwo Jima. Corporal Ira Hayes, a Pima Indian, was one of the Marines immortalized in the now famous photograph (not shown) taken of the second flag raising incident on Mount Suribachi shortly after the Japanese stronghold was taken on 23 Feb 1945.

Opha Mae Johnson - Private Johnson became the Marine Corps' first enlisted woman on 13 August 1918. Her enlistment was a reflection of the dramatic changes in the status of women brought about by the entry of the United States into World War I. Marine Reserve (F) was the official title by which the Marine Corps' first enlisted women were known. They were better known as skirt Marines" and "Marinettes."

Margaret A. Brewer - Brigadier General Brewer, then a Colonel, served as the Director of Women Marines (WM) during the period 1973-1977. She was the seventh and last director of WM, the only post-World War woman to hold the position. Margaret Brewer became the Marine Corps' first woman general officer on 11 May 1978.

Robert E. Bush - On 2 May 1945, during the battle for Okinawa, Hospital Apprentice First Class Robert E. Bush was a Rifle Company Corpsman with the Second Battalion, Fifth Marines, Fifth Marine Division. While attacking the enemy, a Marine Officer fell wounded in a fire-swept location. Bush, who had been assisting other wounded Marines, went to the officer's exposed position and administered blood plasma amidst the perilous battle conditions. As the Japanese counterattacked, he courageously remained with the disabled officer, firing back with one hand while holding the plasma bottle in the other. Despite his own serious injuries, Bush continued to provide aid until his patient was evacuated. For his "conspicuous gallantry" on this occasion, he was presented with the Medal of Honor by President Harry S. Truman on 5 October 1945, during "Nimitz Day" celebrations at the White House in Washington, D.C. He was the youngest World War II Navy man to receive the Medal of Honor.

John H. Bradley - Pharmacist's Mate Second Class John H. Bradley, the second figure from the right on the near side of the iconic Joe Rosenthal photo, joined with five Marines to raise Old Glory atop Mt. Suribachi on February 23, 1945. This second flag raising (a smaller flag was raised earlier) would be used on a postage stamp, on several posters for the 7th War Loan bond drive, and as the basis for the Marine Corps War Memorial in Arlington, Virginia. On 21 February, seeing a wounded Marine, Bradley rushed to his aid through a mortar barrage and heavy machine gun fire. Although other men from his unit were willing to help him with the casualty, Bradley motioned them to stay back. Shielding the Marine with his own body, the hospital corpsman administered a unit of plasma and bandaged his wounds. Through the gunfire, he then pulled the casualty 30 yards to safety. For these actions Pharmacist's Mate Second Class John H. Bradley was awarded the Navy Cross.

Robert R. Ingram - Medal Of Honor Citation: - For conspicuous gallantry and intrepidity at the risk of his life above and beyond the call of duty while serving as Corpsman with Company C, First Battalion, Seventh Marines, against elements of a North Vietnam Aggressor (NVA) battalion in Quang Ngai Province, Republic of Vietnam on March 28, 1966. Petty Officer Ingram accompanied the point platoon as it aggressively engaged an outpost of an NVA battalion. As the battle moved off a ridge line, down a tree-covered slope, to a small rice paddy and a village beyond, a tree line suddenly exploded with an intense hail of automatic rifle fire from approximately 100 North Vietnamese regulars. In moments, the platoon was decimated. Oblivious to the danger, Petty Officer Ingram crawled across the battlefield to reach a downed Marine. As he administered aid, a bullet went through the palm of his hand. Calls for "corpsmen" echoed across the ridge. Bleeding, he edged across the fire-swept landscape, collecting ammunition from the dead and administering aid to the wounded. Receiving two more wounds, with the third wound being a life-threatening one, he looked for a way off the face of the ridge, but again he heard the call for help and again he resolutely answered. He gathered magazines, resupplied and encouraged those capable of returning fire and rendered aid to the more severely wounded until he finally reached the right flank of the platoon. While dressing the head wound of another corpsman, he sustained his fourth bullet wound. From sixteen hundred hours until almost sunset, Petty Officer Ingram pushed, pulled, cajoled, and doctored his Marines. Enduring the pain from his many wounds and disregarding the probability of his own death, Petty Officer Ingram's gallant actions saved many lives. By his indomitable fighting spirit, daring initiative, and unfaltering dedication to duty, Petty Officer Ingram reflected great credit upon himself and upheld the highest traditions of the United States Naval Service.

102.4 Discuss the circumstances when a hand salute is rendered and when it is not. [pp 1-2-15 thru 1-2-19]

When/ how to salute:
Begin your salute in ample time (at least six, but not more than 30 paces away).
Hold your salute until it is returned or acknowledged.
Accompany the salute with an appropriate greeting.
Look squarely at the person or colors being saluted.
Render the salute only once if a senior remains in the immediate vicinity.
Render the salute again if conversation takes place when a senior leaves or when you depart.

NOTE: Do not interrupt the conversation to salute another senior unless the officer to who you are speaking salutes a senior.

Salute in a group:
If Your group is not in formation -**Then** the first person to notice an officer approaching calls the group to attention and Salutes for the group, or entire group salutes the group.
If Your group is in formation - **Then** Senior person calls the formation to attention and salutes for the group

Salute when passing an officer who is going in the same direction as you:
Come abreast of the officer, salute and say, “By your leave, sir (ma’am).”
Officer returns the salute, and say, “Carry on” or “Granted.”
Terminate your salute and pass ahead.

Salute officers, regular and reserve, of the Navy, Army, Air Force, Marine Corps, Coast Guard, and foreign military and naval officers whose governments are formally recognized by the U.S. Government.

Do not salute when:
At work indoors (except when under arms)
A prisoner or Guarding prisoners
Under battle conditions
In ranks, at games, or part of a working detail
At crowded gatherings, in public conveyances, or in congested areas, unless you are addressing or are being directly addressed by a senior
Doing so would physically interfere with your performance of an assigned duty. or would create a hazard
While your blouse or coat is unbuttoned
With a smoking device in your hand

102.5 Identify the Marine Corps rank and pay grade in order of seniority from E-1 to O-10. [pp. 1-2-21, 1-2-22]

RANK/PAYGRADE	
General (Gen)	0-10
Lieutenant General (LtGen)	0-9
Major General (MGen)	0-8
Brigadier General (BGen)	0-7
Colonel (Col)	0-6
Lieutenant Colonel (LtCol)	0-5
Major (Maj)	0-4
Captain (Capt)	0-3
First Lieutenant (1 st Lt)	0-2
Second Lieutenant (2 nd Lt)	0-1
Chief Warrant Officer (CWO-5)	W-5
Chief Warrant Officer (CWO-4)	W-4
Chief Warrant Officer (CWO-3)	W-3
Chief Warrant Officer (CWO-2)	W-2
Warrant Officer (WO-1)	W-1
Sergeant Major of the Marine Corps	E-9
Sergeant Major (SgtMaj)	E-9
Master Gunnery Sergeant (MGySgt)	E-9
First Sergeant (1stSgt)	E-8
Master Sergeant (MSgt)	E-8
Gunnery Sergeant (GySgt)	E-7
Staff Sergeant (SSgt)	E-6
Sergeant (Sgt)	E-5
Corporal (Cpl)	E-4
Lance Corporal (LCpl)	E-3
Private First Class (PFC)	E-2
Private (Pvt)	E-1

102.6 Discuss the procedures for rendering honors and the circumstances during which honors are rendered during colors, the national anthem, and boarding naval vessels. [pp. 1-2-23, 1-2-24]

If You are neither in formation nor in a vehicle - **Then** render the prescribed salute and hold the salute until the last note of music is sounded
If No flag is near **- Then** Face the music and salute
If You are in formation **- Then** Salute only on the command, "present arms.
If You are outdoors and uncovered - **Then** Stand at attention face the direction of the flag or music
If You are indoors **- Then** stand at attention face the music and/or flag.
If You are in a vehicle - **Then** Driver halt vehicle, passengers and driver remain seated at attention and do not salute.
If You are passing or being passed by an uncased color which is being paraded, presented, or is on formal display **- Then** Salute at six paces distance and hold the salute for six paces beyond or until it has passed your position by six paces.
If You are uncovered **- Then** Stand or march at attention when passing or being passed by an uncased color.

NOTE: When the flag is raised at morning colors or is lowered at evening colors, stand at attention at the first note of the National Anthem or "To the Colors" (standard), and render the prescribed salute. If you are engaged in some duty, which would become a safety hazard or risk to property, do not salute. Usually face the flag while saluting, but if your duty requires it, face in another direction. When the music sounds "Carry On," resume regular duties.

Render honors while boarding and departing ships:

Boarding a naval ship between 0800 to sunset.
Face aft upon reaching the top of the gangway (brow).
Salute the National Ensign.
Salute the officer of the deck (OD), who will be standing on the quarterdeck at the head of the gangway.
Request "Permission to come aboard."

Departing a naval ship between 0800 and sunset.
Salute the OD and request "Permission to go ashore."
Go to the brow, turn aft, and salute the National Ensign.

Board and depart a naval ship between sunset and 0800.
Follow the above procedures but do not turn aft and do not salute the National Ensign.

NOTE: Board a small boat or ship by inverse order of rank; the junior goes first, and the others follow according to rank.

103 UNITED STATES MARINE CORPS MISSION AND ORGANIZATION FUNDAMENTALS

References:

[a] Marine Corps Common Skills Handbook, Book 1A (PCN50600000900)
[b] MCRP 5-12D, Organization of Marine Corps Forces (PCN 14400005000)

103.1 Discuss the seven elements of the Marine Corps mission. [ref. a, p. 1-2-1]

Provide Fleet Marine Forces with combined arms and supporting air components for service with the United States Fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the execution of a naval campaign.

Provide detachments and organizations for service on armed vessels of the Navy and security detachments for the protection of naval property at naval stations and bases.

Develop, in coordination with the Army, Navy, and Air Force, the doctrine, tactics, techniques, and equipment employed by landing forces in amphibious operations.

Provide Marine forces for airborne operations, in coordination with the Army, Navy, and Air Force, according to the doctrine established by the Joint Chiefs of Staff.

Develop, in coordination with the Army, Navy, and Air Force, the doctrine, procedures, and equipment for airborne operations.

Expand peacetime components to meet wartime needs according to the joint mobilization plans.

Perform such other duties as the President may direct.

103.2 Discuss the two parallel chains of command that exist within the Marine Corps. [ref. b, p. 1-1]

Two parallel chains of command—Service and operational

The Service chain begins with the President, through the Secretary of Defense and continues through the Secretary of the Navy and the Commandant of the Marine Corps
The operational chain runs from the President, through the Secretary of Defense, directly to commanders of combatant commands for missions and forces assigned to their commands. Marine Corps component commanders provide operational forces to commanders of combatant commands and other operational commanders as required.

103.3 Identify and discuss the three Marine Corps operating forces. [ref. b, pp. 1-1 thru 1-3]

The Marine Corps' operating forces consist of:

Marine Corps forces (MARFOR) Marine Corps forces are organized as MAGTFs and are either employed as part of naval expeditionary forces or separately as part of larger joint or combined forces. The commanders of MARFOR Atlantic and Pacific serve as Marine Corps component commanders to their respective combatant commanders and may also serve as commanding generals of Fleet Marine Forces (FMFs) Atlantic, Pacific, and Europe. As commanding

generals, with the status of a naval type commander, they provide forces for service with Commander US Atlantic Fleet, Commander US Pacific Fleet, and Commander US Naval Forces Europe, respectively.

Marine Corps security forces (MCSF) at naval installations- The MCSF include approximately 3,400 Marines who protect key naval installations and facilities worldwide. Although not assigned to combatant commands, they are part of the operating forces of the Marine Corps. These security forces include Marine barracks and Marine security force companies in the continental United States (CONUS) and abroad, as well as Marine detachments afloat.

Marine security guard detachments at embassies and consulates around the globe - The Marine security guard battalion provides forces to the Department of State for embassy security. These Marines are currently assigned to 121 diplomatic posts in 115 countries throughout the world

103.4 Discuss the purpose of the Headquarters Marine Corps (HQMC). [ref. b, p.1-6]

Headquarters, U.S. Marine Corps, consists of the Commandant of the Marine Corps and those staff agencies that advise and assist the Commandant in discharging those responsibilities prescribed by law and higher authority. The internal organization of Headquarters, U.S. Marine Corps is described in the *Headquarters Marine Corps Organization Manua*l.

The Commandant of the Marine Corps is directly responsible to the Secretary of the Navy for the administration, discipline, internal organization, training, requirements, efficiency, and readiness of the Marine Corps; the operation of the Marine Corps materiel support system; and the total performance of the Marine Corps

103.5 Describe, in general, a Marine air-ground task force (MAGTF). [ref. b, p. 2-1]

The MAGTF is the Marine Corps' principle organization for the conduct of all missions across the range of military operations. MAGTFs are balanced, combined-arms forces with organic ground, aviation, and sustainment elements. They are flexible, task-organized forces that can respond rapidly to a contingency anywhere in the world and are able to conduct a variety of missions. Although organized and equipped to participate as part of naval expeditionary forces, MAGTFs also have the capability to conduct sustained operations ashore. The MAGTF provides a combatant commander or other operational commander with a versatile expeditionary force that is capable of responding to a broad range of crisis and conflict situations. MAGTFs are organized, trained, and equipped to perform missions ranging from humanitarian assistance to peacekeeping to intense combat and can operate in permissive, uncertain, and hostile environments. They may be shore-or sea-based in support of joint and multinational major operations and/or campaigns. MAGTFs deploy as amphibious, air-contingency, or maritime prepositioning forces (MPFs), either as part of a naval expeditionary force or via strategic lift. They can present a minimal or a highly visible presence and are able to project combat power ashore in measured degrees or can provide secure staging areas ashore for follow-on forces. MAGTFs are prepared for immediate deployment overseas into austere operating environments, bringing all means necessary to accomplish the mission. When deployed aboard amphibious shipping, MAGTFs maintain a continuous presence at strategic locations around the globe and can be rapidly moved to and indefinitely stationed at the scene of potential trouble. The MAGTF provides the JFC with the capability of reconstitution, which is the ability of an expeditionary force to regenerate, reorganize, replenish, and reorient itself for a new mission without having to return to its home base.

103.6 Discuss the organization and mission of the following Marine Expeditionary Forces (MEF) elements and their components: [ref. b, pp. 2-2, 2-3, 6-1, 6-2]

Command Element (CE) - The CE is the MAGTF headquarters. It is task organized to provide command and control capabilities (including intelligence and communications) necessary for effective planning, direction, and execution of all operations.

The MEF CE consists of:
Command Section.
G-1 Division (personnel and administration).
G-2 Division (intelligence and counterintelligence).
G-3 Division (operations and training).
G-4 Division (logistics).
G-5 Division (plans).
G-6 Division (communications and information systems).
Comptroller Division.
Communication Security Management Office.
Special Operations Training Group.
Staff Judge Advocate Branch.
Public Affairs Office Branch.

Mission: To provide command and control of the Marine Expeditionary Force (MEF). The MEF Command Element (CE) is responsible for the command, control, direction, planning and coordination of corps-level air, ground, and logistical operations of assigned forces, normally consisting of one or more Marine divisions, Marine aircraft wings, and force service support groups, and other separate units.

MHG
Marine Expeditionary Force (MEF) Headquarters Group (MHG) provides administrative, training, and logistical support while in CONUS and forward deployed to the MEF and MEB Command Elements. Additionally, function as Higher Headquarters for the four Major Subordinate Elements in order to allow MEF CE to execute warfighting functions in support of service and COCOM initiatives as required

MARCENT
Is designated as the Marine Corps service component for U.S. Central Command. MARCENT is responsible for all Marines Corps forces in the CENTCOM area of responsibility.

MFR
The mission of Marine Forces Reserve is to augment and reinforce active Marine forces in time of war, national emergency or contingency operations, provide personnel and operational tempo relief for the active forces in peacetime, and provide service to the community (for example, through Toys for Tots).

Marine Air Wing, Air Combat Element (ACE) - The ACE is task-organized to support the MAGTF mission by performing some or all of the six functions of Marine aviation. The ACE is normally built around an aviation organization that is augmented with appropriate air command and control, combat, combat support, and CSS units. The ACE can operate effectively from ships, expeditionary airfields, or austere forward operating sites and can readily and routinely transition between sea bases and expeditionary airfields without loss of capability. The ACE can vary in size and composition from an aviation detachment with specific capabilities to one or more MAWs.

Marine Division, Ground Combat Element (GCE) - The GCE is task organized to conduct

ground operations in support of the MAGTF mission. It is normally formed around an infantry organization reinforced with requisite artillery, reconnaissance, armor, and engineer forces and can vary in size and composition from a rifle platoon to one or more Marine divisions

Marine Logistic Group (MLG), Logistical Combat Element (LCE) -The LCE is task organized to provide the full range of CSS functions and capabilities needed to support the continued readiness and sustainability of the MAGTF as a whole. It is formed around a CSS headquarters and may vary in size and composition from a support detachment to one or more Marine MLGs

103.7 Identify the location of the three standing MEFs (MEF). [ref. b, p. 2-3]

I Marine expeditionary force (I MEF), based in southern California and Arizona;
II Marine expeditionary force (II MEF), based in North and South Carolina;
III Marine Expeditionary Force (III MEF), based in Japan and Hawaii. Each standing **MEF** consists of a permanent CE and one Marine division, MAW, and MLG.

103.8 Discuss the organization and mission of the following Marine Expeditionary Brigades (MEB) elements and their components: [ref. a, p. 1-2-33]

The MEB is a MAGTF built around a reinforced infantry regiment, an aircraft group, and a Combat Logistics Regiment(FWD). A brigadier general normally commands the MEB. As an expeditionary force, it is capable of rapid deployment and employment via amphibious shipping, strategic airlift, marrying with Maritime prepositioned Force (MPF) assets, or any combination thereof.

Command Element, (CE) - exercises command and control, is commanded by a general, and contains a SRIG detachment.

Air Combat Element, (ACE) - is a Marine aircraft group

Ground Combat Element, (GCE) - is a reinforced infantry regiment

Logistics Combat Element, (LCE) - is a CLR(FWD).

103.9 Discuss the organization and mission of the following Marine Expeditionary Units (MEUs) (Special Operations Capable(SOC)) elements and their components: [ref. b, pp. 2-4, 2-5, 6-3, 6-4]

With Re-enforcements includes:

ACE = CH-46, CH-53, Cobra's, UH-1EN, and Harriers

GCE = Infantry Battalion, CEB, Artillery, Recon, Tanks, LAR, and AAV

LCE = Supply, Motor T, Med, Dental, COMM, NBC etc…
(They bring all their own stuff)

The Marine expeditionary unit (special operations capable (MEU (SOC)) is the standard forward-deployed Marine expeditionary organization. Marine Corps Forces Atlantic and Pacific maintain forward-deployed MEUs (SOC) in the Mediterranean Sea, the western Pacific, and the Indian Ocean or Arabian Gulf region. The MEU (SOC) can be thought of both as a self-contained operating force capable of missions of limited scope and duration and as a forward-deployed extension of the Marine expeditionary force. The MEU (SOC) mission is to provide the NCA and the combatant commanders with a forward deployed, sea-based, rapid crisis

response capability to execute a full range of military operations. It is organized, trained, and equipped as a self-sustaining, general-purpose expeditionary MAGTF that possesses the capability to conduct operations across the spectrum of conflict, from military operations other than war, to amphibious and other conventional operations in support of various contingency requirements, including selected maritime special operations such as:

Reconnaissance and surveillance.
Specialized demolitions.
Tactical recovery of aircraft and personnel (TRAP).
Seizure/recovery of offshore energy facilities.
Seizure/recovery of selected personnel or materiel.
Visit, board, search, and seizure of vessels.
In-extremis hostage recovery.

Command Element - A standing CE. The mission of the MEU (SOC) CE is to provide command and control to the MEU (SOC). The MEU (SOC) CE is responsible for the command and control, direction, planning, and coordination of air, ground, and logistic operations of assigned forces, consisting of a Marine battalion landing team, Marine composite squadron, MEU service support group, and other separate units.

MEU (SOC) CE contains the following sections: Command section, Chaplain section, S-1 section, S-2 section, S-3 section, S-4 section, S-6 section, Headquarters commandant and Public affairs section.

Marine Air Wing, Air Combat Element (ACE) - A reinforced helicopter squadron with transport, utility, and attack helicopters, a detachment of vertical/short takeoff and landing (V/STOL) fixed-wing attack aircraft, and other detachments as required.

Ground Combat Element (GCE) - An infantry battalion reinforced with artillery, reconnaissance, engineer, armor, assault amphibian units, and other detachments as required.

Logistic Combat Element, (LCE) - A Combat Logistics Battalion.

103.10 Identify the location of each of the seven MEUs (SOC) command elements and the MEFs in which it resides. [ref. b, p. 2-4]

There are seven standing MEU (SOC) CE's.

Residing within I MEF are the 11th, 13th, and 15th MEUs (SOC);
Residing within II MEF are the 22nd, 24th, and 26th MEUs (SOC);
Residing within III MEF is the 31st MEU (SOC).

103.11 Discuss the organization and mission of the following Special Purpose Marine Air Ground Task Force elements (SPMAGTF)r components: [ref. a, p. 1-2-32]

Although not a basic MAGTF, a fourth type of MAGTF organization shall be designated as a Special Purpose MAGTF (SPMAGTF). It is normally used for a special purpose (e.g., disaster relief, humanitarian assistance, noncombatant evacuation operation, or security operations) or in unique instances (e.g., Exxon Valdez oil spill containment) where employment of one of the three basic MAGTFs would be inappropriate

Command Element (CE) - is structured to conduct command and control of operational functions and is tailored to the mission and task organization of the SPMAGTF.

Air Combat Element (ACE) - is a task-organized detachment of aircraft.

Ground Combat Element (GCE) - is composed of at least a platoon-sized element

Logistic Combat Element, (LCE) - is task-organized to meet the specific logistics support requirements of the SPMAGTF and is centered on the unit designated to provide most of the logistics support.

104 ADMINISTRATIVE FUNDAMENTALS

References:

[a] BUPERSINST 1610.10, Navy Performance Evaluation and Counseling System
[b] SECNAVINST 5216.5, Correspondence Manual
[c] NAVPERS 15560C, Navy Military Personnel Manual
[d] Marine Corps Common Skills Handbook, Book 1A (PCN 50600000900)
[e] 10804UM-01, Enlisted Distribution Verification Report User's Manual
[f] MCO P1700.24B Marine Corps Personal Services Manual
[g] MCO 1752.5A Sexual Assault Prevention and Response (SAPR) Program

104.1Discuss the following as they apply to the Navy performance evaluation/fitness report and counseling system: [ref. a, encl. 1, pp. 1 thru 5]

Reporting Senior - Commanding officers are reporting seniors by virtue of their command authority. Commanding officers may submit properly authorized fitness and evaluation reports on any member who has reported to them for duty, whether junior or senior to them in grade. The term "commanding officer" includes commanding officers of all services, and their civilian equivalents within the U.S. federal government. Officers in charge are commanding officers if they are in charge of commissioned or established activities listed in the Standard Navy Distribution List (SNDL). When a member is assigned to a non-U.S. government activity, the reporting senior is the member's U.S. administrative commander unless another reporting senior is assigned in orders or directives. These members may receive letter-type reports from the non-U.S. government activity for attachment to FITREPs or EVALs.

Delegated Reporting Seniors - Delegation of reporting senior authority is an actual transfer of that authority, and not merely an authorization to sign "by direction." For this reason, delegation is held to the highest level consistent with effective observation of performance, and commanding officers' oversight responsibilities are carefully defined. For specific direction concerning delegated reporting seniors, refer to the EVAL Manual, Annex B.

Immediate Superiors in Command (ISICs) - ISICs are reporting seniors for assigned commanding officers, and are authorized to assume the reporting senior authority of subordinate commanding officers whose capacity to act as reporting seniors becomes impaired.

Enlisted Reporting Seniors - Chief petty officers (E7-E9) may act as reporting seniors for members in the grades of E4 and below only. The next senior officer in the chain of command having reporting authority for the members concerned must sign all other reports.

Raters and senior raters - Evaluation reports on E6 and below require the signatures of a rater and senior rater as well as the reporting senior. This ensures that the Navy's senior enlisted and junior officer supervisors are properly included in the enlisted evaluation process. The rater should be a Navy chief petty officer whenever possible, but if none is available within the command, may be a military or civilian supervisor who is an E7 equivalent or higher. Typically, the senior rater will be the member's division officer or department head. The senior rater may be omitted where the reporting senior is the rater's immediate supervisor.

Performance counseling - Counseling methods are up to the commanding officer. It is the CO's program. Performance counseling must be provided at the mid-point of the periodic report cycle, and when the report is signed. The counselor will be a supervisor who participates in the member's EVAL or FITREP preparation. Commanding officers will guide the counseling program and monitor counselor performance and results. The objectives are to provide feedback to the member, and to motivate and assist improvement. Performance counseling starts with a fair assessment of the member's performance and capabilities, to which the member contributes. It identifies the member's strengths and motivates their further

improvement. It also addresses important weaknesses, but should not dwell on unimportant ones. It should avoid personality and concentrate on performance. The FITREP and EVAL forms are used as counseling worksheets, and must be signed by the counselor and member. Counselors may use the tick marks next to each performance standard, and/or assign tentative trait grades, and may write comments. Under no circumstances should a future promotion recommendation be promised during counseling.

Types of reports – There are three types of reports.

Regular reports are the foundation of the performance record. Regular reports are submitted periodically according to the schedule in Table I, and on other occasions specified in the EVAL Manual. They must cover, day-for-day, all Naval service on active duty or in drilling Reserve programs, except for enlisted initial entry training and other limited circumstances.

Concurrent reports provide a record of significant performance in an additional duty (ADDU) or temporary additional duty (TEMADD) status. They are optional unless directed by higher authority, and may not be submitted by anyone in the regular reporting senior's direct chain of command.

Operational Commander reports are optional, and may only be submitted on commanding officers or officers in charge by operational commanders who are not also their regular reporting seniors. A Concurrent report, but not an Operational Commander report, must be countersigned by the regular reporting senior, who has a limited power to reject it, and may also make it the Regular report for the period concerned.

Performance Information Memorandum(PIM): is used to report performance information to another command for consideration in a FITREP, CHIEFEVAL or EVAL. A regular evaluation is the preferred report for significant, observed performance. However, a PIM may be used when:

> Duty, TEMDU, DUINS, TEMDUINS for a period of 3 months or less in a place of a regular report
> TEMADD of any length as an alternative to a concurrent report
> Performance not under written orders that should be brought to the reporting senior’s attention.

Administrative blocks - The administrative blocks identify the report, define the context in which it was received, and make it more informative to detailers and selection boards. They also permit computerized BUPERS compliance audits to assure fairness to all members and reporting seniors. Each command should have a quality review procedure for FITREPs and EVALs. The BUPERS automated data file will not accept incorrect entries, and reports may then have to be returned to the reporting senior for correction. The BUPERS-supplied report preparation software will prevent many incorrect entries

Guidance on trait grade - The meanings of the trait grades are printed on the form, along with representative performance standards. The 5.0 grade is reserved for performance which is far above standards, and is notable for its exemplary or leadership quality. The 1.0 grade means generally poor performance, which is not improving, or unsatisfactory performance with respect to a single standard. For the majority of sailors and officers, most of the trait grades should be in the 2.0 to 4.0 range. Arbitrarily "two-blocking" the trait grades will be detrimental for two reasons. First, the reporting senior's average trait grade will be available to detailers and selection boards for comparison purposes. Second, it will be difficult for the reporting senior to allocate promotion recommendations if everyone's trait grades are the same.

Comments block - should be based on verifiable facts. Use input from the member and the member's immediate supervisor(s) as well as the raters' and reporting senior's personal observations. Do not use underlining, **boldfac**e, *italic*s,** centering **, or other highlighting. Handwritten comments or additions to comments are not allowed, except that reports on E4 and below may be entirely or partially handwritten. Continuation sheets and enclosures are not allowed, except an endorsed statement submitted by the member, a flag endorsement where required, a civilian or foreign letter report, a letter-extension of a Concurrent/Regular report, or a classified letter-supplement. Substantiate all 1.0 grades any promotion recommendation of "Significant Problems," and any recommendation against retention, and treat the report as adverse. Any comment suggesting persistent weaknesses, continuing incapacity, or unsuitability for specific assignment or promotion also must be treated as adverse matter, regardless of grades assigned. Do not include classified matter in the report, and do not submit classified supplements unless absolutely necessary. Include required comments and address special interest items as appropriate. Do not include any of the prohibited comments. Style and content, space is limited. Avoid preambles and get directly to performance. Do not use puffed-up adjectives. Use direct, factual writing, which allows the performance to speak for itself. Bullet style is preferred. Give examples of performance and results. Quantify wherever possible, but don't stress quantity at the expense of quality. Avoid stock comments which make everyone sound alike. Don't rank numerically, e.g.," Number 3 of 7." Comparisons must be in general terms and supported by evidence, e.g., " Best . . . in the command, as demonstrated by . . . " Be consistent with the trait marks. Comment on poor performance or misconduct where necessary, but be judicious. Remember that the report is a permanent official record. Define acronyms. Avoid recommendations. Use the sections of the report that have been set aside for them.

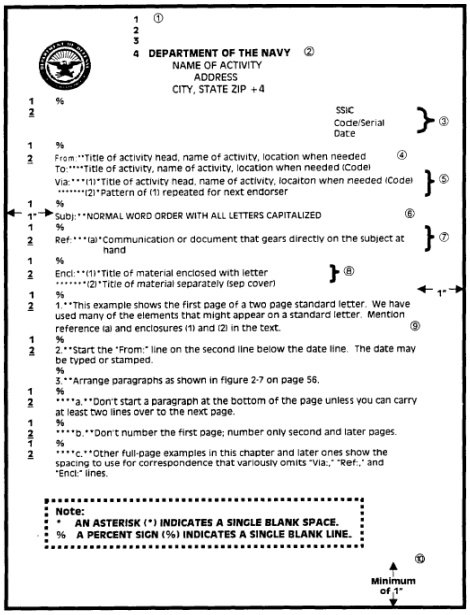
Promotion recommendation summary groups - Promotion recommendations should be consistent with the performance trait grades, and with the Individual Trait Average displayed on E1-E6 evaluations. Do not make "Early Promote" and "Must Promote" recommendations merely because quotas are available, and do not recommend any member as "Promotable" who could not, if called on, currently perform the basic duties of the next higher grade. Do not automatically place individuals in the "Early Promote" category when they are evaluated singly. Use the same standards for trait grades and recommendations as are used for other members of the command. For enlisted personnel, a recommendation of "Promotable" or above is the commanding officer's official recommendation for advancement, even if made by a delegated reporting senior. The enlisted performance mark for the report period is taken directly from the promotion recommendation, and is 4.0 for "Early Promote," 3.8 for "Must Promote," 3.6 for "Promotable," 3.4 for "Progressing," and 2.0 for "Significant Problems

Misconduct reporting - Adverse or downgraded fitness and evaluation reports may not be directed as punishment or used as an alternative to the proper disposition of misconduct under the Uniform Code of Military Justice (UCMJ). Reports may not mention nonpunitive censure, or investigatory, judicial, or other proceedings which have not been concluded or which have exonerated the member. Subject to these limitations, fitness and evaluation reports should take into account misconduct which has been established through reliable evidence to the reporting senior's satisfaction.

Responsibilities and rights of members - Members shall sign all of their Regular reports, unless impossible to do so, and shall sign other reports where possible. Members shall receive a copy of every report from the reporting senior at the time it is signed. Members have the right to submit statements to the record concerning their reports, either at the time of the report or within 2 years thereafter. Such statements are endorsed by the reporting senior, but cannot be rejected. Members have the right to review their records, and the responsibility to ensure that their records are complete. Members have the right to communicate directly with selection boards, and have various avenues by which to appeal for change or removal of their reports.

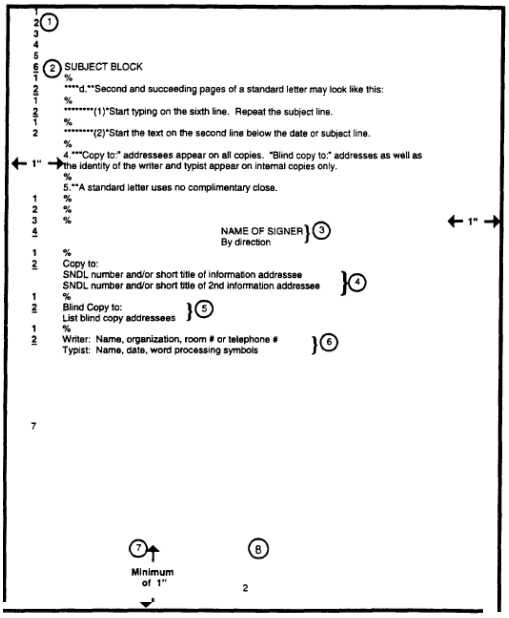
104.2 Discuss the formats for the following types of naval correspondence: [ref. b, pp. 33 thru 82]

Standard letter - Use the standard letter or one of its variations to correspond officially with addressees in DOD. Also use it when writing to addressees outside DOD if you know they have adopted this format. Outside users include the Coast Guard and some contractors who deal widely with the Navy and Marine Corps.



1. Typewriter Lines
2. Letterhead Format (page 11)
3. Identification Symbols (page 33)
4. From Line (page 36)
5. To & Via Lines (page 37)
6. Subject Line (page 38)
7. Reference Line (page 38)
8. Enclosure Line (page 42)
9. Text (page 44)
10. Margins (page 33)

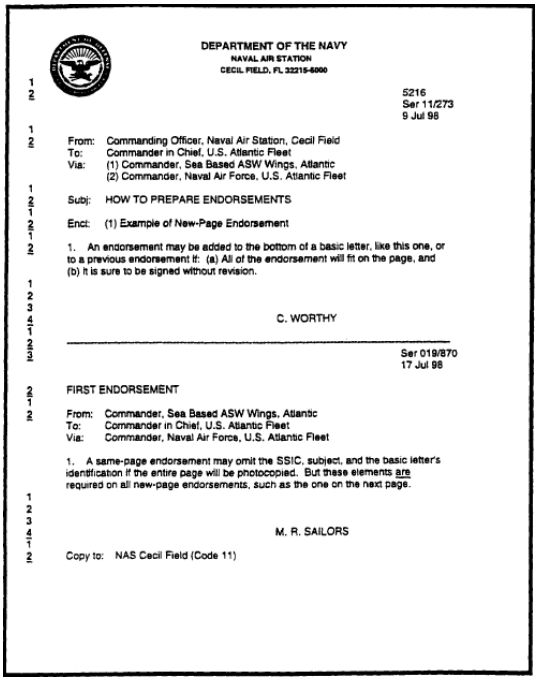
Figure 2-1. Standard Letter – First Page



1. Typewriter Lines
2. Subject Line (page 38)
3. Signature Block (page 44).
4. Copy-to Block (page 45)
5. Blind Copy-to Block. Appears only on internal copies (page 46).
6. Drafter's identification Block. Appears on internal copies only (page 47).
7. Margins (page 33)
8. Page number (page 47)

Figure 2-2. Standard Letter - Second Page

Endorsements - When a letter is transmitted "Via:" your activity, use an endorsement to forward comments, recommendations, or information. While an endorsement is mostly used for transmitting correspondence through the chain of command, you may also use it to redirect a letter. Don't use it to reply to a routine letter. Many endorsements simply forward letters without substantive comment to the next "Via:" addressee (if any) or action addressee. An endorsement may comment on the basic letter or any preceding endorsements. It may return the basic letter with a final reply or a request for more information. A "Via:" addressee may alter the order of any remaining "Via:" addressees or add others.



DEPARTMENT OF THE NAVY
NAVAL AIR STATION
CECIL FIELD, FL 32215-5000

5216
Ser 11/273
9 Jul 98

From: Commanding Officer, Naval Air Station, Cecil Field
To: Commander in Chief, U.S. Atlantic Fleet
Via: (1) Commander, Sea Based ASW Wings, Atlantic
(2) Commander, Naval Air Force, U.S. Atlantic Fleet

Subj: HOW TO PREPARE ENDORSEMENTS

Encl: (1) Example of New-Page Endorsement

1. An endorsement may be added to the bottom of a basic letter, like this one, or to a previous endorsement if: (a) All of the endorsement will fit on the page, and (b) it is sure to be signed without revision.

C. WORTHY

Ser 019/870
17 Jul 98

FIRST ENDORSEMENT

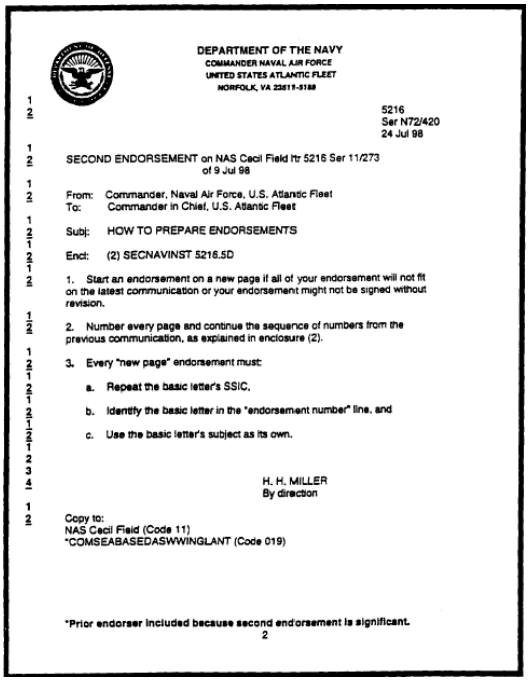
From: Commander, Sea Based ASW Wings, Atlantic
To: Commander in Chief, U.S. Atlantic Fleet
Via: Commander, Naval Air Force, U.S. Atlantic Fleet

1. A same-page endorsement may omit the SSIC, subject, and the basic letter's identification if the entire page will be photocopied. But these elements are required on all new-page endorsements, *such as the one on the next page.*

M. R. SAILORS

Copy to: NAS Cecil Field (Code 11)

Same-Page Endorsement



DEPARTMENT OF THE NAVY
COMMANDER NAVAL AIR FORCE
UNITED STATES ATLANTIC FLEET
NORFOLK, VA 23511-5188

5216
Ser N72/420
24 Jul 98

SECOND ENDORSEMENT on NAS Cecil Field ltr 5216 Ser 11/273 of 9 Jul 98

From: Commander, Naval Air Force, U.S. Atlantic Fleet
To: Commander in Chief, U.S. Atlantic Fleet

Subj: HOW TO PREPARE ENDORSEMENTS

Encl: (2) SECNAVINST 5216.5D

1. Start an endorsement on a new page if all of your endorsement will not fit on the latest communication or your endorsement might not be signed without revision.

2. Number every page and continue the sequence of numbers from the previous communication, as explained in enclosure (2).

3. Every "new page" endorsement must:

a. Repeat the basic letter's SSIC,

b. Identify the basic letter in the "endorsement number" line, and

c. Use the basic letter's subject as its own.

H. H. MILLER
By direction

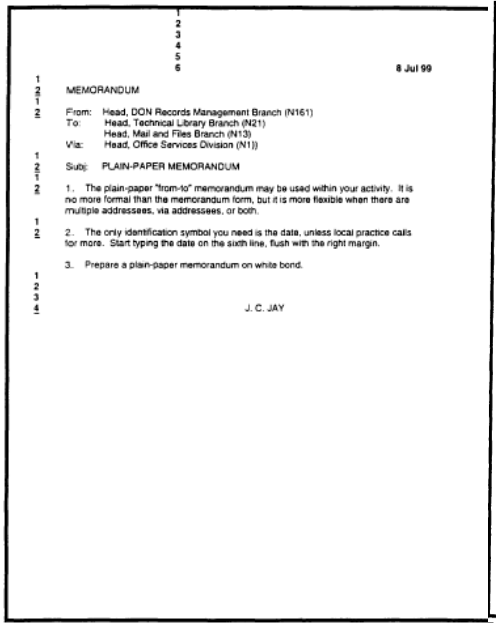
Copy to:
NAS Cecil Field (Code 11)
*COMSEABASEDASWWINGLANT (Code 019)

*Prior endorser included because second endorsement is significant.

2

New Page Endorsement

Memorandums – a memorandum provides an informal way to correspond within an activity or between DON activities. Subordinates may use it to correspond directly with each other on routine official business.



8 Jul 99

MEMORANDUM

From: Head, DON Records Management Branch (N161)
To: Head, Technical Library Branch (N21)
Head, Mail and Files Branch (N13)
Via: Head, Office Services Division (N1))

Subj: PLAIN-PAPER MEMORANDUM

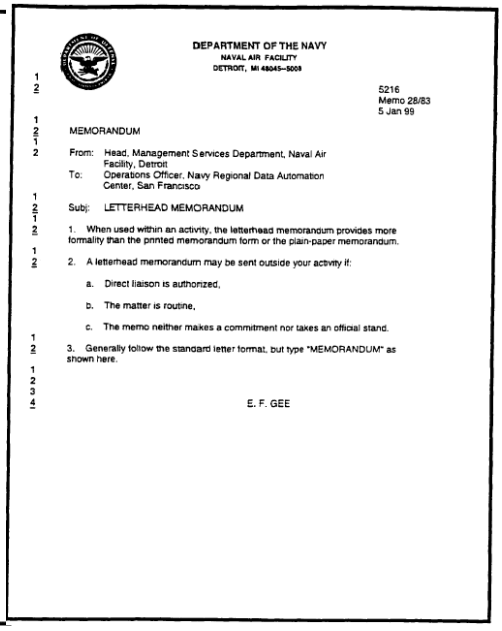
1. The plain-paper "from-to" memorandum may be used within your activity. It is no more formal than the memorandum form, but it is more flexible when there are multiple addressees, via addressees, or both.

2. The only identification symbol you need is the date, unless local practice calls for more. Start typing the date on the sixth line, flush with the right margin.

3. Prepare a plain-paper memorandum on white bond.

J. C. JAY

Plain-Paper "From-To" Memorandum



DEPARTMENT OF THE NAVY
NAVAL AIR FACILITY
DETROIT, MI 48045–5009

5216
Memo 28/83
5 Jan 99

MEMORANDUM

From: Head, Management Services Department, Naval Air Facility, Detroit
To: Operations Officer, Navy Regional Data Automation Center, San Francisco

Subj: LETTERHEAD MEMORANDUM

1. When used within an activity, the letterhead memorandum provides more formality than the printed memorandum form or the plain-paper memorandum.

2. A letterhead memorandum may be sent outside your activity if:

a. Direct liaison is authorized,

b. The matter is routine,

c. The memo neither makes a commitment nor takes an official stand.

3. Generally follow the standard letter format, but type "MEMORANDUM" as shown here.

E. F. GEE

Letterhead Memorandum

104.3 Discuss the purpose of the following enlisted service record pages: [ref. c, pp. 1070-270 thru 1070-320]

Page 2 - NAVPERS 1070/602, DEPENDENCY APPLICATION/RECORD OF EMERGENCY DATA AND DD 93, RECORD OF EMERGENCY DATA
Part I serves as an application for dependency allowances and is used to capture military spouse data.
Part II provides an immediately accessible, up-to-date record of emergency data and is the official document used to determine the following:
Person(s) to be notified in case of emergency or death.
Person(s) to receive the death gratuity when no spouse or child exists.
Person(s) to receive unpaid pay and allowances (arrears of pay) including money accrued during a missing or captured status, unused leave, travel, per diem, transportation of family members, transportation of household goods, and
savings deposits found due from Department of the Navy.
Dependents of member to receive allotment of pay if member is missing or unable to transmit funds.
Commercial insurance companies to be notified in case of death.
National Service Life Insurance, Servicemen's Group Life Insurance, and Veterans Group Life Insurance in effect.

Page 4 - NAVPERS 1070/604, ENLISTED QUALIFICATIONS HISTORY
NAVPERS 1070/604 for USN and USNR enlisted members is a chronological history of their occupational and training related qualifications and their awards and commendations.

Page 5 - NAVPERS 1070/605, HISTORY OF ASSIGNMENTS
NAVPERS 1070/605 for USN and USNR enlisted members is a chronological record of duty assignments and is maintained throughout member's active and inactive duty career

Page 13 - NAVPERS 1070/613, ADMINISTRATIVE REMARKS
NAVPERS 1070/613 services as a chronological record of significant miscellaneous entries which are not provided for elsewhere or where more detailed information may be required to clarify entries on other pages of the U.S. Navy Enlisted (Field) Service Record (FSR).

104.4 Explain the purpose of the Uniform Code of Military Justice, who is responsible for upholding it, and who is subject to it. [ref. d, pp. 1-1-1, 1-1-2]

Purpose - Promotes good order and discipline. and provides a basis for the administration of justice for the Armed Forces.

Who is responsible for upholding the UCMJ - All members of the Armed Forces

Who is subject to the UCMJ –
Members of a regular or reserve component of the Armed Forces
Members of the Fleet Reserve and Fleet Marine Corps Reserve
Members of a reserve component while on inactive-duty training
Members of the Army National Guard and the Air National Guard only when federalized
In time of war, all persons serving with or accompanying an Armed Force in the field
Volunteers from the time of their muster or acceptance into the Armed Forces
Inductees from the time of their actual induction into the Armed Forces
Cadets, aviation cadets, and midshipmen
Retired members of a regular component who are entitled to pay
Retired members of a reserve component who are receiving hospitalization from an Armed Force

104.5 Explain the differences in the following types of courts-martial: [ref. d, pp. 1-1-7, 1-1-8]

Summary - A summary court-martial is composed of one active duty commissioned officer with the rank of captain or higher. The lowest level of authority to convene a summary court-martial is normally a battalion commander or other equivalent; however, under special circumstances, the superiors of a commanding officer of a separate or detached command may grant the authority. A summary court-martial may adjudge any punishment not forbidden by the UCMJ, except confinement for more than 1 month with hard labor, without confinement for more than 45 days, restriction for more than 2 months, or forfeiture of more than 1 month's pay. In the case of sergeants and above, a summary court-martial may not award a reduction of more than one rank and hard labor without confinement. Except aboard ship, you may refuse a summary court-martial and may request a special or general court-martial. However, a conviction at a special or general courts-martial results in a felony conviction. A summary court-martial may not try a commissioned officer, warrant officer, cadet, or midshipman for any capital offenses. You cannot be compelled to accept a summary court-martial. Since a summary court-martial is less formal than the other two types of court-martial, you may refuse to accept trial by summary courts-martial and may request a special court-martial. However, you should be aware that conviction by a special or general court-martial constitutes a felony conviction.

Special court-martial -. A special court-martial can be composed of a military judge alone, or a military judge and not less than three active-duty armed service members. The impartial personnel can be commissioned officers, warrant officers, or enlisted personnel. If you, the accused, are a commissioned officer, no member can be a warrant officer or enlisted person. If you, the accused, are an enlisted person, you may request that at least one third of the

members of the court be enlisted. The lowest level of authority to convene a special court-martial is normally a squadron or battalion commander or equivalent. However, under special circumstances, the superiors of a commanding officer of a separate or detached command may grant the authority. A special court-martial may adjudge any punishment not forbidden by the UCMJ, including confinement for 6 months, hard labor without confinement for 3 months, or forfeiture of more than two-thirds pay for 6 months, a bad conduct discharge, and reduction in rank.Normally, a special court-martial may not try any capital offense when there is a mandatory punishment beyond the maximum power of a special court-martial.

General - A general court-martial can be composed of a military judge alone or a military judge and not less than five impartial active-duty armed services personnel. The impartial personnel can be commissioned officers, warrant officers, or enlisted personnel. If you, the accused, are a commissioned officer, no member can be a warrant officer or enlisted person. If you, the accused, are an enlisted person, you may request that at least one third of the court's members be enlisted.The lowest level of authority to convene a general court-martial is usually the commanding general of a division, wing, base, or the equivalent. However, under special circumstances, the commanding officer of a separate or detached command may be granted the authority by his superiors.A general court-martial may adjudge any punishment not forbidden by the UCMJ.

104.6 Explain the following in regards to Non-Judicial Punishment (NJP): [ref. d, p 1-1-11]

The value of NJP to the commander and to the Marine - The purpose of NJP is to give the commander the ability to maintain good order and discipline

When NJP can be administered - NJP is given for minor offenses of the UCMJ. A minor offense is one for which the maximum sentence, if tried by a general court-martial, does not include a dishonorable discharge or confinement of greater than one year.

The right to refuse NJP - Before the imposition of NJP proceedings, the accused may demand trial by court-martial in lieu of NJP

The right and procedures to appeal - The accused may appeal the punishment if he considers it unjust or disproportionate to the offense.

The procedures to appeal;
By submitting a written statement describing why he considers the punishment unjust or disproportionate
Within 5 days of imposition of punishment
Through the chain of command to the next superior authority

104.7 Explain the Marine Corps position on the following policies:
[ref. d, pp. 1-7-13 thru 1-7-21]

Sexual harassment - Sexual harassment is unacceptable and unprofessional behavior for military or civilian personnel that is dealt with through the
leadership and supervisory structure. Leaders and supervisors have a dual responsibility to create and maintain or defend an environment of mutual respect in which civilian and military men and women can function and conduct appropriate and continuous training to promote understanding and eliminate sexual harassment.

Sexual assault: is a criminal act and will not be tolerated. The Marine Corps' goal is to eliminate sexual assaults within the Corps and to assist those Marines and Sailors assigned to Marine Corps units affected by sexual assault. To facilitate that goal, commanders shall ensure

all leaders and supervisors within their command are familiar with this Order and the guidance published in its enclosure.

Equal opportunity - Provide equal opportunity for all military members without regard to race, color, creed, sex, age, or national origin consistent with the physical and mental capabilities of the individual.
Promote Marines based on merit, not quotas.
Promote Marines who meet the minimum eligibility service and grade criteria (TIS, TIG) for promotion and also
Promote equal opportunity for all Marines.

Hazing - No Marine or service member attached to a Marine command, including Marine detachments, may engage in hazing or consent to acts of hazing being committed upon them. No one in a supervisory position may, by act, word, or omission, condone or ignore hazing if he or she knows or reasonably should have known that hazing may occur. Consent to hazing is not a defense to violating MCO 1700.28. b. Any violation, attempted violation, or solicitation of another to violate MCO 1700.28 subjects involved members to disciplinary action under Article 92 of the Uniform Code of Military Justice (UCMJ).

Fraternization - Defined as duty relationships and social and business contacts between and among Marines of different grades. These relationships are inconsistent with the traditional standards of good order, discipline, and mutual respect that have always existed between Marines of senior and lesser grade. Fraternization violates good order and discipline, which is the essential quality of behavior within the Armed Forces. Marines will behave in a manner that is consistent with traditional standards of good order and discipline, mutual respect, and the customs of the Marine Corps
Describe behavior that would be considered fraternization - Any behavior which would present the appearance of undue familiarity or informality between and among the ranks.
EXAMPLES: Calling seniors by their first name, officers dating enlisted personnel.

Suicide: The Suicide Prevention Program emphasizes the importance of early identification and intervention of problems that detract from personal and unit readiness. Additionally this program emphasizes the importance of data collection and analysis to inform, evaluate, and refine future prevention efforts. Programs should emphasize prevention, intervention and data collection.

104.8 State the purpose and discuss the contents of the Enlisted Distribution Verification (EDVR). [ref. e, pp.1-1, 1-2]

The EDVR is a monthly statement of an activity's enlisted personnel account. It lists all individuals assigned and provides:

A summary by distribution community of the present and future manning status of the activity.
A common reference for communicating manning status between an activity and its Manning Control Authority (MCA).
A statement of account for verification by the Personnel and Pay Services Unit Identification Code (PPSUIC) activity.
A permanent historical record of an activity's enlisted personnel account.

Contents:

EDVR sections 1 through 3 contain information that has been extracted from the account because it requires special attention or action by the activity. To assist activities in managing

enlisted personnel, these sections also identify future personnel events. Additionally, EDVR section 3 contains an alphabetic listing of all enlisted members assigned to the activity.

EDVR section 4 contains the total personnel account of the activity, including those members reflected in sections 1 through 3.

EDVR section 5 contains the Personnel Status Summary.

EDVR section 6 contains Distribution Navy Enlisted Classification Code (DNEC) Management.

EDVR section 7 contains NEC Billet and Personnel Inventory.

EDVR section 8 contains a list of individuals who are qualified in Navy Enlisted Classification Codes (NECs).

EDVR sections 9 and 10 contain the Diary Message Summary and Duty Preference Listing, respectively.

EDVR section 11 contains individual security data, citizenship code, involuntary extension months, Pay Entry Base Date (PEBD), Time in Rate (TIR), Advancement Effective Date, and FORMAN Status and Action Date.

EDVR section 12 contains a listing of both officer and enlisted personnel in an embarked or Temporary Additional Duty (TAD) status to augment normal manning. This listing also includes commands that are embarked onboard another command.
Exception. The EDVR for activity accounts with a MCA code of "X" (Others, Patients and Students) will not contain information in EDVR sections 1, 2 and 5 through 8. This type of account will only contain information in EDVR sections 3, 4, 9, 10, 11 and 12.

105 OPERATIONAL RISK MANAGEMENT AND OCCUPATIONAL SAFETY FUNDAMENTALS

References:

[a] MCO 3500.27A, Operational Risk Management (ORM)
[b] MCO P5100.8F, Marine Corps Occupational Safety and Health Program
[c] OPNAVINST 5100.19C, Navy Occupational Safety and Health Program Manual for Afloat

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105.1 Discuss the term ORM and the concept of the ORM process. [ref. a, encl. 1, pp. 1, 2]

ORM - is a decision making tool used by people at all levels to increase operational effectiveness by anticipating hazards and reducing the potential for loss, thereby increasing the probability of a successful mission.

ORM - Increases our ability to make informed decisions by providing the best baseline of knowledge and experience available.

ORM - Minimizes risks to acceptable levels, commensurate with mission accomplishment. The amount of risk we will take in war is much greater than that we should be willing to take in peace, but the process is the same. Applying the ORM process will reduce mishaps, lower costs, and provide for more efficient use of resources.

105.2 Discuss the following ORM terms: [ref. a, encl. 1, p. 2]

Hazard - A condition with the potential to cause personal injury or death, property damage or mission degradation.

Risk - An expression of possible loss in terms of severity and probability.

Risk assessment - The process of detecting hazards and assessing associated risks.

105.3 Explain the five-step process of ORM. [ref. a, encl. 1, pp. 2, 3

Identify Hazards - Begin with an outline or chart of the major steps in the operation (operational analysis). Next, conduct a Preliminary Hazard Analysis by listing all of the hazards associated with each step in the operational analysis along with possible causes for those hazards.

Assess Hazards - For each hazard identified, determine the associated degree of risk in terms of probability and severity. Although not required, the use of a matrix may be helpful in assessing hazards.

Make Risk Decisions - First, develop risk control options. Start with the most serious risk first and select controls that will reduce the risk to a minimum consistent with mission accomplishment. With selected controls in place, decide if the benefit of the operation outweighs the risk. If risk outweighs benefit or if assistance is required to implement controls, communicate with higher authority in the chain of command.

Implement Controls - Measures that can be used to eliminate hazards or reduce the degree of risk.

Supervise - Conduct follow-up evaluations of the controls to ensure they remain in place and have the desired effect. Monitor for changes, which may require further ORM. Take corrective action when necessary.

105.4 Explain the four principles of ORM. [ref. a, encl. 1, pp. 4, 5]

Accept risk when benefits outweigh the cost. Fleet Marine Force Manual I (WARFIGHTING) states, "Risk is inherent in war and is involved in every mission. Risk is also related to gain; normally greater potential gain requires greater risk." Our naval tradition is built upon principles of seizing the initiative and taking decisive action. The goal of ORM is not to eliminate risk, but to manage the risk so that the mission can be accomplished with the minimum amount of loss.

Accept no unnecessary risk. Fleet Marine Force Manual I also states, "We should clearly understand that the acceptance of risk does not equate to the imprudent willingness to gamble. Take only risks, which are necessary to accomplish the mission.

Anticipate and manage risk by planning. Risks are more easily controlled when they are identified early in the planning process.

Make risk decisions at the right level. Risk management decisions are made by the leader directly responsible for the operation. Prudence, experience, judgment, intuition and situational awareness of leaders directly involved in the planning and execution of the mission are the critical elements in making effective risk management decisions. When the leader responsible for executing the mission determines that the risk associated with that mission cannot be controlled at his/her level, or goes beyond the commander's stated intent, he/she shall elevate the decision to their chain of command.

105.5 Discuss the requirements and give examples of each of the following Personal Protection Equipment (PPE): [ref. b, art.13004 thru 13007]

Head protection - Safety helmets protect against impact, penetration, and electric shock. Head-hazardous areas are designated where there is reasonable possibility of head injury caused by cuts, bumps, falling or flying objects, and from limited electric shock and burns. Industrial head protection appropriate to exposure shall be worn during the entire work shift by Marine Corps personnel assigned to head-hazardous or hardhat areas. Any other personnel entering head-hazardous areas shall wear appropriate head protection.

Hearing protection - Hearing protective devices shall be worn by all personnel when they enter or work in an area where the operations generate noise levels of, greater than 84 dBA (8 hour TWA) sound level, 140 dB peak sound pressure level or greater. A combination of insert type and circumaural hearing protective devices (double protection) shall be worn in all areas where noise levels exceed 104 dBA (8 hour TWA) sound level. Additionally, all personnel exposed to gunfire in a training situation or to artillery, mortar, or missile firing, under any circumstances, shall wear hearing protective devices.

Foot protection - All Marine Corps personnel occupationally exposed to foot-hazardous operations or areas shall be furnished appropriate safety footwear at organizational expense. Foot-hazardous operations are those, which have a high incidence of, or a potential for, foot or toe injuries. Some of these operations or areas include; construction material handling, maintenance, transportation, weapons, supply, warehousing. Vehicle maintenance facilities, aircraft maintenance, fuels, and avionics.

Eye protection - Marine Corps personnel working in eye-hazardous areas or operations identified in PPE survey shall be provided adequate eye protection at government expense. All persons entering an eye-hazardous area or a hazard radius of an eye-hazardous operation, including other workers, supervisors, or visitors, shall also be required to wear eye protection.

105.6 Define the following terms: [ref. c, pp. B3-1, B3-2]

Hazardous material - Any material that, because of its quantity, concentration, or physical or chemical characteristics, may pose a substantial hazard to human health or the environment when incorrectly used, purposefully released, or accidentally spilled.

Hazardous waste - A discarded material (liquid, solid, Or gas) which meets the definition of HM and/or is designated as a hazardous waste by the Environmental Protection Agency or a State authority.

105.7 Explain the purpose and information contained on the Material Safety Data Sheet (MSDS). [ref. c, pp. B3-6, B3-7]

MSDS - are technical bulletins containing information about materials, such as composition, chemical, and physical characteristics, health and safety hazards, and precautions for safe handling and use. MSDSS shall be maintained for every item of HM aboard either through the HMIS or by hard copy for open purchased items. They shall be readily accessible to supervisors and personnel who actually use or handle HM. Supervisors are required to provide instruction in MSDS understanding and use. All personnel using HM shall be trained on the dangers and precautions contained within the MSDS before they actually use those materials.

106 GENERAL COMBAT LEADERSHIP FUNDAMENTALS

References:

[a] Marine Corps Common Skills Handbook, Book 1A (PCN 50600000900)
[b] USMC, Marine Corps University Sergeant's Course (SCRS0810)

106.1 Identify and explain the nine common elements found in a combat environment. [ref. a, p. 1-8-3]

Violent, unnerving sights and sounds
Casualties
Confusion and lack of information
Isolation
Communications breakdown
Individual discomfort and physical fatigue
Fear, stress, and mental fatigue
Continuous operations
Homesickness

106.2 Explain the characteristics that enable Marines and Sailors to overcome fear. [ref. a, p. 1-8-7]

Morale - is the individual's state of mind. It depends on individual attitude toward everything that affects him/her, fellow Marines, leaders, Marine life in general, and other things important to the individual.

Discipline - is the individual or group attitude that ensures prompt obedience to orders and initiation of appropriate action in the absence of orders.

Esprit de corps - is the loyalty to, pride in, and enthusiasm for the unit shown by its members. It implies devotion and loyalty to the unit and deep regard for the unit's history, traditions, and honor.

Proficiency - is the technical, tactical, and physical ability to perform the job or mission.

Motivation - is based on psychological factors such as needs, desires, and impulses that cause a person to act. For a Marine, commitment and pride in the unit and Corps is generally the basis for combat motivation.

106.3 Discuss and explain the six troop leading steps.(BAMCIS) [ref. b, pp. 0810H-2 thru 0810H-5]

The acronym BAMCIS - is utilized to memorize the troop leading step yet many leaders do not apply it. Understanding it is the first step in applying it.

Begin planning.
- Use METT-T to begin estimates of the situation based on content of the order received from the next senior echelon.
- Terrain orientation as seen from a vantage point, map, or aerial photograph.
- Plan use of available time for personal/subordinates reconnaissance and planning
- Movement of the unit, (when movement and planning cannot be conducted concurrently)
- Formulate a tentative plan of action based on the preliminary estimate of the situation, the higher commander's order, and the commander's intent.

Arrange for reconnaissance.
- Reconnaissance
- Movement of the unit, to include the route, persons to accompany the commander/leader and the schedule of prearranged meetings with adjacent and supporting unit leaders.
- Issuance of the order, subordinate leaders are notified of time and place where the order will be issued and a time and place for prearranged meetings with adjacent and supporting unit leaders for coordination.

Make reconnaissance.
- Revise the estimate of the situation and preliminary plan, as necessary.
- Select a vantage point from which to orient subordinates.
- Effect coordination with adjacent and supporting unit leaders, as planned.
- Confirm tactical control measures.

Complete the plan.
- Receive recommendations.
- Complete the estimate and arrive at a decision.
- Prepare the order.

Issue the order.
- Orient subordinate leaders.
- Ensure a thorough understanding of the orientation.
- Utilize standard operation order format.
- Ensure a thorough understanding of the order.

Supervise.
-The planning and preparation by subordinates and the conduct of operations.

106.4 Explain and interpret the six articles of the Code of Conduct. [ref. a, pp. 1-10-1, 1-10-2]

ARTICLE I. "I am an American, fighting in the armed forces which guard my country and our way of life. I am prepared to give my life in their defense."
INTERPRETATION: I am a Marine. I will fight and, if necessary, die for my country and our way of life.

ARTICLE II. "I will never surrender of my own free will. If in command, I will never surrender the members of my command while they still have the means to resist
INTERPRETATION: I will never surrender as long as I can fight, nor will I surrender the Marines in my charge if they can fight. If they should lose the means to fight, they will take all possible steps to evade capture.

ARTICLE III. "If I am captured, I will continue to resist by all means available. I will make every effort to escape and aid others to escape. I will accept neither parole nor special favors from the enemy."
INTERPRETATION: If I am captured, I will not take any favors or special treatment from the enemy, and I will resist and escape, if possible. If I can help Marines and others to escape, I will do so.

ARTICLE IV. "If I become a prisoner of war, I will keep faith with my fellow prisoners. I will give no information nor take part in any action which might be harmful to my comrades. If I am senior, I will take command. If not, I will obey the lawful orders of those appointed over me and will back them in every way."

INTERPRETATION: If I am a prisoner, I will help my fellow prisoners and not sell them out for favors from the enemy. If senior, I will take charge; if not, I will follow the orders of the senior prisoner, regardless of the branch of service (U. S. or allied nation).

ARTICLE V. "When questioned, should I become a prisoner of war, I am required to give name, rank, service number, and date of birth. I will evade answering further questions to the utmost of my ability. I will make no oral or written statements disloyal to my country and its allies, or harmful to their cause."
INTERPRETATION: If taken prisoner, I will give my service number (social security number), name, rank, and date of birth, as required. I may fill out a Geneva Convention Capture Card, but I am not required to. I may also write letters home and talk with the enemy about matters of health and welfare. I will say or sign nothing that may hurt my fellow prisoners, my country, or its allies.

ARTICLE VI. "I will never forget that I am an American, fighting for freedom, responsible for my actions, and dedicated to the principles which made my country free. I will trust in my God and in the United States of America."
INTERPRETATION: I am a Marine fighting to keep my country free. I will be responsible for my conduct, and I will trust in my God and my country

106.5 Discuss the rights of a prisoner of war. [ref. a, pp. 1-10-3 thru 1-10-6]

The right to receive sanitary, protective housing and clothing.
- Prisoners of war shall be quartered under conditions as favorable as those for the forces of the Detaining Power who are billeted in the same area. The said conditions shall make allowance for the habits and customs of the prisoners and shall in no case be prejudicial to their health. The foregoing provisions shall apply in particular to the dormitories of POWs as regards to both total surface and minimum cubic space and the general installations, bedding and blankets. The premises provided for the use of POWs individually or collectively shall be entirely protected from dampness and adequately heated and lighted, in particular between dusk and lights out. All precautions must be taken against the danger of fire. In any camp in which women and men POWs are accommodated, separate dormitories shall be provided for them.
-Clothing, underwear, and footwear shall be supplied to POWs in sufficient quantities by the Detaining Power, which shall make allowance for the climate of the region where the prisoners are detained. Uniforms of enemy Armed Forces captured by the Detaining Power should, if suitable for the climate, be made available to clothe POWs. The regular replacement and the Detaining Power shall assure repair of the above articles. In addition, working POWs shall receive appropriate clothing wherever the nature of the work demands.

The right to receive a sufficient amount of food to sustain good health.
-The basic daily food rations shall be sufficient in quantity, quality, and variety to keep POWs in good health and prevent loss of weight or the development of nutritional deficiencies. Account shall also be taken of the habitual diet of the prisoners. The Detaining Power shall supply working POWs with such additional rations necessary for the labor on which they are employed.
-Sufficient drinking water shall be supplied to POWs. The use of tobacco shall be permitted. Prisoners of war shall be associated with the preparation of their meals; they may be employed for that purpose in the kitchens. Furthermore, they shall be given the means of preparing themselves the additional food in their possession. Adequate premises shall be provided for messing. Collective disciplinary measures affecting food are prohibited

The right to receive adequate medical care.
-Every camp shall have an adequate infirmary where POWs may have the attention they require as well as appropriate diet. Isolation wards shall, if necessary, be set aside for cases of contagious or mental disease. Prisoners of war suffering from serious disease or whose

condition necessitates special treatment, a surgical operation, or hospital care must be admitted to any military or civilian medical unit where such treatment can be given, even if their repatriation is contemplated in the near future. Special facilities shall be afforded for the care to be given to the disabled, in particular to the blind, and for their rehabilitation pending repatriation.
- Prisoners of war shall have the attention, preferably, of medical personnel of the power on which they depend and, if possible, of their nationality. Prisoners of war may not be prevented from presenting themselves to the medical authorities for examination. The detaining authorities shall, upon request, issue to every prisoner who has undergone treatment, an official certificate indicating the nature of his or her illness or injury and the duration and kind of treatment received. A duplicate of this certificate shall be forwarded to the Central Prisoners of War Agency. The costs of treatment, including those of any apparatus necessary for the maintenance of POWs in good health, particularly dentures and other artificial appliances and spectacles shall be borne by the Detaining Power.
- Medical inspections of POWs shall be held at least once a month. They shall include the checking and the recording of the weight of each POW. Their purpose shall be, in particular, to supervise the general state of health, nutrition, and cleanliness of prisoners and detect contagious diseases, especially tuberculosis, malaria, and venereal disease. For this purpose, the most efficient methods available shall be employed, e. g., periodic mass miniature radiography for the early detection of tuberculosis.

The right to receive necessary facilities for proper hygiene.
- Prisoners of war may be interned only in premises located on land and affording every guarantee of hygiene and healthfulness. Except in particular cases, which are justified by the interest of the prisoners themselves, they shall not be interned in penitentiaries. Prisoners of war interned in unhealthy areas, or where the climate is injurious for them, shall be removed as soon as possible to a more favorable climate.

The right to practice religious faith.
-Prisoners of war shall enjoy complete latitude in the exercise of their religious duties, including attendance at the service of their faith on condition that they comply with the disciplinary routine prescribed by the military authorities. Adequate premises shall be provided where religious services may be held

The right to keep personal property except weapons, military equipment, and military documents.

- All effects and articles of personal use except arms, horses, military equipment, and military documents shall remain in the possession of POWs, likewise their metal helmets and gas masks and like articles issued for personal protection. Effects and articles used for their clothing or feeding shall likewise remain in their possession, even if such effects and articles belong to their regulation military equipment. At no time should POWs be without identity documents. The Detaining Power shall supply such documents to POWs who possess none.
- Badges of rank and nationality, decorations, and articles having above all a personal or sentimental value may not be taken from POWs. Sums of money carried by POWs may not be taken away from them except by order of an officer, after the amount and particulars of the owner have been recorded in a special register, and an itemized receipt has been given legibly inscribed with the name, rank, and unit of the person issuing the said receipt. Sums in the currency of the Detaining Power of which are changed into such currency at the prisoner's request shall be placed to the prisoner's credit.

The right to send and receive mail.
-Prisoners of war shall be allowed to send and receive letters and cards. If the Detaining Power deems it necessary to limit the number of letters and cards sent by each POW, the said number

shall not be less than two letters and four cards monthly, exclusive of the capture cards provided for in Artical 70, and conforming as closely as possible to the models annexed to the present convention. Further limitations may be imposed only if the Protecting Power is satisfied that it would be in the interests of the POWs concerned to do so owing to difficulties of translation caused by the Detaining Power's inability to find sufficient qualified linguists to carry out the necessary censorship.
- If limitations must be placed on the correspondence addressed to POWs, they may be ordered only by the power on which the prisoners depend, possibly at the request of the Detaining Power. Such letters and cards must be conveyed by the most rapid method at the disposal of the Detaining Power; they may not be delayed or retained for disciplinary reasons
-Prisoners of war who have been without news for a long period, are unable to receive news from their next of kin, or given news by the ordinary postal route, as well as those who are at a great distance from their homes shall be permitted to send telegrams, the fees being charged against the POW's accounts with the Detaining Power or paid in the currency at their disposal. They shall likewise benefit by this measure in cases of urgency. As a general rule, the correspondence of POW shall be written in their native language. The parties to the conflict may allow correspondence in other languages. Sacks containing POW mail must be securely sealed and labeled so as clearly to indicate their contents, and must be addressed to offices of destination.

The right to receive packages containing non-contraband items such as food, clothing, educational, religious, and recreational materials.
- Prisoners of war shall be allowed to receive, by post or by any other means, individual parcels or collective shipments containing in particular foodstuffs, clothing, medical supplies, and articles of a religious, educational, or recreational character which may meet their needs; including books, devotional articles, scientific equipment, examination papers, musical instruments, sports outfits, and materials allowing POWs to pursue their studies or their cultural activities.
- Such shipments shall in no way free the Detaining Power from the obligations imposed upon it by virtue of the present convention. The only limits which may be placed on these shipments shall be those proposed by the Protecting Power in the interest of the prisoners themselves, by the International Committee of the Red Cross, or any other organization giving assistance to the prisoners, in respect of their own shipments only, on account of exceptional strain on transport or communications.

The right to select a fellow POW to represent you.
- In all places where there are POWs, except in those where there are officers, the prisoners shall freely elect by secret ballot every 6 months, and also in case of vacancies, prisoners' representatives entrusted with representing them before the
military authorities, the Protecting Powers, the International Committee of the Red Cross, and any other organization which may assist them. These prisoners' representatives shall be eligible for reelection.
- In camps for officers and persons of equivalent status or in mixed camps, the senior officer among the POWs shall be recognized as the camp prisoners' representative. In camps for officers, he or she shall be assisted by one or more advisers chosen by the officers; in mixed camps, his or her assistants shall be chosen from among the POWs who are not officers and shall be elected by them.
- Officer POWs of the same nationality shall be stationed in labor camps for POWs to carry out the camp administration duties for which the POWs are responsible. These officers may be elected as prisoners' representatives under the first paragraph of this article. In such a case, the assistants to the prisoners' representatives shall be chosen from among those POWs who are not officers.

- Every representative elected must be approved by the Detaining Power before he or she has the right to commence his or her duties. Where the Detaining Power refuses to approve a POW elected by his or her fellow POWs, it must inform the Protecting Power of the reason for such refusal
- In all cases, the prisoners' representative must have the same nationality, language, and customs as the POWs whom he or she represents. Thus, POWs distributed in different sections of a camp, according to their nationality, language or customs shall have for each section their own prisoners' representative in accordance with the foregoing paragraphs

The right to receive humane treatment.
Prisoners of war must at all times be humanely treated. Any unlawful act or omission by the Detaining Power causing death or seriously endangering the health of a POW in its custody is prohibited and will be regarded as a serious breach of the present convention. In particular, no POW may be subjected to physical mutilation or to medical or scientific experiments of any kind, which are not justified by the medical, dental, or hospital treatment of the prisoner concerned and carried out in his or her interest.

The right to have a copy of the Geneva Convention and its annexes, including any special agreements, posted where it can be read. The Geneva Convention and its annexes, etc., must be written in the proper language and available upon request.
- Every POW camp shall be put under the immediate authority of a responsible commissioned officer belonging to the regular Armed Forces of the Detaining Power. Such officer shall have in his or her possession a copy of the present convention. He or she shall ensure that its provisions are known to the camp staff and the guard and shall be responsible, for its application.
- In every camp, the text of the present convention and its annexes and the contents of any special agreement provided for in Article 6, shall be posted, in the prisoners' own language, in places where all may read them. Copies shall be supplied, on request, to the prisoners who cannot have access to the copy which has been posted.

The right to have a copy of all camp regulations, notices, orders, and publications about POW conduct posted where it can be read. Regulations, notices, etc., must be in the proper language for POWs to understand and available upon request.
-Regulations, orders, notices and publications of every kind relating to the conduct of POWs shall be issued to them in a language which they understand. Such regulations, orders, and publications shall be posted in the manner described above and copies shall be handed to the prisoners' representative. Every order and command addressed to POWs individually must likewise be given in a language which they understand.

106.6 Discuss the obligations of a prisoner of war. [ref. a, p. 1-10-7]

Information Marines are required to give their captors.
- Name
- Rank
-Service number (social security number)
- Date of birth

Explain lawful obedience to rules and regulations.
- Obey lawful rules and regulations.

Explain responsibility to perform paid labor.
- Labor that is not military
- Not degrading
- Not dangerous
- Not unhealthy

Explain military discipline, courtesy, and rendering of honors responsibilities.
-Maintain military discipline in accordance with the rules and regulations governing the armed forces.
-Maintain courtesy and honors to all officers regardless of the branch of the service (U.S. or allied nation).

107 FIRST AID AND FIELD SANITATION FUNDAMENTALS

References:

[a] NAVEDTRA 14295, Hospital Corpsman
[b] Marine Corps Common Skills Handbook, Book 1B (PCN 50600000900)
[c] PHTLS Division 5 p. 491-593

107.1 Discuss the nine general first aid rules. [ref. a, p. 4-1]

-Take a moment to get organized. On your way to an accident scene, use a few the basic rules of first aid. Remain calm as you take charge of the situation, and act quickly but efficiently. Decide as soon as possible what has to be done and which one of the patient's injuries needs attention first.

-Unless contraindicated, make your preliminary examination in the position and place you find the victim. Moving the victim before this check could gravely endanger life, especially if the neck, back, or ribs are broken. Of course, if the situation is such that you or the victim is in danger, you must weigh this threat against the potential damage caused by premature transportation. If you decide to move the victim, do it quickly and gently to a safe location where proper first aid can be administered.

- In a multi-victim situation, limit your preliminary survey to observing for airway patency, breathing, and circulation, the ABCs of basic life support. Remember, irreversible brain damage can occur within 4 to 6 minutes if breathing has stopped. Bleeding from a severed artery can lethally drain the body in even less time. If both are present and you are alone, quickly handle the major hemorrhage first, and then work to get oxygen back into the system. Shock may allow the rescuer a few minutes of grace but is no less deadly in the long run.

- Examine the victim for fractures, especially in the skull, neck, spine, and rib areas. If any are present, prematurely moving the patient can easily lead to increased lung damage, permanent injury, or death. Fractures of the hip bone or extremities, though not as immediately life-threatening, may pierce vital tissue or blood vessels if mishandled.

- Remove enough clothing to get a clear idea of the extent of the injury. Rip along the seams, if possible, or cut. Removal of clothing in the normal way may aggravate hidden injuries. Respect the victim's modesty as you proceed, and do not allow the victim to become chilled.

- Keep the victim reassured and comfortable. If possible, do not allow the victim to see the wounds. The victim can endure pain and discomfort better if confident in your abilities. This is important because under normal conditions the Corpsman will not have strong pain relief medications right at hand.

- Avoid touching open wounds or burns with your fingers or unsterile objects, unless clean compresses and bandages are not available and it is imperative to stop severe bleeding.

- Unless contraindicated, position the unconscious or semiconscious victim on his side or back, with the head turned to the side to minimize choking or the aspirating of vomitus. Never give an unconscious person any substance by mouth.

- Always carry a litter patient feet first so that the rear bearer can constantly observe the victim for respiratory or circulatory distress.

107.2 Discuss the protocols for tactical and nontactical triage. [ref. a, p. 4-2]

Triage, a French word meaning "to sort" is the process of quickly assessing patients in a multiple-casualty incident and assigning patient a priority (or classification) for receiving treatment according to the severity of his illness or injuries. In the military, there are two types of triage, tactical and nontactical, and each type uses a different set of prioritizing criteria. The person in charge is responsible for balancing the human lives at stake against the realities of the tactical situation, the level of medical stock on hand, and the realistic capabilities of medical personnel on the scene. Triage is a dynamic process, and a patient's priority is subject to change as the situation progresses.

SORTING FOR TREATMENT (TACTICAL)
The following discussion refers primarily to battalion aid stations (BAS) (where neither helicopter nor rapid land evacuation is readily available) and to shipboard battle-dressing stations. Immediately upon arrival, sort the casualties into groups in the order listed below.

Class I Patients whose injuries require minor professional treatment that can be done on an outpatient or ambulatory basis. These personnel can be returned to duty in a short period of time.

Class II Patients whose injuries require immediate life-sustaining measures or are of a moderate nature. Initially, they require a minimum amount of time, personnel, and supplies.

Class III Patients for whom definitive treatment can be delayed without jeopardy to life or loss of limb.

Class IV Patients whose wounds or injuries would require extensive treatment beyond the immediate medical capabilities. Treatment of these casualties would be to the detriment of others

SORTING FOR TREATMENT (NONTACTICAL)
In civilian or nontactical situations, sorting of casualties is not significantly different from combat situations. There are four basic classes (priorities) of injuries, and the order of treatment of each is different.

Priority I Patients with correctable life-threatening illnesses or injuries such as respiratory arrest or obstruction, open chest or abdomen wounds, femur fractures, or critical or complicated burns.

Priority II Patients with serious but non-life-threatening illnesses or injuries such as moderate blood loss, open or multiple fractures (open increases priority), or eye injuries.

Priority III Patients with minor injuries such as soft tissue injuries, simple fractures, or minor to moderate burns.

Priority IV Patients who are dead or fatally injured. Fatal injuries include exposed brain matter, decapitation, and incineration.
As mentioned before, triage is an ongoing process. Depending on the treatment rendered, the amount of time elapsed, and the constitution of the casualty, you may have to reassign priorities. What may appear to be a minor wound on initial evaluation could develop into a case of profound shock. Or a casualty who required initial immediate treatment may be stabilized and downgraded to a delayed status

107.3 Explain the steps in performing a primary survey. [ref. c, p. 491-599]

Field assessments are normally performed in a systematic manner. The formal processes are known as the **primary survey** and the **secondary surve**y. The primary survey is a rapid initial assessment to detect and treat life-threatening conditions that require immediate care, followed by a status decision about the patient's stability and priority for immediate transport to a medical facility. The secondary survey is a complete and detailed assessment consisting of a subjective interview and an objective examination, including vital signs and head-to-toe survey. As stated earlier, the primary survey is a process carried out to detect and treat life-threatening conditions. As these conditions are detected, lifesaving measures are taken immediately, and early transport may be initiated. The information acquired before and upon your arrival on the scene provides you with a starting point for the primary survey. The primary survey is a treat-as-you-go process. As each major problem is detected, it is treated immediately, before moving on to the next. During the primary survey, you should be concerned with what are referred to as the

A = Airway. An obstructed airway may quickly lead to respiratory arrest and death. Assess responsiveness and, if necessary, open the airway.

B = Breathing. Respiratory arrest will quickly lead to cardiac arrest. Assess breathing, and, if necessary, provide rescue breathing. Look for and treat conditions that may compromise breathing, such as penetrating trauma to the chest.

C = Circulation. If the patient's heart has stopped, blood and oxygen are not being sent to the brain. Irreversible changes will begin to occur in the brain in 4 to 6 minutes; cell death will usually occur within 10 minutes. Assess circulation, and, if necessary, provide cardiopulmonary resuscitation (CPR). Also check for profuse bleeding that can be controlled. Assess and begin treatment for severe shock or the potential for severe shock.

D = Disability. Serious central nervous system injuries can lead to death. Assess the patient's level of consciousness and, if you suspect a head or neck injury, apply a rigid neck collar. Observe the neck before you cover it up. Also do a quick assessment of the patient's ability to move all extremities.

E = Expose. You cannot treat conditions you have not discovered. Remove clothing–especially if the patient is not alert or communicating with you–to see if you missed any life-threatening injuries. Protect the patient's privacy, and keep the patient warm with a blanket if necessary.

As soon as the ABCDE process is completed, you will need to make what is referred to as a status decision of the patient's condition. A status decision is a judgment about the severity of the patient's condition and whether the patient requires immediate transport to a medical facility without a secondary survey at the scene. Ideally, the ABCDE steps, status, and transport decision should be completed within 10 minutes of your arrival on the scene.

107.4 Identify the signs, symptoms, and general treatment procedures for shock. [ref. a, pp. 4-22 thru 4-25]

The essence of shock control and prevention is to recognize the onset of the condition and to start treatment before the symptoms fully develop. The following are general signs and symptoms of the development of shock:
- Restlessness and apprehension are early symptoms, often followed by apathy.
- Eyes may be glassy and dull. Pupils may be dilated. (These are also the symptoms of morphine use.)

- Breathing may be rapid or labored, often of the gasping, for air hunger, type. In the advanced stages of shock, breathing becomes shallow and irregular.
- The face and skin may be very pale or ashen gray; in the dark complexioned, the mucous membranes may be pale. The lips are often cyanotic.
- The skin feels cool and is covered with clammy sweat. The skins coolness is related to a decrease in the peripheral circulation.
- The pulse tends to become rapid, weak, and thready. If the blood pressure is severely lowered, the peripheral pulse may be absent. The pulse rate in hemorrhagic shock may reach 140 or higher. In neurogenic shock, however, the pulse rate is slowed, often below 60.
- The blood pressure is usually lowered in moderately severe shock; the systolic pressure drops below 100, while the pulse rises above 100. The body is compensating for circulatory fluid loss by peripheral vasoconstriction. This process tends to maintain the blood pressure at a nearly normal level despite a moderately severe loss of circulating blood volume. A point comes, however, when decompensation occurs, and a small amount of additional blood loss will produce a sudden, alarming fall in blood pressure.
- There may be nausea, vomiting, and dryness of the mouth, lips, and tongue.
- Surface veins may collapse.
- There are frequent complaints of thirst.
- The kidneys may shut down. Urine formation either ceases or greatly diminishes if the systolic blood pressure falls below 80 for long periods of time.
- The person may faint from inadequate venous blood return to the heart. This may be the result of a temporary gravitational pooling of the blood associated with standing up too quickly.

107.5 Discuss how to control hemorrhage by use of the following:
[ref. a, pp. 4-31 thru 4-34]

Pressure dressing - The best way to control external bleeding is by applying a compress to the wound and exerting pressure directly to the wound. If direct pressure does not stop the bleeding, pressure can also be applied at an appropriate pressure point. At times, elevation of an extremity is also helpful in controlling hemorrhage. The use of splints in conjunction with direct pressure can be beneficial. In those rare cases where bleeding cannot be controlled by any of these methods, you must use a tourniquet. If bleeding does not stop after a short period, try placing another compress or dressing over the first and securing it firmly in place. If bleeding still will not stop, try applying direct pressure with your hand over the compress or dressing. Remember that in cases of severe hemorrhage, it is less important to worry too much about finding appropriate materials or about the dangers of infection. The most important problem is to stop rapid exsanguination. If no material is available, simply thrust your hand into the wound. In most situations direct pressure is the first and best method to use in the control of hemorrhage

Pressure points - Bleeding can often be temporarily controlled by applying hand pressure to the appropriate pressure point. A pressure point is the spot where the main artery to an injured part lies near the skin surface and over a bone. Apply pressure at this point with the fingers (digital pressure) or with the heel of the hand. No first aid materials are required. The object of the pressure is to compress the artery against the bone, thus shutting off the flow of blood from the heart to the wound. There are 11 principal points on each side of the body where hand or finger pressure can be used to stop hemorrhage. It is very tiring to apply digital pressure, and it can seldom be maintained for more than 15 minutes. Pressure points are recommended for use while direct pressure is being applied to a serious wound by a second rescuer. Using the pressure-point technique is also advised after a compress, bandage, or dressing has been applied to the wound, since this method will slow the flow of blood to the area, thus giving the direct pressure technique a better chance to stop the hemorrhage. The pressure-point system is also recommended as a stopgap measure until a pressure dressing or a tourniquet can be applied

Tourniquets - A tourniquet is a constricting band that is used to cut off the supply of blood to an injured limb. Use a tourniquet only as a last resort and if the control of hemorrhage by other means proves to be difficult or impossible. A tourniquet must always be applied above the wound (i.e., toward the trunk), and it must be applied as close to the wound as practical. Basically, a tourniquet consists of a pad, a band, and a device for tightening the band so that the blood vessels will be compressed. It is best to use a pad, compress, or similar pressure object, if one is available. The pressure object goes under the band and must be placed directly over the artery or it will actually decrease the pressure on the artery, allowing a greater flow of blood. If a tourniquet placed over a pressure object does not stop the bleeding, there is a good chance that the pressure object is in the wrong place. If placement is not effective, shift the object around until the tourniquet, when tightened, will control the bleeding. Any long flat material may be used as the band. It is important that the band be flat: belts, stockings, flat strips of rubber, or neckerchiefs may be used; however, rope, wire, string, or very narrow pieces of cloth should not be used because they can cut into the flesh. A short stick may be used to twist the band, tightening the tourniquet. To be effective, a tourniquet must be tight enough to stop the arterial blood flow to the limb. Be sure, therefore, to draw the tourniquet tight enough to stop the bleeding. Do not make it any tighter than necessary, though, since a tourniquet that is too tight can lead to loss of the limb the tourniquet is applied to. After you have brought the bleeding under control with the tourniquet, apply a sterile compress or dressing to the wound and fasten it in position with a bandage.

107.6 Discuss how to identify and treat the following wounds: [ref. a, pp. 4-37 thru 4-39]

Head wounds - Head wounds must be treated with particular care, since there is always the possibility of brain damage. The general treatment for head wounds is the same as that for other fresh wounds. However, certain special precautions must be observed if you are giving first aid to a person who has suffered a head wound. NEVER GIVE ANY MEDICATIONS.
- Keep the victim lying flat, with the head at the level of the body. Do not raise the feet if the face is flushed. If the victim is having trouble breathing, you may raise the head slightly.
- If the wound is at the back of the head, turn the victim on his side.
- Watch closely for vomiting and position the head to avoid aspiration of vomitus or saliva into the lungs.
- Do not use direct pressure to control hemorrhage if the skull is depressed or obviously fractured.

Facial wounds - Wounds of the face are treated, in general, like other fresh wounds. However, in all facial injuries make sure neither the tongue nor injured soft tissue blocks the airway, causing breathing obstruction. Keep the nose and throat clear of any obstructing materials, and position the victim so that blood will drain out of the mouth and nose. Facial wounds that involve the eyelids or the soft tissue around the eye must be handled carefully to avoid further damage. If the injury does not involve the eyeball, apply a sterile compress and hold it in place with a firm bandage. If the eyeball appears to be injured, use a loose bandage. (Remember that you must NEVER attempt to remove any object that is embedded in the eyeball or that has penetrated it; just apply a dry, sterile compress to cover both eyes, and hold the compress in place with a loose bandage). Any person who has suffered a facial wound that involves the eye, the eyelids, or the tissues around the eye must receive medical attention as soon as possible. Be sure to keep the victim lying down. Use a stretcher for transport.

Chest wounds - Since chest injuries may cause severe breathing and bleeding problems, all chest injuries must be considered as serious conditions. Any victim showing signs of difficulty in breathing without signs of airway obstruction must be inspected for chest injuries. The most serious chest injury that requires immediate first aid treatment is the sucking chest wound. This is a penetrating injury to the chest that produces a hole in the chest cavity. The chest hole causes the lung to collapse, preventing normal breathing functions. This is an extremely serious

condition that will result in death if not treated quickly. Victims with open chest wounds gasp for breath, have difficulty breathing out, and may have a bluish skin color to their face. Frothy-looking blood may bubble from the wound during breathing. The proper treatment for a sucking chest wound is as follows:
- Immediately seal the wound with a hand or any airtight material available (e.g., ID card). The material must be large enough so that it cannot be sucked into the wound when the victim breathes in.
- Firmly tape the material in place with strips of adhesive tape and secure it with a pressure dressing. It is important that the dressing is airtight. If it is not, it will not relieve the victim's breathing problems. The object of the dressing is to keep air from going in through the wound. NOTE: If the victim's condition suddenly deteriorates when you apply the seal, remove it immediately.
- Give the victim oxygen if it is available and you know how to use it.
- Place the victim in a Fowler's or semi-Fowler's position. This makes breathing a little easier. During combat, lay the victim on a stretcher on the affected side.
- Watch the victim closely for signs of shock, and treat accordingly.
- Do not give victims with chest injuries anything to drink.
- Transport the victim to a medical treatment facility immediately.

Abdominal wound - A deep wound in the abdomen is likely to constitute a major emergency since there are many vital organs in this area. Abdominal wounds usually cause intense pain, nausea and vomiting, spasm of the abdominal muscles, and severe shock. Immediate surgical treatment is almost always required; therefore, the victim must receive medical attention at once, or the chances of survival will be poor. Give only the most essential first aid treatment, and concentrate your efforts on getting the victim to a medical treatment facility. The following first aid procedures may be of help to a person suffering from an abdominal wound: Keep the victim in a supine position. If the intestine is protruding or exposed, the victim may be more comfortable with the knees drawn up. Place a coat, pillow, or some other bulky cloth material under the knees to help maintain this position. **DO NOT ATTEMPT TO PUSH THE INTESTINES BACK IN OR TO MANIPULATE THEM IN ANY WAY!**· If bleeding is severe, try to stop it by applying direct pressure.· If the intestines are not exposed, cover the wound with a dry sterile dressing. If the intestines are exposed, apply a sterile compress moistened with sterile water. If no sterile water is available, clean sea water or any water that is fit to drink may be used to moisten the compress. The compress should be held in place by a bandage. Fasten the bandage firmly so that the compress will not slip around, but do not apply any more pressure than is necessary to hold the compress in position. Large battle dressings are ideal.· Treat for shock, but do not waste any time doing it. The victim must be transported to a hospital at the earliest possible opportunity. However, you can minimize the severity of shock by making sure that the victim is comfortably warm and kept in the supine position. **DO NOT GIVE ANYTHING TO DRINK**. If the victim is thirsty, moisten the mouth with a small amount of water, but do not allow any liquid to be swallowed.· Upon the direction of a medical officer, start an intravenous line.

107.7 Discuss the difference between open and closed fractures. [ref. a, p. 4-46]

A break in a bone is called a fracture. There are two main kinds of fractures. **A closed fracture** is one in which the injury is entirely internal; the bone is broken but there is no break in the skin. An **open fracture** is one in which there is an open wound in the tissues and the skin. Sometimes the open wound is made when a sharp end of the broken bone pushes out through the flesh; sometimes it is made by an object such as a bullet that penetrates from the outside.

107.8 Discuss the general guidelines for the identification and treatment of the following fractures: [ref. a, pp. 4-46 thru 4-50]

Forearm fracture - There are two long bones in the forearm, the radius and the ulna. When both are broken, the arm usually appears to be deformed. When only one is broken, the other acts as a splint and the arm retains a more or less natural appearance. Any fracture of the forearm is likely to result in pain, tenderness, inability to use the forearm, and a kind of wobbly motion at the point of injury. If the fracture is open, a bone will show through. If the fracture is open, stop the bleeding and treat the wound. Apply a sterile dressing over the wound. Carefully straighten the forearm. (Remember that rough handling of a closed fracture may turn it into an open fracture.) Apply a pneumatic splint if available; if not, apply two well-padded splints to the forearm, one on the top and one on the bottom. Be sure that the splints are long enough to extend from the elbow to the wrist. Use bandages to hold the splints in place. Put the forearm across the chest. The palm of the hand should be turned in, with the thumb pointing upward. Support the forearm in this position by means of a wide sling and a cravat bandage. The hand should be raised about 4 inches above the level of the elbow. Treat the victim for shock and evacuate as soon as possible.

Upper arm fracture - The signs of fracture of the upper arm include pain, tenderness, swelling, and a wobbly motion at the point of fracture. If the fracture is near the elbow, the arm is likely to be straight with no bend at the elbow. If the fracture is open, stop the bleeding and treat the wound before attempting to treat the fracture. **NOTE:** Treatment of the fracture depends partly upon the location of the break. If the fracture is in the upper part of the arm near the shoulder, place a pad or folded towel in the armpit, bandage the arm securely to the body, and support the forearm in a narrow sling. If the fracture is in the middle of the upper arm, you can use one well-padded splint on the outside of the arm. The splint should extend from the shoulder to the elbow. Fasten the splinted arm firmly to the body and support the forearm in a narrow sling, which you find it. This will prevent further nerve and blood vessel damage. The only exception to this is if there is no pulse distal to the fracture, in which case gentle traction is applied and then the arm is splinted. Treat the victim for shock and get him under the care of a medical officer as soon as possible. Another way of treating a fracture in the middle of the upper arm is to fasten two wide splints (or four narrow ones) about the arm and then support the forearm in a narrow sling. If you use a splint between the arm and the body, be very careful that it does not extend too far up into the armpit; a splint in this position can cause a dangerous compression of the blood vessels and nerves and may be extremely painful to the victim. If the fracture is at or near the elbow, the arm may be either bent or straight. No matter in what position you find the arm, **DO NOT ATTEMPT TO STRAIGHTEN IT OR MOVE IT IN ANY WAY**. Splint the arm as carefully as possible in the position in which you find it. This will prevent further nerve and blood vessel damage. The only exception to this is if there is no pulse distal to the fracture, in which case gentle traction is applied and then the arm is splinted. Treat the victim for shock and get him under the care of a medical officer as soon as possible.

Thigh fracture - The femur is the long bone of the upper part of the leg between the kneecap and the pelvis. When the femur is fractured through, any attempt to move the limb results in a spasm of the muscles and causes excruciating pain. The leg has a wobbly motion, and there is complete loss of control below the fracture. The limb usually assumes an unnatural position, with the toes pointing outward. By actual measurement, the fractured leg is shorter than the uninjured one because of contraction of the powerful thigh muscles. Serious damage to blood vessels and nerves often results from a fracture of the femur, and shock is likely to be severe. If the fracture is open, stop the bleeding and treat the wound before attempting to treat the fracture itself. Serious bleeding is a special danger in this type of injury, since the broken bone may tear or cut the large artery in the thigh. Carefully straighten the leg. Apply two splints, one on the outside of the injured leg and one on the inside. The outside splint should reach from the armpit to the foot. The inside splint should reach from the crotch to the foot. The splints should

be fastened in five places: (1) around the ankle; (2) over the knee; (3) just below the hip; (4) around the pelvis; and (5) just below the armpit . The legs can then be tied together to support the injured leg as firmly as possible. It is essential that a fractured thigh be splinted before the victim is moved. Manufactured splints, such as the Hare or the Thomas half-ring traction splints, are best, but improvised splints may be used. Remember **DO NOT MOVE THE VICTIM UNTIL THE INJURED LEG HAS BEEN IMMOBILIZED**. Treat the victim for shock, and evacuate at the earliest possible opportunity

Lower leg fracture - When both bones of the lower leg are broken, the usual signs of fracture are likely to be present. When only one bone is broken, the other one acts as a splint and, to some extent, prevents deformity of the leg. However, tenderness, swelling, and pain at the point of fracture are almost always present. A fracture just above the ankle is often mistaken for a sprain. If both bones of the lower leg are broken, an open fracture is very likely to result. If the fracture is open, stop the bleeding and treat the wound. Carefully straighten the injured leg. Apply a pneumatic splint if available; if not, apply **three** splints, one on each side of the leg and one underneath. Be sure that the splints are well padded, particularly under the knee and at the bones on each side of the ankle. A pillow and two side splints work very well for treatment of a fractured lower leg. Place the pillow beside the injured leg, then carefully lift the leg and place it in the middle of the pillow. Bring the edges of the pillow around to the front of the leg and pin them together. Then place one splint on each side of the leg (over the pillow), and fasten them in place with strips of bandage or adhesive tape. Treat the victim for shock and evacuate as soon as possible. When available, you may use the Hare or Thomas half-ring traction splints.

Clavicle fracture - A person with a fractured clavicle usually shows definite symptoms. When the victim stands, the injured shoulder is lower than the uninjured one. The victim is usually unable to raise the arm above the level of the shoulder and may attempt to support the injured shoulder by holding the elbow of that side in the other hand. This is the characteristic position of a person with a broken clavicle. Since the clavicle lies immediately under the skin, you may be able to detect the point of fracture by the deformity and localized pain and tenderness. If the fracture is open, stop the flow of blood and treat the wound before attempting to treat the fracture. Then apply a sling and swathe splint as described below. Bend the victim's arm on the injured side, and place the forearm across the chest. The palm of the hand should be turned in, with the thumb pointed up. The hand should be raised about 4 inches above the level of the elbow. Support the forearm in this position by means of a wide sling. A wide roller bandage (or any wide strip of cloth) may be used to secure the victim's arm to the. A figure-eight bandage may also be used for a fractured clavicle. Treat the victim for shock and evacuate to a definitive care facility as soon as possible.

Rib fracture - If a rib is broken, make the victim comfortable and quiet so that the greatest danger -- the possibility of further damage to the lungs, heart, or chest wall by the broken ends -- is minimized. The common finding in all victims with fractured ribs is pain localized at the site of the fracture. By asking the patient to point out the exact area of the pain, you can often determine the location of the injury. There may or may not be a rib deformity, chest wall contusion, or laceration of the area. Deep breathing, coughing, or movement is usually painful. The patient generally wishes to remain still and may often lean toward the injured side, with a hand over the fractured area to immobilize the chest and to ease the pain. Ordinarily, rib fractures are **not** bound, strapped, or taped if the victim is reasonably comfortable. However, they may be splinted by the use of external support. If the patient is considerably more comfortable with the chest immobilized, the best method is to use a swathe in which the arm on the injured side is strapped to the chest to limit motion. Place the arm on the injured side against the chest, with the palm flat, thumb up, and the forearm raised to a 45° angle. Immobilize the chest, using wide strips of bandage to secure the arm to the chest. Do not use wide strips of adhesive plaster applied directly to the skin of the chest for immobilization since

the adhesive tends to limit the ability of the chest to expand (interfering with proper breathing). Treat the victim for shock and evacuate as soon as possible.

107.9 Identify the different degrees of thermal burns and discuss the treatment for each. [ref. a, pp. 4-57, 4-58]

True burns are generated by exposure to extreme heat that overwhelms the body's defensive mechanisms. Burns and scalds are essentially the same injury: Burns are caused by dry heat, and scalds are caused by moist heat. The seriousness of the injury can be estimated by the depth, extent, and location of the burn, the age and health of the victim, and other medical complications.

FIRST-DEGREE BURN. With a first-degree burn, the epidermal layer is irritated, reddened, and tingling. The skin is sensitive to touch and blanches with pressure. Pain is mild to severe, edema is minimal, and healing usually occurs naturally within a week.

SECOND-DEGREE BURN. A second-degree burn is characterized by epidermal blisters, mottled appearance, and a red base. Damage extends into –but not through - the dermis. Recovery usually takes 2 to 3 weeks, with some scarring and depigmentation. This condition is painful. Body fluids may be drawn into the injured tissue, causing edema and possibly a "weeping" fluid (plasma) loss at the surface.

THIRD-DEGREE BURN. A third-degree burn is a full-thickness injury penetrating into muscle and fatty connective tissues, or even down to the bone. Tissues and nerves are destroyed. Shock, with blood in the urine, is likely to be present. Pain will be absent at the burn site if all the area nerve endings are destroyed, and the surrounding tissue (which is less damaged) will be painful. Tissue color will range from white (scalds) to black (charring burns). Although the wound is usually dry, body fluids will collect in the underlying tissue. If the area has not been completely cauterized, significant amounts of fluids will be lost by plasma "weeping" or by hemorrhage, thus reducing circulation volume. There is considerable scarring and possible loss of function. Skin grafts may be necessary.

First Aid

After the victim has been removed from the source of the thermal injury, first aid should be kept to a minimum.

- Maintain an open airway.
- Control hemorrhage, and treat for shock.
- Remove constricting jewelry and articles of clothing.
- Protect the burn area from contamination by covering it with clean sheets or dry dressings. **DO NOT** remove clothing adhering to a wound.
- Splint fractures.
- For all serious and extensive burns (over 20 percent BSA), and in the presence of shock, start intravenous therapy with an electrolyte solution (Ringer's lactate) in an unburned area.
- Maintain intravenous treatment during transportation.
- Relieve mild pain with aspirin. Relieve moderate pain with cool, wet compresses or ice water immersion (for burns of less than 20 percent BSA). Severe pain may be relieved with morphine or demerol injections. Pain resulting from small burns may be relieved with an anesthetic ointment if the skin is not broken

Aid Station Care

Once the victim has arrived at the aid station, observe the following procedures.

- Continue to monitor for airway patency, hemorrhage, and shock.

- Continue intravenous therapy that is in place, or start a new one under a medical officer's supervision to control shock and replace fluid loss.
- Monitor urine output.
- Shave body hair well back from the burned area, and then cleanse the area gently with disinfectant soap and warm water. Remove dirt, grease, and nonviable tissue. Apply a sterile dressing of dry gauze. Place bulky dressings around the burned parts to absorb serous exudate.
- All major burn victims should be given a booster dose of tetanus toxoid to guard against infection. Administration of antibiotics may be directed by a medical officer or an Independent Duty Corpsman.
- If evacuation to a definitive care facility will be delayed for 2 to 3 days, start topical antibiotic therapy after the patient stabilizes and following debridement and wound care. Gently spread a 1/16-inch thickness of Sulfamylon or Silvadene over the burn area. Repeat the application after 12 hours, and then after daily debridement. Treat minor skin reactions with antihistamines

107.10 Explain how to prevent, identify symptoms of, and treat the following: [ref. a, pp 4-60 thru 4-65]

Heat cramps - Excessive sweating may result in painful cramps in the muscles of the abdomen, legs, and arms. Heat cramps may also result from drinking ice water or other cold drinks either too quickly or in too large a quantity after exercise. Muscle cramps are often an early sign of approaching heat exhaustion. To provide first aid treatment for heat cramps, move the victim to a cool place. Since heat cramps are caused by loss of salt and water, give the victim plenty of cool (not cold) water to drink, adding about one teaspoon of salt to a liter or quart of water. Apply manual pressure to the cramped muscle, or gently massage it to relieve the spasm. If there are indications of anything more serious, transport the victim immediately to a medical treatment facility.

Heat exhaustion - Heat exhaustion (heat prostration or heat collapse) is the most common condition caused by working or exercising in hot environments. In heat exhaustion, there is a serious disturbance of blood flow to the brain, heart, and lungs. This causes the victim to experience weakness, dizziness, headache, nausea, and loss of appetite. The victim may faint but will probably regain consciousness as the head is lowered, which improves the blood supply to the brain. Signs and symptoms of heat exhaustion are similar to those of shock; the victim will appear ashen gray, the skin cool, moist, and clammy and the pupils may be dilated. The vital signs usually are normal; however, the victim may have a weak pulse, together with rapid and shallow breathing. Body temperature may be below normal. Treat heat exhaustion as if the victim were in shock. Move the victim to a cool or air-conditioned area. Loosen the clothing, apply cool wet cloths to the head, axilla, groin, and ankles, and fan the victim. Do not allow the victim to become chilled. (If this does occur, cover with a light blanket and move into a warmer area.) If the victim is conscious, give a solution of 1 teaspoon of salt dissolved in a liter of cool water. If the victim vomits, do not give any more fluids. Transport the victim to a medical treatment facility as soon as possible. Intravenous fluid infusion may be necessary for effective fluid and electrolyte replacement to combat shock.

Heat stroke - Sunstroke is more accurately called heat stroke since it is not necessary to be exposed to the sun for this condition to develop. It is a less common but far more serious condition than heat exhaustion, since it carries a 20 percent mortality rate. The most important feature of heat stroke is the extremely high body temperature (105°F, 41°C or higher) accompanying it. In heat stroke, the victim suffers a breakdown of the sweating mechanism and is unable to eliminate excessive body heat build up while exercising. If the body temperature rises too high, the brain, kidneys, and liver may be permanently damaged. Sometimes the victim may have preliminary symptoms such as headache, nausea, dizziness, or weakness. Breathing will be deep and rapid at first, later shallow and almost absent. Usually the victim will

be flushed, very dry, and very hot. The pupils will be constricted (pinpoint) and the pulse fast and strong. Compare these symptoms with those of heat exhaustion. When providing first aid for heat stroke, remember that this is a true life-and-death emergency. The longer the victim remains overheated, the more likely irreversible brain damage or death will occur. First aid is designed to reduce body heat fast. Reduce heat immediately by dousing the body with cold water or by applying wet, cold towels to the whole body. Move the victim to the coolest place available and remove as much clothing as possible. Maintain an open airway. Place the victim on his back, with the head and shoulders slightly raised. If cold packs are available, place them under the arms, around the neck, at the ankles, and in the groin. Expose the victim to a fan or air conditioner since drafts will promote cooling. Immersing the victim in a cold water bath is also very effective. If the victim is conscious, give cool water to drink. **Do not give any hot drinks or stimulants.** Discontinue cooling when the rectal temperature reaches 102°F; watch for recurrence of temperature rise by checking every 10 minutes. Repeat cooling if temperature reaches 103°F rectally. Get the victim to a medical facility as soon as possible. Cooling measures must be continued while the victim is being transported. Intravenous fluid infusion may be necessary for effective fluid and electrolyte replacement to combat shock.

Hypothermia - General cooling of the whole body is caused by continued exposure to low or rapidly falling temperatures, cold moisture, snow, or ice. Those exposed to low temperatures for extended periods may suffer ill effects, even if they are well protected by clothing, because cold affects the body systems slowly, almost without notice. As the body cools, there are several stages of progressive discomfort and disability. The first symptom is shivering, which is an attempt to generate heat by repeated contractions of surface muscles. A feeling of listlessness, indifference, and drowsiness follows this. Unconsciousness can follow quickly. Shock becomes evident as the victim's eyes assume a glassy stare, respiration becomes slow and shallow, and the pulse is weak or absent. As the body temperature drops even lower, peripheral circulation decreases and the extremities become susceptible to freezing. Finally, death results as the core temperature of the body approaches 8̃°F. The steps for treatment of hypothermia are as follows:

- Carefully observe respiratory effort and heart beat; CPR may be required while the warming process is underway.
- Rewarm the victim as soon as possible. It may be necessary to treat other injuries before the victim can be moved to a warmer place. Severe bleeding must be controlled and fractures splinted over clothing before the victim is moved.
- Replace wet or frozen clothing and remove anything that constricts the victim's arms, legs, or fingers, interfering with circulation.
- If the victim is inside a warm place and is conscious, the most effective method of warming is immersion in a tub of warm (100° to 105°F or 38° to 41°C) water. The water should be warm to the elbow never hot. Observe closely for signs of respiratory failure and cardiac arrest (rewarming shock). Rewarming shock can be minimized by warming the body trunk before the limbs to prevent vasodilation in the extremities with subsequent shock due to blood volume shifts.
- If a tub is not available, apply external heat to both sides of the victim. Natural body heat (skin to skin) from two rescuers is the best method. This is called "buddy warming", If this is not practical, use hot water bottles or an electric rewarming blanket. Do not place the blanket or bottles next to bare skin, however, and be careful to monitor the temperature of the artificial heat source, since the victim is very susceptible to burn injury. Because the victim is unable to generate adequate body heat, placement under a blanket or in a sleeping bag is not sufficient treatment.
- If the victim is conscious, give warm liquids to drink. Never give alcoholic beverages or allow the victim to smoke.
- Dry the victim thoroughly if water is used for rewarming.
- As soon as possible, transfer the victim to a definitive care facility. Be alert for the signs of respiratory and cardiac arrest during transfer, and keep the victim warm.

Immersion foot - Immersion foot, which also may occur in the hands, results from prolonged exposure to wet cold at temperatures ranging from just above freezing to 5°F (1°C). Immersion foot is usually seen in connection with limited motion of the extremities and water-soaked protective clothing. Signs and symptoms of immersion foot are tingling and numbness of the affected areas; swelling of the legs, feet, or hands; bluish discoloration of the skin; and painful blisters. Gangrene may occur. General treatment for immersion foot is as follows:
- Get the victim off his feet as soon as possible.
- Remove wet shoes, socks, and gloves to improve circulation.
- Expose the affected area to warm, dry air.
- Keep the victim warm.
- **Do not** rupture blisters or apply salves and ointments.
- If the skin is not broken or loose, the injured part may be left exposed; however, if it is necessary to transport the victim, cover the injured area with loosely wrapped fluff bandages of sterile gauze.
- If the skin is broken, place a sterile sheet under the extremity and gently wrap it to protect the sensitive tissue from pressure and additional injury.
- Transport the victim as soon as possible to a medical treatment facility as a litter patient

Frostbite - Frostbite occurs when ice crystals form in the skin or deeper tissues after exposure to a temperature of 32°F (0°C) or lower. Depending upon the temperature, altitude, and wind speed, the exposure time necessary to produce frostbite varies from a few minutes to several hours. The areas most commonly affected are the face and extremities. The symptoms of frostbite are progressive. Victims generally incur this injury without being acutely aware of it. Initially, the affected skin reddens and there is an uncomfortable coldness. With continued heat loss, there is a numbness of the affected area due to reduced circulation. As ice crystals form, the frozen extremity appears white, yellow-white, or mottled blue-white, and is cold, hard, and insensitive to touch or pressure. Frostbite is classified as superficial or deep, depending on the extent of tissue involvement.
Superficial Frostbite In superficial frostbite the surface of the skin will feel hard, but the underlying tissue will be soft, allowing it to move over bony ridges. This is evidence that only the skin and the region just below it are involved. General treatment for superficial frostbite is as follows:
- Take the victim indoors.
- Rewarm hands by placing them under the armpits, against the abdomen, or between the legs.
- Rewarm feet by placing them in the armpit or against the abdomen of the buddy.
- Gradually rewarm the affected area by warm water immersion, skin-to-skin contact, or hot water bottles.
- Never rub a frostbite area.
Deep Frostbite. In deep frostbite, the freezing reaches into the deep tissue layers. There are ice crystals in the entire thickness of the extremity. The skin will not move over bony ridges and will feel hard and solid. The objectives of treatment are to protect the frozen areas from further injury, to rapidly thaw the affected area, and to be prepared to respond to circulatory or respiratory difficulties.
- Carefully assess and treat any other injuries first. Constantly monitor the victim's pulse and breathing since respiratory and heart problems can develop rapidly. Be prepared to administer CPR if necessary.
- Do not attempt to thaw the frostbitten area if there is a possibility of refreezing. It is better to leave the part frozen until the victim arrives at a medical treatment facility equipped for long-term care. Refreezing of a thawed extremity causes severe and disabling damage.
- Treat all victims with injuries to the feet or legs as litter patients. When this is not possible, the victim may walk on the frozen limb, since it has been proven that walking will not lessen the chances of successful treatment as long as the limb has not thawed out.

- When adequate protection from further cold exposure is available, prepare the victim for rewarming by removing all constricting clothing such as gloves, boots, and socks. Boots and clothing frozen on the body should be thawed by warm-water immersion before removal.
- Rapidly rewarm frozen areas by immersion in water at 100°F to 105°F (38°C to 41°C). Keep the water warm by adding fresh hot water, but do not pour the water directly on the injured area. Ensure that the frozen area is completely surrounded by water; do not let it rest on the side or bottom of the tub.
- After rewarming has been completed, pat the area dry with a soft towel. Later it will swell, sting, and burn. Blisters may develop. These should be protected from breaking. Avoid pressure, rubbing, or constriction of the injured area. Keep the skin dry with sterile dressings and place cotton between the toes and fingers to prevent their sticking together.
- Protect the tissue from additional injury and keep it as clean as possible (use sterile dressings and linen).
- Try to improve the general morale and comfort of the victim by giving hot, stimulating fluids such as tea or coffee. Do not allow the victim to smoke or use alcoholic beverages while being treated.
- Transfer to a medical treatment facility as soon as possible. During transportation, slightly elevate the frostbitten area and keep the victim and the injured area warm. Do not allow the injured area to be exposed to the cold.

107.11 Discuss how to purify water under field conditions. [ref. b, pp.1-17-27 thru 1-17-29]

Draw water upstream from other activities

Use Iodine tablets

- Remove the cap from your canteen and fill the canteen with the cleanest water available.
- Put one tablet in clean water.
- Put two tablets in the canteen of cloudy water.

NOTE: Double the amount if you have a 2-quart canteen.

- Replace the cap and wait 5 minutes.
- Shake the canteen.
- Loosen the cap and tip the canteen over to allow leakage around the canteen threads.
- Tighten the cap and wait another 25 minutes before drinking or a total of 30 minutes.

Use calcium hypochlorite.

Fill the canteen with the cleanest water available. Leave airspace of 1 inch or more below the neck of the canteen

-Fill a canteen cup half full of water and add the calcium hypochlorite from one ampule. Stir with a clean stick until the powder is dissolved.
-Fill the cap of a plastic canteen half full of the solution in the cup.
-Add it to the water in the canteen.
-Place the cap on the canteen. Shake it thoroughly.
-Loosen the cap slightly and invert the canteen. Let the treated water leak onto the threads around the neck of canteen.
-Tighten the cap on the canteen and wait at least 30 minutes before using the water for drinking or cooking.

Boil the water.

NOTES: This method is used when purification compounds are not available. however, it has the following disadvantages:

- You need fuel to boil the water.
- Water can take a long time to boil and then cool.
- Boiled water needs residual protection against recontamination.
- Water must be held at a rolling boil for at least 15 seconds to make it safe for drinking

107.12 Discuss how to construct a cat hole/straddle trench. [ref. b, pp. 1-17-30, 1-17-31]

Dig a cat hole approximately 1-foot wide and 1-foot deep.
- Completely cover and pack down with dirt after each use.
- The cat-hole is used when on the march.

Dig a straddle trench approximately 4-foot long, 2 1/2 feet deep, and 1-foot wide
-After each use, cover with a shovel of dirt.
-Completely cover and pack down with dirt after each bivouac.
- The straddle trench is used for 1- to 3-day bivouac sites.

107.13 Explain the following methods for carrying a casualty: [ref. b, pp. 1-21-33 thru 1-21-41]

Fireman's carry
Properly position the unconscious or disabled casualty.
Roll the casualty onto his or her abdomen.
Kneel at the casualty's uninjured side.
Place the casualty's arms above his or her head and cross the ankle farther from you over the one closer to you.
Place one of your hands on the shoulder farther from you and your other hand in the area of the casualty's hip or thigh, then gently roll the casualty toward you onto his or her abdomen.
Raise the casualty from the ground.
After rolling the casualty onto his or her abdomen, straddle him or her.
Extend your hands under casualty's chest and lock them together.
Lift the casualty to his or her knees as you move backward
Continue to move backward, thus straightening the casualty's legs and locking his or her knees.
Walk forward, bringing the casualty to a standing position but tilted slightly backward to prevent his or her knees from buckling.
Free your left arm, maintaining support of the casualty with your right arm.
Quickly grasp his left wrist and raise his or her arm high.
Instantly pass your head under the casualty's raised arm, releasing his or her arm as you pass under it.
Move swiftly to face the casualty and secure your arms around his or her waist
Immediately place your right toe between the casualty's feet, and spread his or her feet 6 to 8 inches apart.
With your right hand, grasp the casualty's left wrist and raise his or her arm over your head.
Bend at the waist and knees; then pull the casualty's arm over your left shoulder and down your back, thus bringing his or her body across your shoulders .
At the same time, pass your left arm between his or her legs.
Place the Marine's left wrist in your left hand, and place your right hand on your right knee for support in rising.
Rise with the casualty in the correct position
Free your right hand to use as needed.

One-man support carry
Raise the casualty from the ground as in the fireman's carry.
With your left or right hand, grasp the casualty's left or right wrist and draw his or her arm around your neck.
Place your right or left right arm around his or her waist. (The casualty is now able to walk, using you as a crutch.)

One-man arms carry
Lift the casualty from the ground as you would in the fireman's carry.
Carry the casualty high to lessen fatigue.

Saddleback carry
Raise the casualty to an upright position as in the fireman's carry.
Support the casualty by placing an arm around his or her waist, and move in front of him or her.
Have the casualty circle his or her arms around your neck.
Stoop, raise the casualty upon your back, and clasp your hands beneath his or her thighs.

Pack strap carry

Lift the casualty from the ground as in the fireman's carry.
Supporting the casualty with your arm around him or her, grasp his or her wrist closest to you, and place his or her arm over your head and cross your shoulder.
Move in front of the casualty while supporting his or her weight against your back.
Grasp his or her other wrist, and place this arm over your shoulder.
Bend forward, and hoist the casualty as high on your back as possible so that all his or her weight is resting on your back.

Pistol-belt carry

Link together two pistol belts to form a sling.
NOTE: If pistol belts are not available, use other items such as one rifle sling, two cravat bandages, two litter straps, or any suitable material that will not cut or bind the wounded Marine.
Place the sling under the casualty's thighs and lower back so that a loop extends from each side. Lie between the casualty's outstretched legs
Thrust your arms through the loops; grasp the casualty's hand and trouser leg on his or her injured side.
Roll toward the casualty's uninjured side onto your abdomen, bringing the casualty onto your back.
Adjust the sling as necessary.
Rise to a kneeling position. The belt will hold the casualty in place.
Place one hand on your knee for support and rise to an upright position.
NOTE: Your shoulders now support the casualty.
Carry the casualty so that your hands will be free to fire your rifle, climb banks, or to surmount obstacles.

107.14 Discuss how to improvise a litter to carry a casualty.
[ref. b, pp. 1-21-41 thru 1-21- 43]

Improvise a stretcher with a poncho and poles.
Open the poncho and lay the two poles (or limbs) lengthwise across the center. Reach in, pull the hood toward you and lay it flat on the poncho.
Fold the poncho over the first pole.
Fold the remaining free edge of the poncho over the second pole.
Improvise a stretcher with poles and jackets.
Button two or three shirts or jackets and turn them inside out, leaving the sleeves inside.
Pass the poles through the sleeves of the shirts or jackets.
Cut holes in both shoulders of the shirts or jackets.
Button or zip the two shirts or jackets.
Push poles through the holes.
Improvise litters made by inserting poles through sacks or by rolling a blanket.

108 SECURITY FUNDAMENTALS

References:

[a] Marine Corps Common Skills Handbook, Book 1A (PCN 50600000900)
[b] SECNAVINST 5510.36, DON Information Security Program Regulation

108.1 Discuss the duties of the interior guard. [ref. a, p. 1-9-1]

The three duties of the interior guard.
Preserve order
Protect property
Enforce regulations within the jurisdiction of command

108.2 Discuss and provide explanation of the eleven general orders. [ref. a, pp. 1-9-3, 1-9-4] 1.

General Order 1.
To take charge of this post and all government property in view.
General Order 2.
To walk my post in a military manner, keeping always on alert and observing everything that takes place within sight or hearing.
General Order 3.
To report all violations of orders I am instructed to enforce.
General Order 4.
To repeat all calls from post more distant from the guardhouse than my own.
General Order 5.
To quit my post only when properly relieved.
General Order 6.
To receive, obey, and pass on to the sentry who relieves me all orders from the commanding officer, officer of the day, and officers and noncommissioned officers of the guard only.
General Order 7.
To talk to no one except in the line of duty.
General Order 8.
To give the alarm in case of fire or disorder.
General Order 9.
To call the corporal of the guard in any case not covered by instructions.
General Order 10.
To salute all officers and all colors and standards not cased.
General Order 11.
To be especially watchful at night and during the time for challenging, to challenge all persons on or near my post, and to allow no one to pass without proper authority

108.3 Discuss the interior guard chain of command. [ref. a, p. 1-9-9]

Commanding officer: State the specific name of the commanding officer.
Field officer of the day: State the specific name of the field officer of the day.
Officer of the day: State the specific name of the officer of the day.

Commander of the guard: State the specific name of the commander of the guard.
Sergeant of the guard: State the specific name of the sergeant of the guard.

Corporal of the guard: State the specific name of the corporal of the guard

108.4 Define deadly force and when it may be used. [ref. a, pp. 1-9-11, 1-9-12]

Deadly force - The efforts of an individual used against another to cause death, substantial risk of death, or serious bodily harm]

The six conditions that justify the use of deadly force.

Defend yourself. To prevent military law enforcement or security personnel who reasonably believe themselves to be in imminent danger of death or serious bodily harm.

Defend property not involving national security. To prevent the threatened theft, damage, or espionage aimed at property or information, which though not vital to the national security is of substantial importance to the national security. To prevent the actual theft, damage, or espionage aimed at property or information, which though not vital to the national security is of substantial importance to the national security.

Defend property not involving national security but inherently dangerous to others. To prevent the actual theft or sabotage of property, such as operable weapons or ammunition, which is inherently dangerous to others.

Prevent crimes against people. To prevent or to interrupt the commission of a serious offense observed by the sentry, which threatens death or serious bodily harm to other persons. Such offenses include, but are not limited to, murder, rape, or armed robbery.

Apprehend individuals. To apprehend or to prevent the escape of a person reasonably believed to have committed an offense involving national security, or to prevent the escape of a designated prisoner.

Establish and/or maintain lawful order when it has been directed by the lawful order of a superior authority

108.5 Discuss and explain the characteristics of the following: [ref. a, p. 1-9-13]

Terrorism - Terrorism is the unlawful use or threatened use of violence to force or to intimidate governments or societies to achieve political, religious, or ideological objectives.

Perspectives of terrorism - Terrorism is a cheap, low-risk, highly effective way for weak nations, individuals, or groups to challenge stronger nations or groups and achieve objectives beyond their own abilities.

Long range goals of terrorism - Terrorists have sought to topple governments, influence top level decisions, and gain recognition for their cause

Short range goals of terrorism - Focus on gaining recognition, reducing government credibility, obtaining funds and equipment, disrupting communications, demonstrating power, delaying the political process, reducing the government's economy, influencing elections, freeing prisoners, demoralizing and discrediting the security force, intimidating a particular group, and causing a government to overreact.

What motivates terrorists - Terrorists are motivated by religion, prestige, power, political change, and material gain. .Terrorists believe that they are an elite society and act in the name of the people.

Terrorist operations. - Terrorists operate in small secret groups with little interaction and tight central control held by a few individuals. Each group may have smaller functional units that have command, intelligence, support, and tactical responsibilities. Each unit may have only two to six persons. Terrorists operate with the good will and support of sympathetic foreign governments. Terrorist groups share resources, expertise, and safe havens. Tactics and methods of operation may vary from group-to-group, but they all seek to achieve their objectives through fear, intimidation, and force

108.6 Define the threat condition (THREATCON) system. [ref. a, p. 1-9-14]

The THREATCON system is designed to standardize security measures so that inter-service coordination and support of anti-terrorism activities are simplified. Your overseas command will reduce, increase, or cancel declared THREATCONs as demanded by changes in the terrorist threat

108.7 Explain the four basic THREATCON conditions: [ref. a, p. 1-9-15]

Alpha - A general threat of possible terrorist activity against installations and personnel. The exact nature and extent are unpredictable, and circumstances do not justify full implementation of THREATCON BRAVO. Implication of selected THREATCON BRAVO measures as a result of intelligence or as a deterrent may be necessary

Bravo - An increased and more predictable threat of terrorist action.

Charlie - An incident has occurred or that intelligence has been received indicating that some form of terrorist action is imminent.

Delta - A terrorist attack has occurred or that intelligence indicates that a terrorist action against a specific location is likely. Normally, this THREATCON is declared as a localized warning.

108.8 Explain the steps in reacting to a terrorist threat/attack. [ref. a, p. 1-9-15]

There are no purely preventive measures that can ensure 100 percent protection against terrorism; however, as Marines we must apply all known measures to protect us from attack.

The following are some common rules to protect you from terrorist attack.
- Vary transportation methods, routes, and times.
- Park in well-lighted areas with multiple exits.
- Lock unattended vehicles.
- Report unusual activities to local security officials.
- Avoid traveling alone.
- Travel only on busy, well-traveled thoroughfares whenever possible.
- Take proper security precautions at home during travel.
- Attend periodic threat awareness briefings and hostage survival training.
- Avoid establishing a pattern of attendance at certain events, locations, etc.
- Keep a low profile and avoid calling attention to yourself.
- Seek knowledge of the local situation and be aware of your surroundings.
- Be sensitive to the possibility of surveillance.

108.9 Describe the ways to protect yourself from terrorist attacks. [ref. a, p. 1-9-17]

Maintain a low profile.
- Ensure that your dress, conduct, and mannerisms do not attract attention.

- Make an effort to blend into the local environment.
- Avoid publicity.
- Do not go out in big groups.
- Stay away from civil disturbances and demonstrations.

Be unpredictable.
- Vary your route and the time you leave and return home during your daily routine.
- Vary your style of dress.
- Avoid deserted streets or country roads.
-.Avoid traveling alone.
- Let people close to you know where you are going and what you will be doing.

Remain vigilant.
- Watch for anything suspicious or out of place.
- Do not give out personal information over the telephone.
- Preselect a secure area in which you can take refuge if you are being followed.
- Report any incident of being followed to the military police and to your command duty officer.

Protect your automobile.
- Avoid leaving the vehicle unattended and in the open.
- Lock the doors, the trunk, and the gas cap when leaving the vehicle.
- Upon returning to the vehicle, search it before operating (or driving).
Check the exterior of the vehicle for; packages left under the vehicle, ground disturbed around the vehicle, loose wiring, string, or tape, check the interior of the vehicle for, objects out of place, or anything out of the ordinary.

108.10 Discuss the following terms: [ref. b, app. A, pp. A-1 thru A-8]

Access - The ability and opportunity to obtain knowledge or possession of classified information.

Classification -The determination by an authorized official that official information requires, in the interests of national security, a specific degree of protection against unauthorized disclosure

Compromise - An unauthorized disclosure of classified information to one or more persons who do not possess a current valid security clearance.

Information - Any official knowledge that can be communicated or documentary material, regardless of its physical form or characteristics, that is owned by, produced by or for, or is under the control of the U.S. Government. ‘Control” means the authority of the agency that originates information, or its successor in function, to regulate access to the information.

108.11 Identify the three levels of security classifications. [ref. b, art. 4-2]

Information that requires protection against unauthorized disclosure in the interest of national security shall be classified at the Top Secret, Secret, or Confidential levels. Except as otherwise provided by statute, no other terms shall be used to identify U.S. classified information. Terms such as ‘For official Use Only” (FOUO)or ‘Secret Sensitive” (SS) shall not be used for the identification of U.S. classified information.

Top Secret is the classification level applied to information whose unauthorized disclosure could reasonably be expected to cause exceptionally grave damage to the national security. Examples include information whose unauthorized release could result in armed hostilities against the U.S. or its allies; a disruption of foreign relations vitally affecting the national

security; the compromise of vital national defense plane; the disclosure of complex cryptographic and communication intelligence systems; the disclosure of sensitive intelligence operations; and the disclosure of significant scientific or technological developments vital to national security.

Secret is the classification level applied to information whose unauthorized disclosure could reasonably be expected to cause serious damage to the national security. Examples include information whose unauthorized release could result in the disruption of foreign relations significantly affecting the national security; the significant impairment of a program or policy directly related to the national security; the disclosure of significant military plans or intelligence operations; and the disclosure of scientific or technological developments relating to national security.

Confidential is the classification level applied to information whose unauthorized disclosure could reasonably be expected to cause damage to the national security. Examples include information whose unauthorized release could result in disclosure of ground, air, and naval forces (e.g., force levels and force dispositions) ; or disclosure of performance characteristics, such as design, test, and production data of U.S. munitions and weapon systems

108.12 Discuss what should be done upon finding unsecured classified material. [ref. a, p. 1-9-19]

Protect it from further compromise and notify the custodian or security manager immediately

108.13 Describe methods that foreign agents use in collecting information. [ref.a,p.1-9 19]

Observe and photograph activities.
Eavesdrop on electronic communications.
Read news releases.
Listen to careless talk.
Obtain classified documents.

109 FIELD COMMUNICATION FUNDAMENTALS

References:

[a] TM 11-5820-890-10-1, SINCGARS Radio Operator's Manual (PCN 35159745100)
[b] Marine Corps Common Skills Handbook, Book 1B (PCN 50600000900)

109.1 Discuss the two modes of operation for the Single Channel Ground and Airborne Radio System (SINCGARS) radio. [ref. a, p. 1-15]

SINGLE CHANNEL: When using the SC mode of operation, the RT communicates on one frequency (selected using RT keyboard) that has been loaded into the RT. The SC frequency can be cleared or offset as desired.

FREQUENCY HOPPING: SINCGARS also has the ability to secure transmissions through the use of a transmission security key and frequency hopping to reduce or eliminate the threat of jamming and direction-finding equipment. In order for your RT to use the FH mode of operation, it must be loaded with FH data. The data necessary for FH operation are (1) cold start TSK, (2) SC frequency loaded into MAN channel, (3) hopset((4) lockout set(s), if required, and (5) FH sync time.

109.2 Discuss the maximum transmission ranges for each of the following settings: [ref. a, p. 1-6]

LO (low power) – Man pack/Vehicular LO (low) 200 M - 400 M
M (medium power) - M (medium) 400 M - 5KM
HI (high power) - HI (high) 5KM - 10KM
PA (power amplifier) - Vehicular Only PA (power amplifier) 10 KM - 40 KM

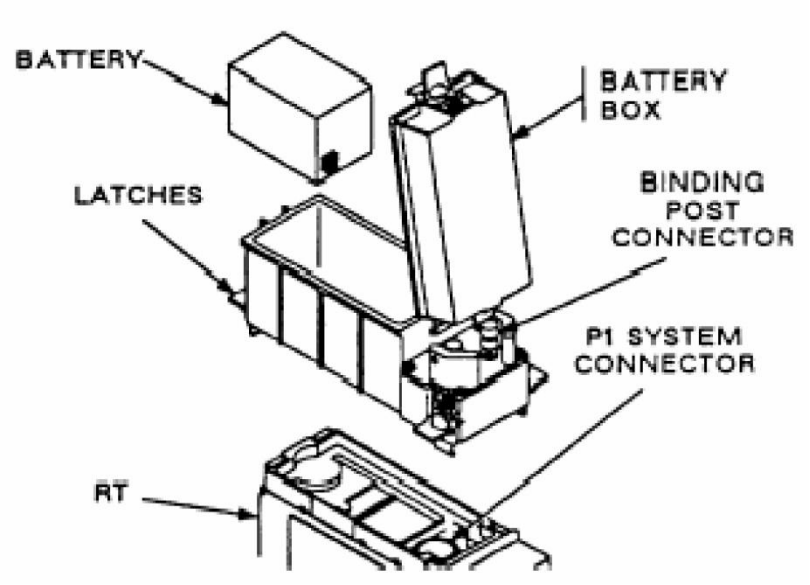
NOTE: Above ranges are based upon line of sight and are average for normal conditions. Range depends on location, sighting, weather, and surrounding noise level, among other factors. Use of OE-254 antenna will increase ranges for both voice and data transmissions. Enemy jamming and mutual interference conditions will degrade these ranges. In data transmissions, use of lower baud rate will increase range.

109.3 Explain the components and assembly process of the following SINCGARS radio configurations: [ref. a, pp. 2-16 thru 2-29]

MANPACK - To assemble a man pack radio, you must first check and install the battery.
WARNING
THE LITHIUM BATTERY USED WITH YOUR MANPACK RADIO IS HAZARDOUS IF MISUSED OR TAMPERED WITH BEFORE, DURING, OR AFTER DISCHARGE. STRICTLY OBSERVE THE FOLLOWING PRECAUTIONS TO PREVENT INJURY TO PERSONNEL OR DAMAGE TO EQUIPMENT.
DO NOT heat, incinerate, crush, puncture, disassemble, or otherwise mutilate battery.
DO NOT short circuit, recharge, or bypass any internal fuse.

DO NOT store battery in equipment during periods of non-use.

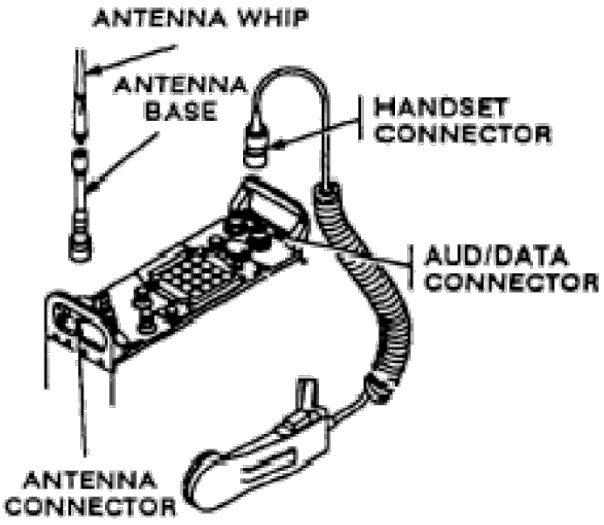
TURN OFF equipment immediately if you feel battery case becoming very hot, hear battery venting (hissing, or burping), or smell irritating gas (sulphur dioxide), Remove battery only after it cools to the touch; then return it to supply for disposal.



Installation of Primary Battery and Battery Box to RT
- Visually Inspect battery box for dirt and damage. If battery has been previously used, note battery life condition number.
- Stand RT on front panel guards; place battery box on RT. Secure using latches.
- Check battery life condition (written on battery if battery is not new).
- Write down number (for later entry into radio).
- Place battery in battery box and mate connectors.
- Close battery box cover, and secure using latches
- Return radio to upright position.
- If used battery was installed, enter the battery life condition into the radio by performing the following: Set FCTN to LD. Press BATT; then CLR. Enter number recorded on side of battery. Press STO. Set FCTN to SQ ON.

ANTENNA.
DO NOT USE ANTENNA AS A HANDLE. EQUIPMENT DAMAGE MAY RESULT.
- Screw whip into antenna base. (Hand tighten).
  - Carefully mate antenna base with RT ANT connector.
- Hand tighten. (Important not to over-tighten.)
- Position antenna as needed by bending gooseneck.

NOTE: Keep antenna straight up if possible. If the antenna is bent to a horizontal position, it may be necessary to turn the radio in order to receive and transmit messages.



HANDSET

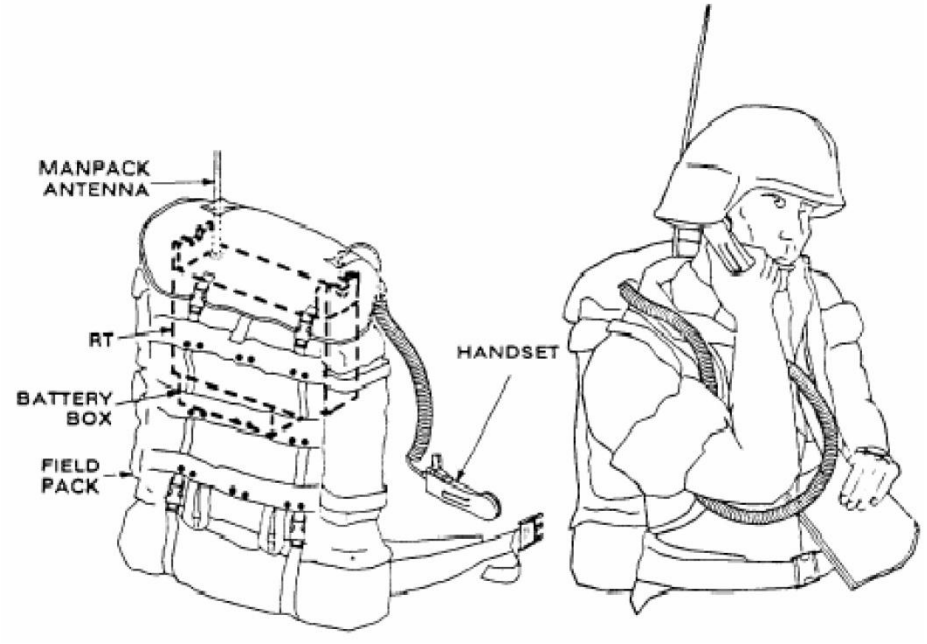
Refer to the illustration on page 2- 18; then connect and secure handset connector to AUD/DATA connector. Make sure that keys line up on handset connector and RT AUD/DATA connector; then push handset connector onto AUD/DATA connector and twist right (clockwise) to lock in place. Push handset connector in and twist left (counterclockwise) to remove handset.

FIELD PACK

Place RT in field pack with antenna on the left as shown.

Fold top flap of field pack over RT and secure flap to field pack using straps and buckles.

Put on field pack



Vehicle Radio Component –Vehicular radios are installed and removed by maintenance personnel. However, if you have a dismount radio, you need to know how to remove and install the RT.

WARNING HIGH VOLTAGE

EXISTS AT CONNECTOR J1 ON MOUNTING ADAPTER. AVOID INJURY: BE SURE J1 IS COVERED OR CAPPED WHEN NOT IN USE.

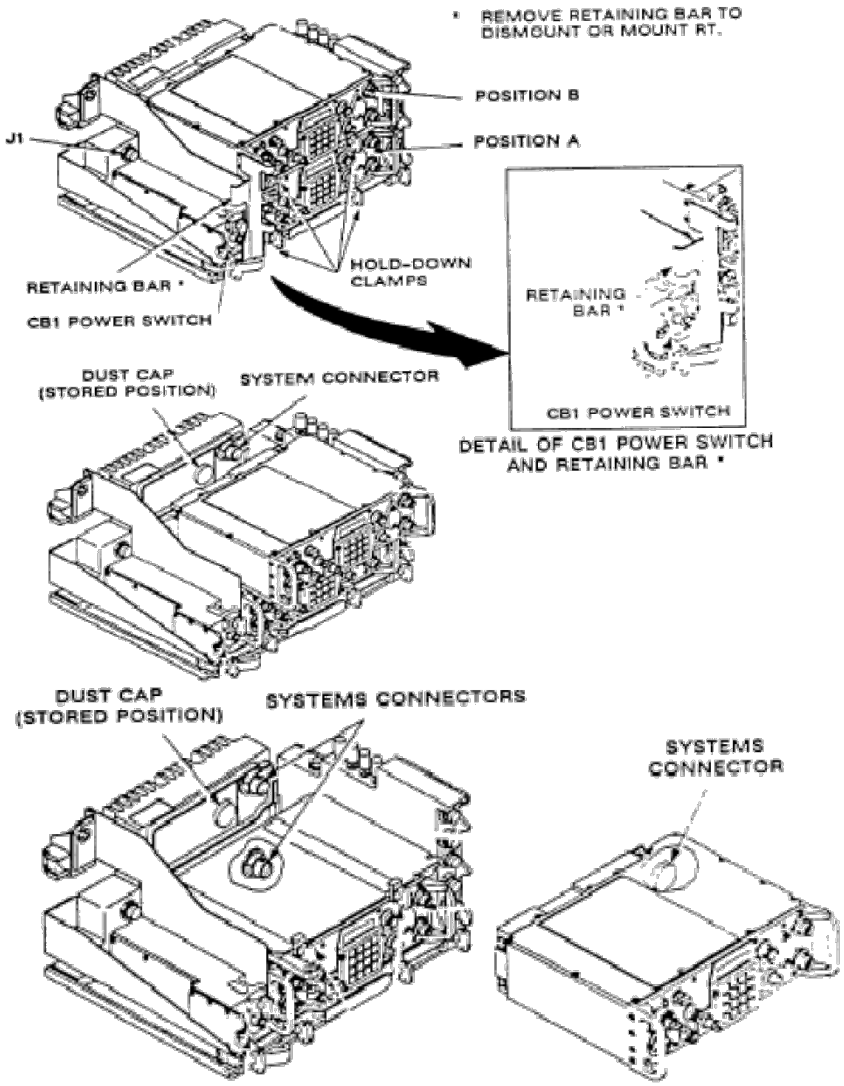
CAUTION

BE SURE POWER SWITCH CB1 IS OFF WHEN REMOVING OR INSTALLING RT. IF IT IS NOT, EQUIPMENT DAMAGE MAY OCCUR.

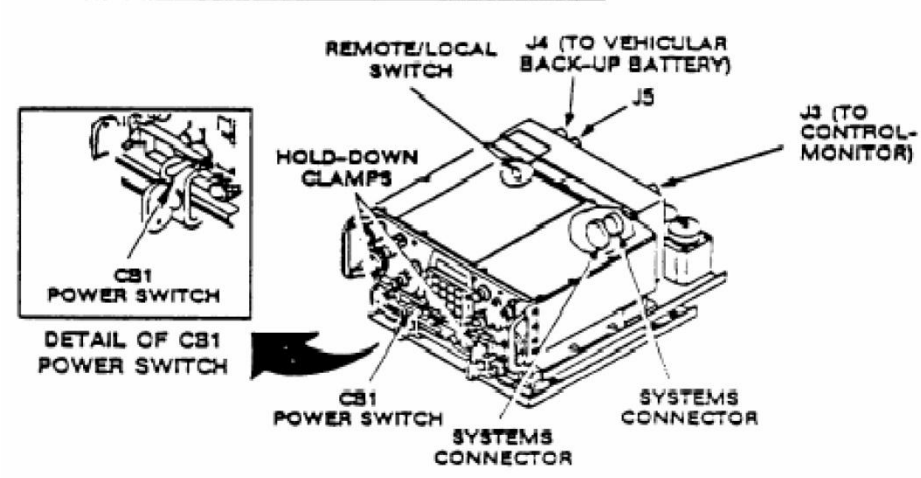
DISMOUNTING RT.

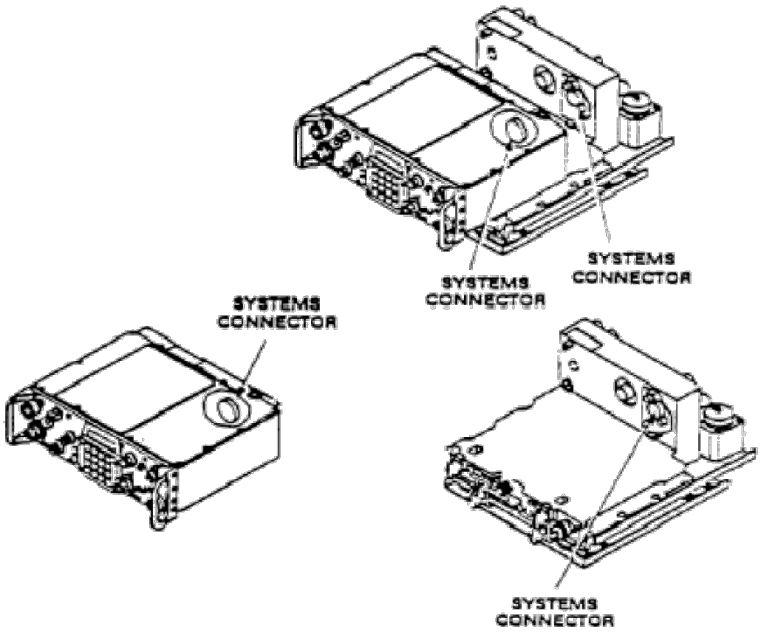
When dismounting an RT to assemble a MP from a system that has two RT's, always dismount the RT in position B (upper RT). You must use the RT in position B so that the radio system retains long range capability. This procedure will allow you to receive communication until step f has been performed.

- Remove retaining bar (if used).
- Loosen hold-down clamps; turn sideways.
- Set CM (if used) to OFF.
- Set loudspeaker (if used) power switch to OFF.
- Disconnect cables from RT connectors (refer to cabling illustrations: then disconnect cables that are connected to RT AUDIFILL, AUDIDATA, and RXMT connectors).
- Disconnect antenna cable connected to RT ANT connector (refer to the appropriate cabling illustration as needed).
- Set RT FCTN to [sTsV] .
- Set adapter CB1 to OFF.
- Remove RT. Pull RT straight out.
- Cap system connector



Mounting and Dismounting RT From Mounting Adapter





Mounting and Dismounting RT Mounted in a Power Supply Adapter

When mounting an RT refer to the above illustrations, If you have an assembled manpack radio, make sure you do the following (before mounting RT):

Check and record battery life condition.

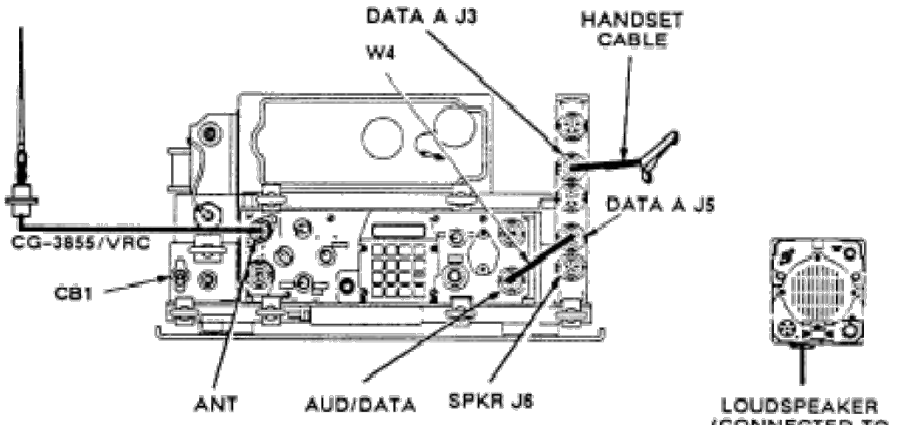
The two FCTN switch position possibilities (after disassembling MP) are “CFF” and “STBY”. If FCTN switch is set to “OFF” pause in “Z-FH” until “GOOD” is displayed; then set FCTN to “STBY”

Disassemble manpack radio, removing handset and antenna before battery. Stow manpack accessories.

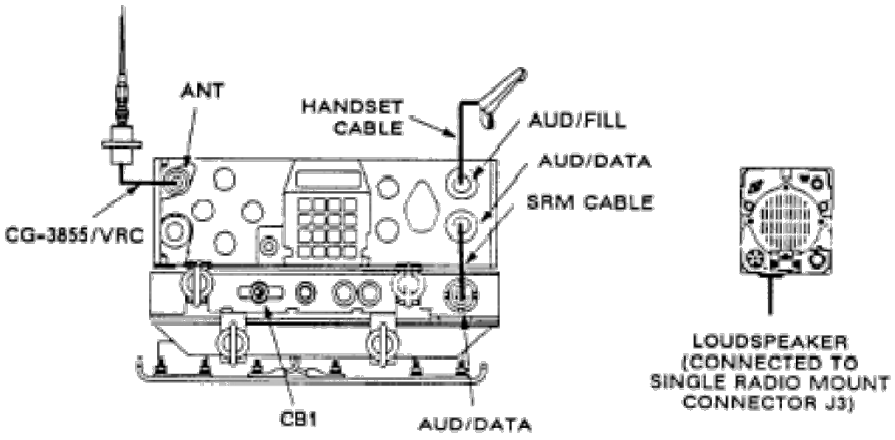
- Remove cap from systems connector. Put cap on storage post. Check
- Set CB1 to OFF.
- Loosen hold-down clamps and turn sideways. Slide RT into place. Align RT systems connector with systems connector of mount: then secure.
- Secure RT. Reposition hold-down clamps and tighten screws. Secure retaining bar (if used).
- Connect cables. See cabling diagrams (refer to appropriate cabling diagram).
- Set adapter CB1 to ON and RT FCTN to SQ ON (or normal operating position). If COMSEC alarm is heard (beeping alarm),
- Set CM (if used) to ON.
- Set loudspeaker (if used) power switch to ON.
- Tie down antenna.

CABLING. Vehicular radios are initially cabled by maintenance personnel. However, after an RT has been on a dismount mission: you must know how to connect the cables once it is remounted. The following illustrations show where the cables are connected. Audio devices used (headsets, handsets, or mics) depend on the mission. Radios used with intercoms may use intercom audio devices.

CABLING FOR SR.



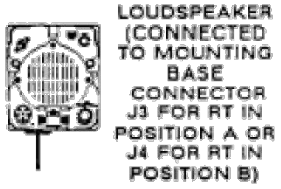
SR Cabling (in mounting adapter)

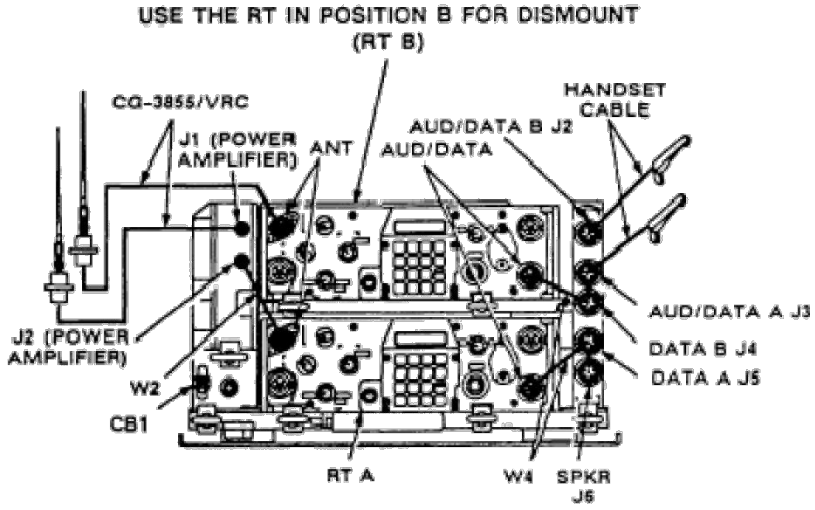


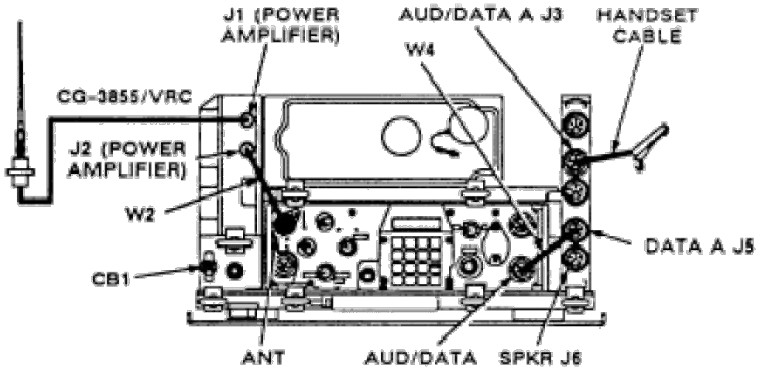
SR Cabling (in power supply adapter)

CAUTION

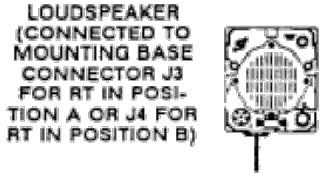
MAKE SURE YOU CONNECT CABLES EXACTLY AS SHOWN. EQUIPMENT DAMAGE MAY RESULT IF CABLES ARE INCORRECTLY CON-NECTED

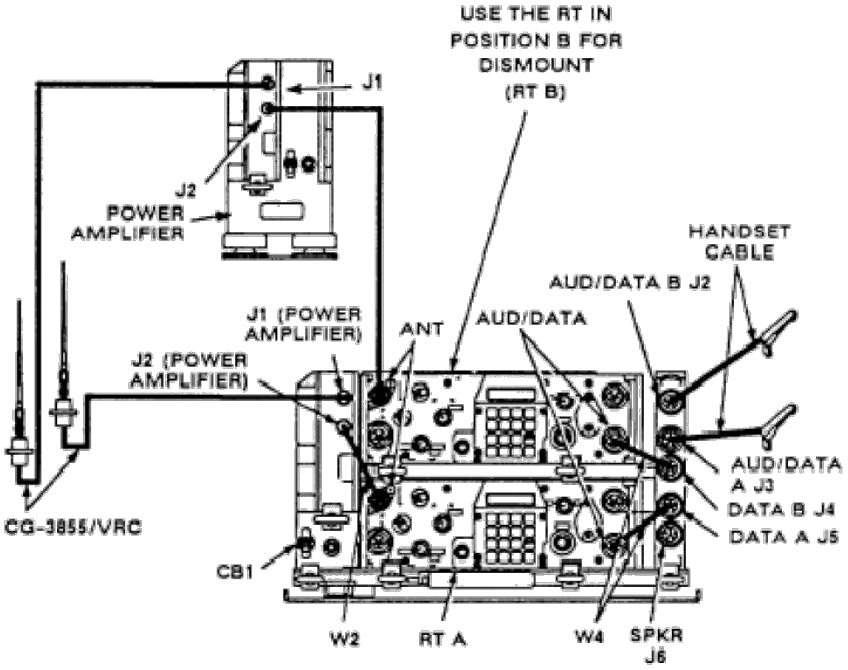






LR Cabling (in mounting adapter)



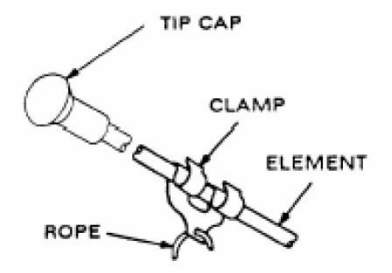


ANTENNA. There are four methods to tie down an antenna: (1) stay-down clamp, (2) snap-free clamp, (3) stay-down clip, and (4) snap-free clip.

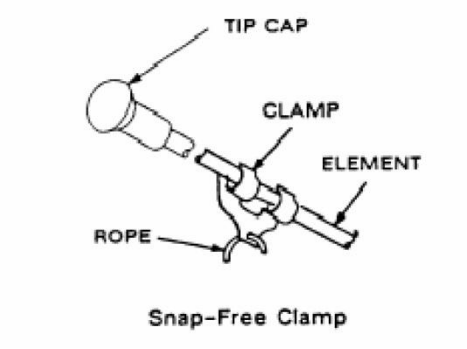
STAY-DOWN CLAMP. Use the following method to tie down an antenna when it is necessary that the antenna remain tied down when it hits a stationary object.

- Make sure that tip cap has been in-stalled to the top tip of antenna element.
- Slide clamp/clip of tiedown to middle of top antenna element. Make sure antenna is secured under clamp.
- Pull antenna down until it forms a 45° - 60° angle with the ground. The distance from the tip cap to the ground must be more than 7 feet.
-Using rope, tie down to vehicle. Never cross antenna elements when more than one antenna is being used.

For best communication results, untie antenna(s) when stationary. Let it stand up straight.

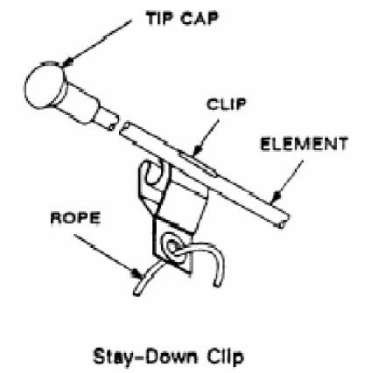


SNAP-FREE CLAMP. Use the procedure above when it is necessary that the antenna snaps free when it hits a stationary object. Refer to the following illustration.



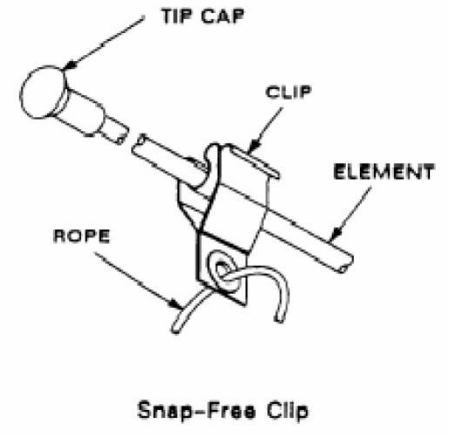
Snap-Free Clamp

STAY-DOWN CLIP. Use the tie down procedure on page 2-28 when install-ing antenna clip and it is necessary that the antenna remain tied down when it hits a stationary object.



Stay-Down Clip

SNAP-FREE CLIP. Use the tie down procedure on page 2-28 when installing antenna clip and it is necessary that the antenna snaps free when it hits a stationary object.



Snap-Free Clip

WARNING

AN ANTENNA TIP CAP MUST BE IN PLACE ON THE ANTENNA. WHEN TYING DOWN THE ANTENNA, BE SURE THE CAP IS THERE.

BE SURE TO TIE DOWN THE ANTENNA SO THE DISTANCE FROM THE GROUND TO THE TIP CAP IS 7 FEET OR MORE.

DEATH OR SERIOUS INJURIES CAN RESULT WHEN TIP CAPS ARE NOT USED, OR WHEN ANTENNAS ARE TIED DOWN TOO CLOSE TO THE GROUND.

DEATH OR SERIOUS INJURIES CAN RESULT WHEN AN ANTENNA WHICH IS NOT TIED-DOWN HITS A FIXED OBJECT SUCH AS AN OVERHEAD BRIDGE, TREE LIMB, ETC. FLYING ANTENNA PARTS MIGHT STRIKE PERSONNEL.

RF ENERGY IS PRESENT NEAR THE ANTENNA DURING TRANSMISSION. MAINTAIN AT LEAST 30 INCHES BETWEEN VEHICULAR ANTENNA AND PERSONNEL DURING TRANSMISSIONS.

CAUTION

MAKE SURE CLAMP OR CLIP DOES NOT CUT INTO ANTENNA ELEMENT.

109.4 Explain the procedures for loading single channel frequencies. [ref. a, pp. 2-33, 2-34]

LOADING SC FREQUENCIES. The procedure for loading SC frequencies requires setting the proper switches, pressing the correct number keys for the frequency you wish to load, and storing the load in RT permanent memory by pressing STO button.
Obtain authorized operating frequency from SOI or NCS.
Refer to the illustration of RT front panel above: then set FCTN to LD.
Set MODE to SC.
Set CHAN to MAN, CUE, or desired channel (1 - 6) where frequency is to be stored.
Press FREQ (display will show "00000", or to frequency RT is currently tuned).
Press CLR (display will show five lines).
Enter the numbers of the new frequency (using keyboard buttons).
If you make a mistake while entering a frequency, press CLR (this action will delete the last digit entered)..It is important that you enter another number, or store the frequency within 7 seconds. Otherwise, the display will go blank, and you will have to re-enter the numbers. If you require more than 7 seconds to perform a step, continue to press the last button, and the 7 second clock will be stopped.
Press STO (display will blink and show the frequency you just stored).
Repeat steps a thru h for additional frequencies that you wish to load.
Set FCTN to SQ ON (or normal operating position).

109.5 Discuss the purpose of the following batteries: [ref. a, p. C-1]

BA 5372 - BATTERY, NON-RECHARGEABLE BA-5372/U (hold up battery)
BA 5590 - BATTERY, NON-RECHARGEABLE (Lithium) (manpack radio primary power battery)
BA 590 - BATTERY, RECHARGEABLE: BB (manpack radio secondary power battery

109.6 Discuss the phonetic alphabet. [ref. b, p. 1-19-14]

PHONETIC ALPHABET		PRONUNCIATION	
A = ALFA	N = NOVEMBER	A = AL FAH	N = NO VEM BER
B = BRAVO	O = OSCAR	B = BRAH VOH	O = OSS CAH
C = CHARLIE	P = PAPA	C = CHAR LEE	P = PAH PAH
D = DELTA	Q = QUEBEC	D = DELL TAH	Q = KEH BECK
E = ECHO	R = ROMEO	E = ECH OH	R = ROW ME OH
F = FOXTROT	S = SIERRA	F = FOKS TROT	S = SEE AIR RAH
G = GOLF	T = TANGO	G = GOLF	T = TANG GO
H = HOTEL	U = UNIFORM	H = HOH TELL	U = YOU NEE FORM
I = INDIA	V = VICTOR	I = IN DEE AH	V = VIK TAH
J = JULIET	W = WHISKEY	J = JEW LEE ETT	W = WISS KEY
K = KILO	X = X-RAY	K = KEY LOH	X = ECKS RAY
L = LIMA	Y = YANKEE	L = LEE MAH	Y = YANG KEY
M = MIKE	Z = ZULU	M = MIKE	Z = ZOO LOO

NUMERIC PRONUNCIATION

1 = WUN	6= SIX	70 = SEVEN ZERO
2 = TOO	7= SEV-EN	84 = ATE FO-WER
3 = TREE	8= ATE	131 = WUN TREE WUN
4 = FO-WER	9= NIN-ER	500 = FIFE HUN-DRED
5 = FIFE	0= ZE-RO	1,468 = WUN FO-WER SIX ATE
		7,000 = SEVEN THOUSAND
		16,000 = WUN SIX THOUSAND

109.7 Discuss the procedures to perform operator's level maintenance on the AN/PRC 119. [ref. b, pp. 1-19-16, 1-19-17]

Inspect the equipment.
Ensure the equipment SL3 is complete.
Check all major components for damage and serviceability.
Receiver-transmitter
Battery box
Antennas and support bases
Harness and accessory bag
Headset or handset.

Clean the equipment
- Inspect the exterior of the radio set.
- Clean the external surface by removing dust, dirt, grease, salt, and fungus.
- Remove all dust and loose dirt with a clean rag and a general-purpose brush
- Clean the audio connector pins on the radio and handset with a rubber eraser.

Perform operation checks.
Conduct inventory. Make sure all parts are present.
Check the accessories for cleanliness and serviceability using the memory aid

FITCAL.
Feel. Physically touch and inspect the radio set and its accessories. **I**nspect.
Visually inspect gear for cracks or corrosion.
Tighten. Tighten all connectors by hand and make sure all screws are tight. **C**lean.
Clean with brushes and rags.
Adjust. Adjust all controls and knobs to ensure serviceability.
Lubricate. Lubricate rubber boots and handset cords with silicone to prevent dry rot.

Report any discrepancies.

110 WEAPONS FUNDAMENTALS

References:

[a] USMC, Marine Corps University Sergeant's Course 1006
[b] TM05538D/10012B-12/1, USMC Operator's Manual with Components List (Rifle, 5.56 MM, M16A2 W/E; Rifle, 5.56 MM, M16A4 W/E; Carbine, 5.56 MM, M4 W/E; Carbine 5.56 MM, M4A1 W/E) (PCN 18405538000)
[c] USMC TM 10698A-10/1
[d] USMC TM 1330-12/1A
[e] USMC, Marine Corps University Sergeant's Course 1001
[f] USMC, Marine Corps University Sergeant's Course 1002
[g] USMC, Marine Corps University Sergeant's Course 1003
[h] USMC, Marine Corps University Sergeant's Course 1004
[i] USMC, Marine Corps University Sergeant's Course 1005
[j] USMC TM 11064-OR
[k] Marine Corps Common Skills Handbook, Book 1B (PCN 50600000900)

110.1 Discuss the following characteristics of the M9 service pistol: [ref. a]

Description and Technical Data: The M9 pistol is a semiautomatic, magazine fed, recoil operated, double action pistol, chambered for the 9mm cartridge.

Caliber……..…….9mm NATO
System of Operation…….short recoil, semi-automatic
Length……8.54 in
Width……..……...50 in
Height……...5.51 in
Weight (w/empty magazine)……...……33.86 oz.
Weight (w/15 round magazine)…….……40.89 oz.
Maximum effective range……..…….50 meters
Maximum range……..1800 meters
Magazine…… staggered, 15 round capacity

Four weapon safety rules:
1 - Treat every weapon as if it were loaded
2 - Never point a weapon at anything you do not intend to shoot.
3 - Keep your finger straight and off the trigger until you are ready to fire.
4 - Keep weapon on safe until you are ready to fire.
.
Condition codes

Condition 1. Magazine inserted, round in chamber, slide forward, hammer in the forward position and decocking/safety lever is on.

Condition 2. Does not apply to the M9 Pistol.

Condition 3. The chamber is empty, a magazine is inserted, the slide is forward, and the safety is on.

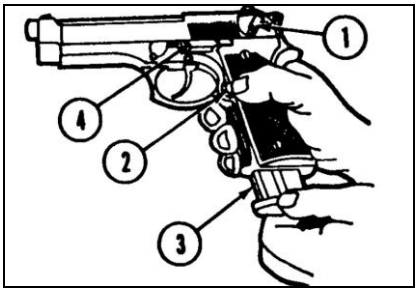
Condition 4. Magazine removed, the chamber is empty, the slide is forward, and the safety is on.

Load and unload procedures:

Loading the magazine. Hold the magazine in one hand. With the other hand place a cartridge on the follower in front of the lips. Press down and slide the cartridge completely back under the lips. Repeat the step above until the magazine is fully loaded (15 cartridges). Holes on the backside of the magazine allow for visual counting of cartridges.

Loading the pistol. Insert the loaded magazine into the magazine well of the pistol until a click of the magazine catch is heard. This will ensure proper catch engagement. With the pistol pointing in a safe direction, grasp the serrated portion of the slide and retract the slide to the rear. Releasing the slide will strip a cartridge from the magazine and chamber it. WARNING: The pistol is now loaded.

Unloading the pistol: For the following steps,
Place decocking/safety lever (1) in "safe" (down) position.
Depress the magazine release button (2) to remove the magazine (3) from the pistol. With the pistol pointing in a safe direction, grasp the slide serrations and fully retract the slide to remove the chambered cartridge. Lock the slide to the rear using the slide stop (4) and visually inspect the chamber to ensure that it is empty.



Unloading the magazine. With one hand, hold magazine upright with front end forward. With the thumb firmly press down on the cartridge rim and push forward. As the cartridge moves forward, tip it upward and out with the index finger. Repeat the above step until the magazine is empty.

Immediate and Remedial Action - Immediate Action. Immediate action is the prompt action taken by the user to correct a stoppage. The procedure for applying immediate action should become instinctive to the user, without the user attempting to discover the cause. It is important that the user apply immediate action instinctively to correct a stoppage.

WARNING: During the following procedures always keep the pistol pointed in a safe direction. When the slide is fully forward and the pistol fails to fire, apply immediate action as follows:

- Ensure that decocking/safety lever is in the fire (up) position.

- In a tactical situation, if the pistol does not fire, ensure that the magazine is fully seated; retract the slide to the rear and release.
- In a non-tactical situation, clear/unload the pistol. If the operator cannot determine the cause of the stoppage, evacuate the pistol to organizational maintenance.

- If the pistol still does not fire, remove the magazine and retract the slide to eject the chambered cartridge. Insert a new magazine; retract the slide and release to chamber another cartridge.

- Squeeze the trigger

- If the pistol still does not fire, replace the ammunition.

- If the pistol still does not fire, clear/unload the pistol and refer to the Trouble Shooting Procedures in the Operator's Manual.

When the slide is not fully seated forward, remove finger from the trigger. With the other hand, attempt to push the slide fully forward. If the slide will not move forward, proceed as follows:

- Place decocking/safety lever in safe (down) position

- Remove the magazine.

- Grasp the slide and retract to the rear, locking it with the slide stop.

- Inspect the chamber and bore and remove any obstructions.

- Insert another loaded magazine into the pistol.

- Release the slide. Place the decocking/safety lever in fire (up) position, aim and attempt to fire.

WARNING: If a round has been assembled without powder (a faulty manufacturing process), the primer alone has enough power to expel the bullet from the case to lodge in the bore. A bullet lodged in the bore will cause destruction of the pistol if another round is fired, and will also cause personal injury.

110.2 Discuss the following characteristics of the M16A4 service rifle: [ref. b]

Description and technical data - The M16A4 is a lightweight, gas-operated, air-cooled, magazine-fed, shoulder-fired, weapon that can be fired in the semi-auto and auto (3 round burst)

Caliber…….5.56mm
System of Operation……..…gas operated, semi-automatic, 3 round burst
Length (w compensator)…… 39 5/8 in
Weight (w/30 round magazine)……...8.13 pds.
Maximum effective range…….550 meters point target/800 meters area target
Maximum range…….3600 meters
Magazine…….staggered, 30 round capacity

Four weapon safety rules:

1. Treat every weapon as if it were loaded
2. Never point a weapon at anything you do not intend to shoot.
3. Keep your finger straight and off the trigger until you are ready to fire.
4. Keep weapon on safe until you are ready to fire.

.

Condition codes

Condition 1. Safety on, magazine inserted, round in chamber inserted, bolt forward, ejection port cover closed.

Condition 2. Does not apply to the M16A4 rifle, M9 Pistol.

Condition 3. Safety on magazine inserted , chamber empty, bolt forward, ejection port cover closed

Condition 4. Safety on, magazine removed, the chamber is empty, ejection port cover closed.

Load and unload procedures

Loading a magazine. The magazine may be loaded quickly using the 10-round stripper clips and the magazine filler found in each bandoleer.
With the magazine filler in place, place a 10-round stripper clip in position. Using thumb pressure on the rear of the top cartridge, press down firmly until all 10 rounds are below the feed lips of the magazine. Remove the stripper clip while holding the magazine filler in place. Repeat until 3-round clips have been loaded. Remove magazine filler and retain for future use.

***Unloading the magazine*.** With one hand, hold magazine upright with front end forward. With the thumb firmly press down on the cartridge rim and push forward. As the cartridge moves forward, tip it upward and out with the index finger. Repeat the above step until the magazine is empty.

Immediate and Remedial Action –

If your rifle stops firing, perform the following immediate actions:

Tap – Rack - Bang

-Slap upwards on the magazine to make sure it is properly seated.

-Pull charging handle all the way back. Observe ejection of case or cartridge. Check chamber for obstruction.

- If cartridge or case is ejected or chamber is clear, release charging handle to feed new round. Don't ride the charging handle forward.

Tap Forward assist.
If your rifle still fails to fire after performing Immediate Action, check again for jammed cartridge case. Perform ***remedial*** action.
WARNING If your rifle stops firing with a live round in the chamber of a hot barrel, remove the round fast. However, if you cannot remove the round within 10 seconds, remove the magazine and wait 15 minutes with the rifle pointed in a safe direction. This way you will not get hurt by the possibility of a round cooking off. Regardless, keep your face away from the ejection port while clearing a hot chamber.

If a cartridge case is in the chamber, tap it out with a cleaning rod.

- Remove the magazine

- Lock the bolt to the rear

Place selector switch on "safe"

WARNING. Bullet stuck in bore. If an audible "pop" is heard or reduced recoil is experienced during firing, immediately cease fire. **Do not apply Immediate Action** If a bullet is stuck in the barrel of the weapon, **DO NOT** attempt to remove it. Turn the weapon in to the armorer.

110.3 Discuss the following characteristics of the M4 service rifle: [ref. b]

Description and technical data - The M16M4 is a lightweight, gas-operated, air-cooled, magazine-fed, shoulder-fired, weapon that can be fired in the semi-auto and auto (3 round burst)

Caliber……5.56mm
System of Operation……gas operated, semi-automatic, 3 round burst
Length (w compensator, buttstock extended)….39 5/8 in
Length (w compensator, buttstock collapsed)…29.75 in
Weight (w/30 round magazine)…….....7.12 pds.
Maximum effective range…….500 meters point target/594 meters area target
Maximum range…….3600 meters
Magazine……staggered, 30 round capacity

Four weapon safety rules:

1. Treat every weapon as if it were loaded
2. Never point a weapon at anything you do not intend to shoot.
3. Keep your finger straight and off the trigger until you are ready to fire.
4. Keep weapon on safe until you are ready to fire.

Condition codes

Condition 1. Safety on, magazine inserted, round in chamber inserted, bolt forward, ejection port cover closed.

Condition 2. Does not apply to the M16M4 rifle, M9 Pistol.

Condition 3. Safety on magazine inserted, chamber empty, bolt forward, ejection port cover closed

Condition 4. Safety on, magazine removed, the chamber is empty, ejection port cover closed.

Load and unload procedures

Loading a magazine. The magazine may be loaded quickly using the 10-round stripper clips and the magazine filler found in each bandoleer.
With the magazine filler in place, place a 10-round stripper clip in position. Using thumb pressure on the rear of the top cartridge, press down firmly until all 10 rounds are below the feed lips of the magazine. Remove the stripper clip while holding the magazine filler in place. Repeat until 3-round clips have been loaded. Remove magazine filler and retain for future use.

Unloading the magazine. With one hand, hold magazine upright with front end forward. With the thumb firmly press down on the cartridge rim and push forward. As the cartridge moves forward, tip it upward and out with the index finger. Repeat the above step until the magazine is empty.

Immediate and Remedial Action –

If your rifle stops firing, perform the following immediate actions:

Tap – Rack - Bang

-Slap upwards on the magazine to make sure it is properly seated.

-Pull charging handle all the way back. Observe ejection of case or cartridge. Check chamber for obstruction.

- If cartridge or case is ejected or chamber is clear, release charging handle to feed new round. Don't ride the charging handle forward.

Tap Forward assist.
If your rifle still fails to fire after performing Immediate Action, check again for jammed cartridge case. Perform ***remedial*** action.

WARNING If your rifle stops firing with a live round in the chamber of a hot barrel, remove the round fast. However, if you cannot remove the round within 10 seconds, remove the magazine and wait 15 minutes with the rifle pointed in a safe direction. This way you will not get hurt by the possibility of a round cooking off. Regardless, keep your face away from the ejection port while clearing a hot chamber.

If a cartridge case is in the chamber, tap it out with a cleaning rod.

- Remove the magazine

- Lock the bolt to the rear

- Place selector switch on "safe"

WARNING. Bullet stuck in bore. If an audible "pop" is heard or reduced recoil is experienced during firing, immediately cease fire. **Do not apply Immediate Action**
If a bullet is stuck in the barrel of the weapon, **DO NOT** attempt to remove it. Turn the weapon in to the armorer.

110.4 Discuss the following characteristics of the M4 Super 90(M1014) Shotgun: [ref. c]

Description and Technical Data - The M1014 shotgun is a semi-automatic weapon with a fixed magazine tube. It uses the ARGO (Auto Regulating Gas Operated) Twin Operating System with rotating bolt head and dual locking lugs. The operating system is self-cleaning, is unaffected by fouling, requires little or no maintenance, is self-regulated for cartridges of varying length and power levels and functions reliably under all environmental conditions.

Caliber……12 gauge
System of Operation…….ARGO Twin system with dual gas system
Length (w buttstock extended)……39.8 in
Length (w buttstock collapsed)……...34.9 in
Weight (empty)…….....8.44 pds.
Maximum effective range……Dependent upon ammunition used
Maximum range……Dependent upon ammunition used
Magazine……Fitted for (7)-2.75in shells, (6)-3in shells

Four weapon safety rules:

1. Treat every weapon as if it were loaded
2. Never point a weapon at anything you do not intend to shoot.
3. Keep your finger straight and off the trigger until you are ready to fire.
4. Keep weapon on safe until you are ready to fire.

Condition codes

Condition 1. Safety on, round in chamber, bolt forward.

Condition 2. Does not apply to the M1014.

Condition 3. Round in magazine.

Condition 4. Safety on, no rounds in magazine, bolt forward.

Load and unload procedures
Administrative Loading (Bolt Assembly Locked Rearward). Administrative loading is the initial loading of the M1014 after the weapon has been cleared or when reloading after the weapon is fired dry (empty). Administrative loading is as follows:

(1) Point the weapon's muzzle in a safe direction; keep fingers off the trigger and outside the trigger guard.
(2) Place the cross-bolt safety button in the SAFE position (depressed).
(3) Through the open ejection port, place one live shell on the shell carrier with the rim of the shell facing the rear of the weapon.
(4) Press the bolt release button to close the bolt and chamber the shell.
(5) Push up on the shell carrier and insert shells individually into the magazine tube through the loading port.
(6) Ensure that:
(a) Each shell is inserted into the magazine with its rim facing rearward.
(b) Each shell is pushed fully into the magazine tube until the shell stop holds the shell in place. A click can be heard when the shell stop snaps behind the rim of the shell.
(7) Continue this procedure until the magazine tube is full or the desired number of shells have been loaded.

Unloading/Exchanging rounds. IF AMMUNITION IS SWITCHED, BOTH THE CHAMBERED SHELL AND THE SHELL ON THE CARRIER MUST BE REMOVED.
The free carrier in the M1014 allows the chambered shell to be removed or exchanged with a different shell without having to first unload the magazine tube. Also, the operator can quickly remove chambered shell and replace it with a different shell that is more appropriate for the target at hand.

a. Grasp the forearm of the weapon firmly with the non-firing hand.
b. Remove the firing hand from the buttstock and retrieve a shell from the ammunition pouch. Hold the shell between the thumb and index finger of the firing hand with the rim or base of the shell pointing towards the palm.
c. Using the edge of the firing hand below the small finger, pull rearward on the bolt handle and hold it open. The chambered shell will eject from the weapon.
d. While holding the bolt open, insert the new shell into the weapon through the ejection port.
e. Release the bolt handle to chamber the new shell. Do not ride the bolt handle forward or the shell may not fully chamber.
TO REMOVE A CHAMBERED SHELL, TILT THE WEAPON TO THE RIGHT (EJECTION PORT FACING DOWN) AND REPEAT STEP c. ABOVE.

Immediate and Remedial Action –
IMMEDIATE ACTION.
The operator will perform the immediate actions below whenever the weapon does not operate correctly and a backup weapon is unavailable.
a. Fully release the trigger and attempt to fire the weapon again.
b. If the weapon does not fire, press the shell release lever to release a shell from the magazine tube onto the shell carrier.
c. Pull the bolt fully rearward and release to chamber another shell. If the bolt locks to the rear, manually insert a single shell through the ejection port. Press the bolt release button to chamber the shell.

d. Pull the trigger and attempt to fire the chambered shell. If the weapon does not fire, switch to a back-up weapon, if available, or seek cover and perform the remedial actions in paragraph 2-11.
e. If the weapon fires, combat reload the weapon as described in paragraph 2-6 to bring the shotgun back to maximum capacity.

REMEDIAL ACTION.
Perform remedial action when immediate action does not solve the problem. To perform remedial action, check for the following:
a. An empty magazine.
b. An obstruction in the chamber and / or receiver such as an empty or ruptured case, a misfed shell or foreign matter.
c. A faulty, dented or corroded magazine tube, jammed follower or unserviceable spring.
d. Faulty ammunition (misshapen, bulging, corroded or gouged).
e. Improperly or incompletely assembled weapon or magazine.
f. Broken firing pin, hammer or other component part.
g. Immobile (stuck) gas piston(s).
h. Correct any deficiencies found and resume firing.

110.5 Discuss the following characteristics of the M67 grenade: [ref. d]

Description and Technical Data – The M67 grenade is a Fragmentation hand grenades, these grenades are used to produce casualties by high velocity
projection of fragment.

Filling……. Composition B
Filling weight……. 6.5oz
Weight……14oz
Detonation mechanism….Pyrotechnic delay M213 fuse
Fuse delay……..4sec.
Casualty radius……..15 meters
Fatality radius……5 meters
Maximum range…….Dependant on persons using weapon

Four weapon safety rules:

1. Treat every weapon as if it were loaded
2. Never point a weapon at anything you do not intend to shoot.
3. Keep your finger straight and off the trigger until you are ready to fire.
4. Keep weapon on safe until you are ready to fire.

Condition Codes do not apply to the M67
110.6 Discuss the following characteristics of the M203 grenade launcher: [ref. e]

Description and Technical Data - The M203 grenade launcher is a lightweight, single shot, breech-loaded, pump action (sliding barrel), shoulder-fired weapon attached to either an M16A1 or an M16A2 rifle.

Length of rifle and grenade launcher (overall)……9.0 cm (39 inches)
Length of barrel only.....…….30.5 cm (12 inches)
Length of rifling.....……...25.4 cm (10 inches)
Weight of launcher unloaded.....……..…1.4 kg (3.0 pounds)
Weight of launcher loaded.....……....1.6 kg (3.5 pounds)
Wt. of rifle and grenade launcher with both fully loaded..5.0 kg (11.0 pounds)
Maximum range (approximately) 400 meters (1,312 feet)

Maximum effective range:
- Fire-team sized area target.....……...350 meters (1,148 feet)
- Vehicle or weapon point target.....……150 meters (492 feet)
Minimum safe firing range (HE) (Training) .....……..165 meters (541 feet)
(Combat).....……..31 meters (102 feet)
Minimum arming range (approximately).....…….....14 to 38 meters (46 to 125 ft) Rate of fire.....……...5 to 7 rounds per minute

Four weapon safety rules:

1. Treat every weapon as if it were loaded
2. Never point a weapon at anything you do not intend to shoot.
3. Keep your finger straight and off the trigger until you are ready to fire.
4. Keep weapon on safe until you are ready to fire.

Condition Codes

Condition 1. Round in the chamber, action is closed and the weapon is on safe.

Condition 2. This condition does not apply to the M203.

Condition 3. This condition does not apply to the M203.

Condition 4. The chamber is clear. The action is closed and the weapon is on safe.

Load and unload procedures

Load the M203. Always keep the muzzle down range. Do not take the weapon off safe until you intend to fire. Press the barrel latch and slide the barrel forward. With the barrel assembly open, place a round into the breech end of the barrel, ensuring it is snugly in place and that it will not fall out. Slide the barrel down until it locks into place.

Unload the M203. To unload the grenade launcher, press the barrel latch and slide the barrel forward. The empty casing will usually fall out by itself. If it does not, then take the casing out using your fingers. If it is a live round that you are unloading, place free hand under the receiver to catch the round as it ejects.

Immediate and Remedial Action – Immediate action is the prompt action taken by the grenadier to reduce a stoppage. If the launcher fails to fire, assume a hang fire and proceed as follows.

Keeping the weapon trained on the target, shout “MISFIRE”.

Clear unnecessary people from the vicinity and attempt to remove the round from the grenade launcher.

Wait 30 seconds from the time of the failure before opening the breech for unloading procedures.

Either catch the ejected round or reduce the distance of its free fall to the ground. **Exercise extreme caution!**

Determine whether the round or the firing mechanism is defective. Examine the primer to see if it has been dented. If not, the firing mechanism is at fault.

Reload and attempt to fire after the cause or the failure to fire has been corrected. If the primer has been dented, separate the round from other ammunition until it can be properly disposed of.

110.7 Discuss the following characteristics of the M249 squad automatic weapon: [ref. f]

Description and Technical Data - The machine gun, light, squad automatic weapon, M249 (SAW) is a gas-operated, air-cooled, belt or magazine-fed, automatic weapon that fires from the open-bolt position.

Weight of SAW with bipod and tools ……………………………17 pounds
With 200 round drum …………………...……………………......23.92 pounds
Measurements:Length ….……………...…………………………40.87 inches
Muzzle velocity Ball ammunition ....……………………..3,025 feet per second
Tracer ammunition ....………………2,870 feet per second
Rifling ....…..........………………Standard right hand twist one turn in 7 inches
Ranges: Maximum ....……………….…………………......3,600 meters
Maximum effective Point targets .....……………..……………..…...800 meters
Area targets ...………………..…...………….…1,000 meters
Grazing fire ..………...……………….……..600 meters
Rates of fire.
Sustained ....……...………85 rounds per minute, fired in 3 to 5 round bursts, 4 to 5 seconds between bursts, no barrel changes
Rapid .... …………200 rounds per minute, fired in 6 to 8 round bursts, 2 to 3 seconds between bursts, barrel change every 2 minutes
Cyclic ....……………850 rounds per minute, continuous burst, barrel change every minute

Four weapon safety rules:

1. Treat every weapon as if it were loaded
2. Never point a weapon at anything you do not intend to shoot.
3. Keep your finger straight and off the trigger until you are ready to fire.
4. Keep weapon on safe until you are ready to fire.

Condition Codes

Condition 1. The bolt is locked to the rear. The safety is on. The source of ammunition is in position on the feed tray or in the magazine well. The cover is closed.

Condition 2. Not applicable to the M249.
Condition 3. The bolt is forward. The chamber is empty. The safety is off. The source of ammunition is in position on the feed tray or in the magazine well. The cover closed.

Condition 4. The bolt is forward. The chamber is empty. The safety is off. The feed tray is empty or no magazine is inserted. The cover is closed.

CAUTION: This weapon will not be halfed-cocked.

Load and unload procedures

Load the M249. There are two methods of loading the M249 machine gun, belt fed or magazine fed.

Belt Method. Clear the weapon as stated earlier. Leave cover open. If using the ammunition box attach it to the grooved tracks on the bottom of the receiver. Make sure the open side of

the links are facing down, and place the first round in the tray groove against the cartridge stop. Hold in place and close the feed cover. NOTE. You must first pull the cocking handle to the rear in order to fire. The M249 fires from the open bolt.

Magazine method. Load the magazine by inserting it into the magazine well on the left side of the receiver. Push the magazine firmly into the well until it seats and the release tab clicks into the recess on the magazine.

Unload the M249. Ensure the bolt and lock it in the rear position if it is not already there. Place the weapon on **safe**.

Belt fed. Raise the cover and remove any ammunition or links from the feed tray.

Perform the five point safety check

- Check the feed pawl assembly under the cover
- Check the feed tray assembly
- Lift the feed tray assembly and inspect the chamber
- Check the space between the bolt assembly and the chamber
- Insert two fingers of the left hand into the magazine well to extract any ammunition or brass

Magazine fed. Push the magazine release tab down and pull the magazine from the magazine well. Raise the feed cover and perform the five point safety check.

Immediate and Remedial Action

Malfunction. Is a failure of the machine gun to function satisfactorily. The two most common types of malfunctions are sluggish operation and run away gun.

Sluggish Operation. Gun fires very slowly. It can be due to excessive friction or loss of gas. Excessive friction is usually due to lack of lubrication or excessive dirt/carbon. Loss of gas is usually due to loose connections in the gas system.

Action taken is:

- Move the regulator setting to the number two or three position.
-Clean, inspect and lube the gun.

Runaway Gun. This is the case when a gun continues to fire after you release the trigger; firing is uncontrolled. Caused by worn, broken, or burred sear or worn sear notch. Use either of the following methods when you have a runaway gun. Keep the gun pointed down range and let weapon fire off remaining rounds if near the end. Team leader should break the belt of ammunition by twisting it.

NOTE: Never reload a runaway gun until it is repaired

Stoppages. A stoppage is an interruption in the cycle of operation cause by a faulty gun or ammunition. In short the gun stops firing. A stoppage must be cleared quickly by applying immediate action.

Immediate Action. This is the prompt action taken by the gunner to reduce a stoppage of the machine gun without investigating the cause. If the gun stops firing, the gunner performs immediate action. Hang fire and cook off are two terms that describe ammunition condition and should be understood in conjunction with immediate action procedures.

Hang Fire. Occurs when the cartridge primer has detonated after being struck by the firing pin but some problem with the propellant powder causes it to burn too slowly and this delays the firing of the projectile. Time (5 seconds) is allotted for this malfunction before investigating a stoppage further because of injury to personnel and damage to equipment.

Cook Off. Occurs when the heat of the barrel is high enough to cause the propellant powder inside the round to ignite even though the primer has not been struck. Immediate action is completed in a total of ten (10) seconds to ensure that the round is extracted prior to the heat of the barrel effecting it. When the round fails to extract/eject, further action is delayed (15 minutes) if the barrel is hot because the gunner must assume that a round is still in the chamber and could cook off at any time prior to the barrel cooling off.

Procedures. Wait 5 seconds after the misfire to guard against a hang fire.
Within the next 5 seconds (to guard against a cook off) pull and lock the cocking handle to the rear while observing the ejection port to see if a cartridge case, belt link, or round is ejected. Ensure the bolt remains to the rear to prevent double feeding if nothing is not ejected. If a cartridge case, belt link, or a round is ejected, push the cocking handle to its forward position, take aim and the target, and press the trigger. If the weapon does not fire, take remedial action. If a cartridge case, belt link, or a round is not ejected take remedial action.
WARNING: If nothing is ejected and the barrel is hot (200 rounds or more in 2 Minutes or less), do not open the cover. Push the safety to the right (red ring not visible), which places the weapon on safe. Keep the weapon pointed down range and remain clear for 15 minutes, then clear the weapon.

Remedial Action. When immediate action fails to reduce the stoppage, remedial action must be taken. This involves investigating the cause of the stoppage and may involve some disassembly of the weapon and replacement of parts to correct the problem. Remedial actions for stoppages are as follows

Stuck Cartridge. Some swelling of the cartridge occurs when it fires. If the swelling is excessive, the cartridge will be fixed tightly in the chamber. If the extractor spring has weakened and does no tightly grip the base of the cartridge, it may fail to extract a round when the bolt moves to the rear Insure the bolt is locked to the rear. Place the weapon on safe and allow the gun to cool if hot gun. Insert a length of cleaning rod into the muzzle to push the round out through the chamber.

Ruptured Cartridge. Sometimes a cartridge is in weakened condition after firing. In addition, it may swell as described above. In this case, a properly functioning extractor may sometimes tear the base of the cartridge off as the bolt moves to the rear, leaving the rest of the cartridge wedged inside the chamber. The ruptured cartridge extractor must be used in this instance to remove it. Remove the barrel. Insert extractor into the chamber to grip and remove the remains of the cartridge.

110.8 Discuss the following characteristics of the M240G machine gun: [ref. g]

Description and Technical Data **-** The M240G machine gun is an air cooled, belt fed, gas operated automatic weapon that fires from the open bolt position.

Weights/Measurements
Total system weight (gun and tripod complete) ..... ……45.6 pounds
Weight of machine gun .....…… ……..25.6 pounds
Weight of barrel .....……..…6.6 pounds

Weight of spare barrel, case, and all SL-3 components ..…....12.90 pounds Weight of tripod, complete with flex-mount including T&E
mechanism……..…....20 pounds
Length of machine gun .....…….49 inches
Height of machine gun on tripod .....…….17 inches
Ranges Maximum .....…… ……..3,725 meters
Maximum effective .....… ……1,800 meters
Grazing fire .....…….600 meters
Caliber .....……7.62 millimeter
Rates of fire
Sustained ..... 100 rounds per minute fired in 6 to 8 round bursts 4 to 5 seconds between bursts barrel change every 10 minutes
Rapid ..... 200 rounds per minute fired in 10 to 12 round bursts 2 to 3 seconds between bursts barrel change every 2 minutes
Cyclic ..... …..650 to 950 rounds per minute continuous burst barrel change every minute depending on gas setting)

Four weapon safety rules:

1. Treat every weapon as if it were loaded
2. Never point a weapon at anything you do not intend to shoot.
3. Keep your finger straight and off the trigger until you are ready to fire.
4. Keep weapon on safe until you are ready to fire.

Condition Codes

Condition 1. The bolt is locked to the rear. The safety is on. The source of ammunition is in position on the feed tray. The cover is closed.

Condition 2. Not applicable to the M240G.

Condition 3. The bolt is forward. The chamber is empty. The safety is off. The source of ammunition is in position on the feed tray. The cover closed.

Condition 4. The bolt is forward. The chamber is empty. The safety is off. The feed tray is empty. The cover is closed.

CAUTION: This weapon will not be half-cocked.

Load and unload procedures

Load the M240G. There are two methods of loading the M240G machine gun, the cover raised method and the cover closed method.

Cover Raised Method. To load with the cover raised, the bolt must be to the rear and safety lever on S.

Open the cover.
Place the belt of ammo on the feed tray with open side of links down against cartridge stop.
Hold in place and close the cover.
Pull the bolt to the rear and push the cocking handle forward.
Place the weapon on safe.

Cover closed method. To load with the cover closed and the bolt forward, the safety must be on fire

The team leader takes a belt of ammunition with the open side of the link is down and forces the first round into the feedtray until the holding pawl engages it and holds it in place (distinct click). The gunner pulls the cocking handle to the rear and returns the handle forward. The gun is loaded and ready to fire.

Unload the M240G. To unload the gun, follow these steps.
The gunner ensures the bolt is to the rear and places the weapon on safe.
The gunner then raises the cover.
The team leader clears the feed tray of ammunition and links.
The gunner raises the feed tray and visually inspects the chamber.
If the chamber is clear, unloading is completed.

Immediate and Remedial Action

Malfunction. A malfunction is a failure of the machine gun to function satisfactorily. The two most common types of malfunctions are sluggish operation and run away gun.

Sluggish Operation. Gun fires very slowly. It can be due to excessive friction or loss of gas. Excessive friction is usually due to lack of lubrication or excessive dirt/carbon. Loss of gas is usually due to loose connections in the gas system. Action taken is:
- Move the regulator setting to the number two or three position.
- Clean, inspect and lube the gun.

Runaway Gun. This is the case when a gun continues to fire after you release the trigger; firing is uncontrolled. Caused by worn, broken, or burred sear or worn sear notch. Use either of the following methods when you have a runaway gun.

- Keep the gun pointed down range and let weapon fire off remaining rounds if near the end.
- Team leader should break the belt of ammunition by twisting it.

NOTE: Never reload a runaway gun until it is repaired.

Stoppages. A stoppage is an interruption in the cycle of operation cause by a faulty gun or ammunition. In short the gun stops firing. A stoppage must be cleared quickly by applying immediate action.
- Immediate Action. This is the prompt action taken by the gunner to reduce a stoppage of the machine gun without investigating the cause. If the gun stops firing, the gunner performs immediate action. Hang fire and cook off are two terms that describe ammunition condition and should be understood in conjunction with immediate action procedures.

Hang Fire. Occurs when the cartridge primer has detonated after being struck by the firing pin but some problem with the propellant powder causes it to burn too slowly and this delays the firing of the projectile. Time (5 seconds) is allotted for this malfunction before investigating a stoppage further because of injury to personnel and damage to equipment.

Cook Off. Occurs when the heat of the barrel is high enough to cause the propellant powder inside the round to ignite even though the primer has not been struck. Immediate action is completed in a total of ten (10) seconds to ensure that the round is extracted prior to the heat of the barrel effecting it. When the round fails to extract/eject, further action is delayed (15 minutes) if the barrel is hot because the gunner must assume that a round is still in the chamber and could cook off at any time prior to the barrel cooling off.

- Procedures.

Wait 5 seconds after the misfire to guard against a hang fire.
Within the next 5 seconds (to guard against a cook off) pull and lock the cocking handle to the rear while observing the ejection port to see if a cartridge case, belt link, or round is ejected.

Ensure the bolt remains to the rear to prevent double feeding if nothing is not ejected. If a cartridge case, belt link, or a round is ejected, push the cocking handle to its forward position, take aim and the target, and press the trigger. If the weapon does not fire, take remedial action. If a cartridge case, belt link, or a round is not ejected take remedial action.

WARNING: If nothing is ejected and the barrel is hot (200 rounds or more in 2 Minutes or less), do not open the cover. Push the safety to the right (red ring not visible), which places the weapon on safe. Keep the weapon pointed down range and remain clear for 15 minutes, then clear the weapon.

Remedial Action. When immediate action fails to reduce the stoppage, remedial action must be taken. This involves investigating the cause of the stoppage and may involve some disassembly of the weapon and replacement of parts to correct the problem. Remedial action for stoppages are as follows

- Stuck Cartridge. Some swelling of the cartridge occurs when it fires. If the swelling is excessive, the cartridge will be fixed tightly in the chamber. If the extractor spring has weakened and does no tightly grip the base of the cartridge, it may fail to extract a round when the bolt moves to the rear. Insure the bolt is locked to the rear. Place the weapon on safe and allow the gun to cool if hot gun. Insert a length of cleaning rod into the muzzle to push the round out through the chamber.

- Ruptured Cartridge. Sometimes a cartridge is in weakened condition after firing. In addition, it may swell as described above. In this case, a properly functioning extractor may sometimes tear the base of the cartridge off as the bolt moves to the rear, leaving the rest of the cartridge wedged inside the chamber. The ruptured cartridge extractor must be used in this instance to remove it. Remove the barrel. Insert extractor into the chamber to grip and remove the remains of the cartridge.

110.9 Discuss the following characteristics of the M2 50 CAL machine gun: [ref. h]

Description and Technical Data - The machine gun, caliber .50, Browning, M2HB (M2 .50 cal), is a belt-fed, recoil-operated, air-cooled, crew-served machine gun. The gun is capable of single shot as well as automatic fire.

Weights/measurements:
Total system weight (gun, and tripod complete) ..... 128 pounds
Weight of receiver ..... 60 pounds
Weight of barrel ..... 24 pounds
Weight of tripod mount M3 (w/traversing and elevating mechanism and pintle w/bolt) ..... 44 pounds
Length of gun ..... 65 inches
Length of barrel ..... 45 inches
Ranges:
- Maximum (M2 ball) ..... 7,400 meters (approximate)
- Maximum effective ..... 1,830 meters
- Grazing fire ..... 700 meters
- Caliber ..... 50 caliber
Rates of fire:
- Sustained ..... 40 rounds or less per minute
- Rapid ..... More than 40 rounds per minute
- Cyclic ..... 450-550 rounds per minute

Four weapon safety rules:

1. Treat every weapon as if it were loaded
2. Never point a weapon at anything you do not intend to shoot.
3. Keep your finger straight and off the trigger until you are ready to fire.
4. Keep weapon on safe until you are ready to fire.

Condition Codes

Condition 1. The ammunition is in position on the feedtray. The bolt is locked to the rear and the bolt latch release lock is up.

Condition 2. This weapon condition does not apply to the M2.

Condition 3. The ammunition is in position on the feed tray. The chamber is empty. The bolt is forward and the bolt latch release lock is up.

Condition 4. The feed tray is clear of ammunition. The chamber is empty. The bolt is forward and the bolt latch release lock is up.

Load and unload procedures

Half Load. In order to half load the gun, the gunner takes the following steps: Ensure the bolt is forward and the cover is closed.
Squad leader Inserts the double loop end of the ammunition belt in the feedtray until the belt holding pawl engages the first round.
Gunner Grasps the retracting slide handle with the right hand, palm up, and vigorously jerk the bolt to the rear and release the retracting slide handle
If the bolt latch release lock is engaging the bolt latch release, the bolt and retracting slide handle will move forward under pressure of the driving spring group, half loading the gun.
If the bolt latch release is up and free of the bolt latch release lock, the bolt latch will hold the bolt and the retracting slide handle to the rear, the retracting slide handle must be returned to its most forward position prior to releasing the bolt. Press the bolt latch release, allowing the bolt to go forward in order to complete half loading.

Full Load. To fully load the gun, the procedure is the same as in half loading, except it requires the gunner to pull. and release the bolt twice.

Unload.
Gunner unlocks the bolt latch release (if applicable).
Pull the retracting slide handle to the rear and holds it there.
Squad leader then removes the round that was ejected out of the bottom of the gun.
Gunner raises the cover and the squad leader removes the ammunition belt from the feed tray.
Gunner examines the chamber and t-slot.
If there is a round still on the t-slot the gunner pulls the bolt an additional 1/6 inch to the rear and forces the round up and out of the t-slot by reaching under the gun and forcing the round up the face of the bolt
Immediate and Remedial Action

Malfunction. A malfunction is a failure of the gun to function satisfactorily; the gun will fire, but fires improperly. The two most common types of malfunctions are sluggish operation and run away gun.

Sluggish Operation. Gun fires very slowly. Usually due to human failure to eliminate

excessive friction caused by lack of lubrication or excessive dirt/carbon and burred parts or by tight headspace adjustment or incorrect timing. Clean, inspect and lube the gun.

Runaway Gun. This is the case when a gun continues to fire after you release the trigger; firing is uncontrolled. Caused by bent trigger, forward end of the trigger lever sprung downward, burred beveled contacting surfaces of the trigger lever and sear, or jammed or broken side plate trigger. Use one of the following methods when you have a runaway gun.

- Keep the gun pointed down range and let weapon fire off remaining rounds if near the end. In an emergency, twist the ammunition belt. This causes the gun to jam, and may damage the feeding mechanism. Replace broken, worn, burred parts. Check the side plate trigger and trigger control mechanism, when applicable

Stoppages. A stoppage is any interruption in the cycle of operation caused by faulty action of the weapon or defective ammunition. In short the gun stops firing. A
stoppage must be cleared quickly by applying immediate action.

Types Of Stoppages.

- Failure to feed. Lubricate the weapon, remove and replace the ammunition, remove obstruction, clean the latch cover, align rounds, reinstall link belt with open end of link facing down, or notify organizational maintenance.

- Failure to chamber. Clean the ammunition, cylinder, receiver, and chamber, remove round and recock weapon, or notify organizational maintenance.

- Failure to fire. Failing to fire is caused usually be either defective parts in the firing mechanism, defective ammunition, or incorrect timing.

Immediate Action. This is that action taken by the gunner and/or crew to reduce a stoppage, without investigating the cause, and quickly return the weapon to action. Two terms used to describe ammunition condition should be understood in conjunction with immediate action procedures

NOTE: Never reload a runaway gun until it is repaired.

Hang Fire. Occurs when the cartridge primer has detonated after being struck by the firing pin but some problem with the propellant powder causes it to burn too slowly and this delays the firing of the projectile. Time (5 seconds) is allotted for this malfunction before investigating a stoppage further because of injury to personnel and damage to equipment.

Cook Off. Occurs when the heat of the barrel is high enough to cause the propellant powder inside the round to ignite even though the primer has not been struck. Time (5 seconds) is allotted for this malfunction before investigating a stoppage further because of injury to personnel and damage to equipment
If the barrel is hot, the round must be extracted within the next 5 seconds to prevent a cook off. When more than 150 rounds have been fired in a 2-minute period, the barrel is hot enough to produce a cook off.

If the barrel is hot and the round cannot be extracted within 10 seconds total, it must remain

locked in the chamber, with the cover closed, for at least 5 minutes to allow cooling of the barrel. This guards against a cook off occurring with the cover open.
The following are the steps that must be taken in order to conduct immediate action on the M2. 50 cal.

- Wait 5 seconds. In the next 5 seconds pull the bolt to the rear (check for ejection and feeding of belt).
- Release the bolt, allowing it to move forward.
- Relay (aim) the gun on the target and attempt to fire
-If the weapon again fails to fire, wait 5 seconds, pull and lock the bolt to the rear, and return the retracting slide handle forward.

CAUTION: Determine if the barrel is hot or cold.

- If the barrel is hot (more than 150 rounds fired within 2 minutes prior) and the round can't be extracted within 10 seconds, it must remain locked in the chamber (cover closed) for at least 5 minutes to guard against a cook-off.

- If cold, open the cover and remove the ammunition and inspect the weapon.

- If immediate action fails, remedial action must be applied by doing the following, either disassemble the weapon and inspect or check to see if the weapon has a round stuck on the t-slot or a ruptured cartridge: Remove the cartridge from the T-slot, hold the bolt to the rear, and with the extractor raised, use a length of cleaning rod to push the cartridge out the bottom of the receiver. Remove the ruptured cartridge with a length of cleaning rod or ruptured cartridge extractor.

110.10 Discuss the following characteristics of the MK19 machine gun: [ref. i]

Description and Technical Data A self-powered, air-cooled, belt-fed, blowback operated weapon, the MK19 is designed to deliver accurate, intense, and decisive firepower against enemy personnel and lightly armored vehicles.

Weights
Gun…… ..... 75.6 pounds
Cradle (MK64 Mod 5)……. 21 pounds
Tripod. .....……..... 44 pounds
Total ……. 140.6 pounds
Length of gun .....……..... 43.1 inches
Ranges:
- Maximum (M2 ball) …….. 2,212 (approximate)
- Maximum effective .....……..... 1500 meters (point target)
- Grazing fire .....……..... 2,212 meters area target
Boar diameter …….....……. 40 mm
Muzzle velocity ……... 790 feet per second
Rates of fire:
- Sustained .....……..... 40 rounds or less per minute
- Rapid .....……..... 60 rounds per minute
- Cyclic .....…….....325 n-375 rounds per minute

Four weapon safety rules:

1. Treat every weapon as if it were loaded
2. Never point a weapon at anything you do not intend to shoot.
3. Keep your finger straight and off the trigger until you are ready to fire

4. Keep weapon on safe until you are ready to fire.

Condition Codes

Condition 1. Ammunition is in the position on the feed tray .The weapon has been charged twice. The bolt is locked to the rear and the safety is on.

Condition 2. This weapon condition does not apply to the MK19.

Condition 3. The ammunition is in the feed tray. The weapon has been charged once. The chamber is empty. The bolt is forward and the safety is on.

Condition 4. The feed tray is clear of ammunition, the chamber is empty, the bolt is forward and the safety is on.

Load and unload procedures

Loading.
Bolt is forward, the weapon is on s (safe), and the cover is raised.
Insert the first round into the feeder. Female link first.
Push or slide the round across the first pawl
Move the feed slide assembly to the left.
Close the cover.

Charging The Gun.
Place the safety in fire position.
Grasp the charger handles and press the charger handle locks up and in.
Rotate the charger handles down and pull them to the rear
Press the locks and push the charger handles forward and up to original position.
Place the safety on F and press the trigger, the bolt will spring forward, loading the first round on to the face of the bolt.
Pull the charger handles to the rear, which places the bolt and round into position to and up position.
The weapon is prepared to fire. Put the safety on S until ready to fire.

Clearing.
Put the weapon on safe and keep it pointed down range.
Charge the weapon and leave the charger handles to the rear and down. Do Not open the cover.
Insert a length of cleaning rod through the right hand receiver rail as close to the face of the bolt as possible.
Push down on the casing (the round may be live or spent) forcing it off the face of the bolt and out the bottom of the gun. The squad leader/assistant gunner should catch the round as it falls out.
Dispose of the live round per applicable directives
Push down on the casing (the round may be live or spent) forcing it off the face of the bolt and out the bottom of the gun. The squad leader/assistant gunner should catch the round as it falls out.
Dispose of the live round per applicable directives.

Unloading Open the cover. Reach beneath the feeder, and press the primary and secondary positioning pawls, at the same time, slide the linked rounds out of the feeder and feed tray

Immediate and Remedial Action

Malfunction. A malfunction is a failure of the gun to function satisfactorily; the gun will fire, but fires improperly.

Sluggish Operation. Usually due to human failure to eliminate excessive friction caused by lack of lubrication or excessive dirt/carbon and burred parts.
-Clean, inspect and lube the gun.

Runaway Gun. This is the case when a gun continues to fire after you release the trigger; firing is uncontrolled. Caused by worn parts or short recoil of the bolt assembly. Use one of the following methods when you have a runaway gun.

Free gun. Keep the gun pointed down range and let weapon fire off remaining rounds if near the end.

NOTE: Never reload a runaway gun until it is repaired
Firing out of battery. This is a serious malfunction. A round is being fired before it is fully seated in the chamber. The gunner should see smoke a flash or powder blowback from the bottom of the gun. The following procedures should be followed:

- Cease-fire immediately.
- Place weapon on safe.
- Clear the area around the gun of all personnel and ammunition.
- Notify safety and ordnance personnel.
- Do not attempt to fire the weapon again until it has been inspected and fixed by higher echelon maintenance personnel

Stoppages. A stoppage is any interruption in the cycle of operation caused by faulty action of the weapon or defective ammunition. In short the gun stops firing. A stoppage must be cleared quickly by applying immediate action.

Immediate Action. Is that action taken by the gunner/crew to reduce the stoppage, without investigating the cause, and quickly return the gun to action.
- Clear the area of personnel.
- Wait 10 seconds.
- Pull the bolt to the rear, and catch the round as it is being ejected
- Push the charger handles forward and up.
- Attempt to fire.
- If nothing happens put the gun on S.
- Wait ten seconds.
- Pull the bolt to the rear, catch the round as it is being ejected.
- Open the cover, unload, and clear the weapon.

Remedial Action. Is when immediate action fails to reduce a stoppage, remedial action must be applied. This involves investigating the cause of the stoppage and may require disassembly of the weapon and replacement of parts to correct the problem.

110.11 Discuss the Rifle Combat Optic(RCO): [ref. j]

Description - The RCO is a fixed 4X optical aiming sight designed for use with the service rifle configured with the MIL-STD-1913 Rail Adapter System. It attaches to the rail to provide the user a targeting tool to engage distant daylight and near low-lit targets with increased identification certainty. The RCO is designed for the M4 Carbine family.

111 TACTICAL MEASURES FUNDAMENTALS

References:

[a] Marine Corps Common Skills Handbook, Book 1B (PCN 50600000900)
[b] USMC, Marine Corps University Sergeant's Course (SCRS0808)
[c] MARADMIN 0415/09

111.1 Explain unaided day and night observation techniques. [ref. a, pp. 1-13-1 thru 1-13-3]

Avoid all unnecessary movement.
- Remain motionless while observing. Anything in motion attracts the eye.
- Use all available concealment because it offers a low silhouette and makes detection by the enemy difficult.
- Expose nothing that reflects light.
- Blend with the background because contrasting colors are noticeable.
- Remain in the shade because moving shadows attract attention.
- Distort or change the regular outline of objects. Most military objects have distinctive shapes that make obvious shadows and silhouettes.
- Avoid the skyline. Figures on the skyline can be seen from great distances and are easily identified by their outlines.

Search field of view using the off-center vision method.
- The technique of viewing an object using daytime central vision is ineffective at night. This is due to the night blind spot that exists during low illumination. Marines must learn to use off-center vision. This technique requires viewing an object by looking 6 to 10 degrees above, below, or to either side of the object rather than directly at it.

Search field of view using the scanning method.
- Scanning enables the Marines to overcome many of the physiological limitations of their eyes. It can also reduce confusing visual illusions. This technique involves looking from right to left or left to right using a slow, regular scanning movement as shown in figure 1. At night, it is essential to avoid looking directly at a faintly visible object when trying to confirm its presence.

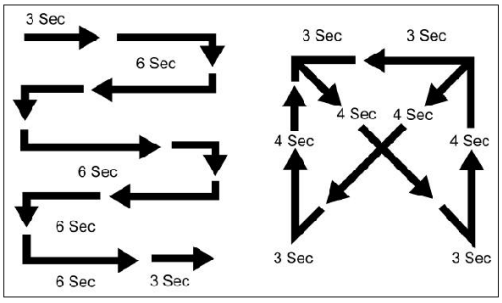


Figure 1

SEARCH FIELD OF VIEW USING THE STRIP METHOD.

- In daylight, look first at the ground nearest you. Begin observing close to your post and search a narrow strip 50 meters or less deep, going from right to left parallel to your front. Then search from left to right a second and similar strip farther away, but overlapping the first. Continue to observe until the entire field of view has been searched as shown in the below figure.

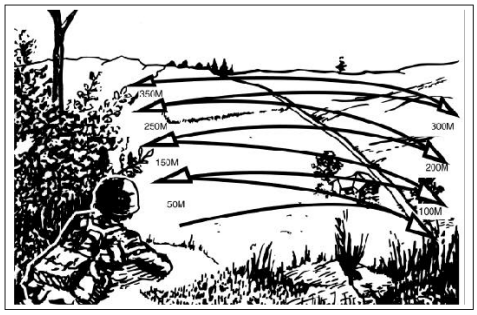


Figure 2

Preserve night vision when subjected to lighted areas or illumination.

- When entering a lighted area or observing in a temporarily lighted area such as illumination and flares, one eye should be closed and covered to preserve its night vision.
- When the light goes off, fades, or the lighted area is exited, the night vision retained by the protected eye enables it to see until the other eye adapts to the darkness.
- Red light helps preserve night vision, but like white light, it can be observed at long distances.
- Factors that decrease night visual acuity include fatigue, lack of oxygen, long exposure to sunlight, alcohol, nicotine within the pass 48 hours, and age.
- When night vision has been attained, straining will not improve effectiveness; however, practicing to identify objects at night will improve perception.

Demonstrate techniques that enhance hearing.

- Hearing is amplified with the mouth open.
- Removing the helmet will reduce sound distortion.
- By holding the ear close to the ground, sounds of people walking and vehicles moving can be heard

111.2 Define and discuss the intelligence information report (SALUTE). [ref. a, p. 1-13-11]

SALUTE report. - Information must be reported as quickly, accurately, and completely as possible. An established method to remember how and what to report about the enemy is to use the acronym SALUTE:

- **S**ize and/or strength
- **A**ctivity or actions
- **L**ocation and direction of movement
- **U**nit identification (The enemy unit may be derived from unit markings, uniforms worn, or through prisoner interrogation
- **T**ime of observation
- **E**quipment and weapons

EXAMPLE: “Seven enemy soldiers, traveling SW, crossed road junction on BLACK RIDGE, unit unknown, at 211300 Aug carrying 1 machinegun and 1 rocket launcher”

111.3 Define and discuss the five paragraphs of the operations order (SMEAC). [ref. a, p. 1-13-17]

FIVE PARAGRAPH ORDER (SMEAC)

Situation

- Environment. Weather, terrain, visibility, local population situation, and behavior as they impact on the patrol and enemy forces.
- Enemy Forces. Consists of the composition, disposition, location, movement, capabilities, and recent activities of the enemy forces.
- Friendly Forces. A statement of the mission of the next higher unit, location and mission of adjacent units, and mission of non-organic supporting units that may affect the actions of the unit.
- Attachments and Detachments. Units attached to or detached from the patrol by higher headquarters, including the effective time of attachment or detachment.

Mission A clear, concise statement of the task that the patrol must accomplish.

Execution

- Concept of Operations. Is the patrol leader's brief summary of the tactical plan the patrol is to execute.
- Task organization of the patrol.
- Movement to the objective area to include navigation method.
- Actions in the objective area.
- The return movement to include navigation method.
- Use of supporting forces, including illumination if required.
- Subordinate Tasks (Missions). In each succeeding paragraph, missions are assigned to each element and any attached units.
- Coordinating Instructions. In the last paragraph, instructions that apply to two or more subordinate elements, coordination of details, and control measures applicable to the patrol as a whole.
- Time of assembly in the assembly area.
- Time of inspections and rehearsals that have not already been conducted.
- Time of departure and estimated time of return.
- Location of departure and re-entry of friendly lines,
- Details on the primary and alternate routes to and from the objective area.
- Details on formations and order of movement.
- Rally points and actions at rally points.
- Final preparation position and actions at this point.
- Objective rally point and actions at this point.
- Actions at danger areas/- Actions in the event of enemy contact.
- Details on actions in the objective not covered elsewhere.
- Estimate time of patrol debriefing upon return.

Administration and Logistics This paragraph contains information pertaining to rations and ammunition; location of the distribution point, corpsman, and aid station; the handling of prisoners of war; and other administrative and supply matters.

Command and Signal

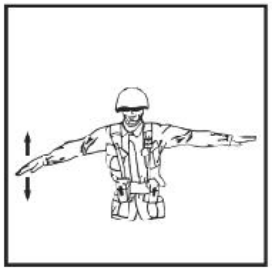
- Special instructions on communications, including prearranged signals, password and countersign, radio call signs and frequencies, emergency signals, radio procedures, pyrotechnics, and restrictions on the use of communications.
- Location of patrol leader.
- Location of assistant patrol leader
- Location of subordinate leaders

111.4 Discuss the following hand and arm signals: [ref. a, pp. 1-14-2 thru 1-14-6]

Column formation - Raise either arm to the vertical position. Drop the arm to the rear, describing complete circles in a vertical plane parallel to the body. The signal may be used to indicate either a troop or vehicular column.

Echelon left/right - The leader may give this signal either facing towards or away from the unit. Extend one arm 45 degrees below the horizontal, palms to the front. The lower arm indicates the direction of echelon. (Example: for echelon right, if the leader is facing in the direction of the forward movement, the right arm is lowered; if the leader is facing the unit, the left is lowered.) Supplementary commands may be given to ensure prompt and proper execution.

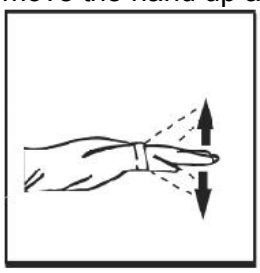
Skirmishers left/right - Raise both arms lateral until horizontal, arms and hands extended palms down. If it is necessary to indicate a direction, move in the desired direction at the same time. When signaling for fire team skirmishers, indicate skirmishers right or left by moving the appropriate hand up and down. The appropriate hand does not depend on the direction the signaler is facing. Skirmishers left will always be indicated by moving the left hand up and down; skirmishers right, the right hand.



Wedge formation - Extend both arms downward and to the side at an angle of 45 degrees below the horizontal, palms to the front.

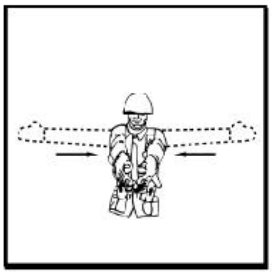
Fire team - The right arm should be placed diagonally across the chest.

Squad - Extend the hand and arm toward the squad leader, palm of the hand down; distinctly move the hand up and down several times from the wrist, holding the arm steady.

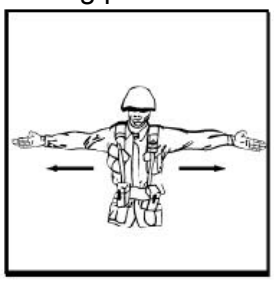


Platoon - Extend both arms forward, palms of the hands down toward the leaders (or units) for whom the signal is intended, and describe large vertical circles with hands.

Close Up - Start the signal with both arms extended sideward, palms forward, and bring palms together in front of the body momentarily. When repetition of this signal is necessary, the arms are returned to the starting position by movement along the front of the body.



Open Up/extended - Start the signal with the arms extended in front of the body, palms together, and bring the arms to the horizontal position at the sides, palms forward. When repetition of this signal is necessary, the arms are returned along the front of the body to the starting position and the signal is repeated until understood.



Halt/Stop - Carry the hand to the shoulder, palm to the front; and then thrust the hand upward vertically to the full extent of the arm and hold it in that position until the signal is understood**.**

Dismount/Take cover - Extend the arm sideward at an angle of 45 degrees above the horizontal, palm down, and lower it to side. Both arms may be used in giving this signal. Repeat until understood.

Hasty Ambush Left/Right - Raise fist to shoulder level and thrust it several times in the desired direction.

111.5 Define and discuss the acronym SAFE when constructing a fighting position. [ref. a, p. 1-15-1]

S Security: Set up security before digging in.
A Automatic Weapons: Set up your automatic weapons so that they are oriented to the most likely avenues of approach.
F Field of Fire: Clear your fields of fire.
E Entrenchment: Dig in your positions

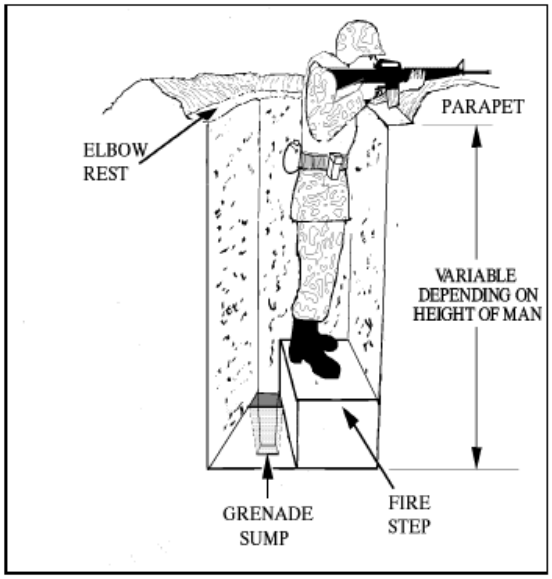
111.6 Discuss the characteristics of the following fighting positions: [ref. a, pp. 1-15-2, 1-15-3]

NOTES: Do not disturb the natural concealment around your position while digging.
Avoid creating fresh paths near the position. Use old paths or vary the route to and from the position. Camouflage the path if necessary.
- Marines at their fighting positions dig fighting holes. Fighting holes provide excellent protection against small arms fire, shell fragments, airplane strafing or bombings, the effects of nuclear detonations, and the crushing action of tanks.
- If not prescribed by higher authority, the squad leader will designate either one- or two-man fighting holes. The type of fighting hole used is based upon squad strength, fields of fire, size of squad sector of fire, and morale. However, the two-man fighting hole permits one Marine to rest while the other maintains security over the assigned frontage

Individual fighting position

The size and shape of the fighting hole are affected by certain important considerations. It is as small as practicable, exposing a minimum target to enemy fire; wide enough to accommodate the shoulders of a man sitting on the fire step; long enough to permit use of an entrenching tool; and at least 4 feet deep to the fire step. The Marine should be able to aim and fire his or her weapon when standing on the fire step.

Two-man fighting position - The two-man fighting hole consists essentially of two adjacent one-man fighting holes. Details of construction are as follows**.**
- In most types of soil, the fighting hole gives protection against the crushing action of tanks provided the occupant crouches at least 2 feet below the ground surface. In sandy or soft soils, it is necessary to revet the sides to prevent caving in.
The soil is piled around the hole as a parapet, approximately 3-feet thick and ½-foot high, leaving a berm or shelf wide enough for the Marine to use as an elbow rest while firing. If turf or topsoil is used to camouflage the parapet, the Marine first removes sufficient ground cover and sets it aside until the fighting hole is completed. Once complete, the ground cover can then be laid on the top and side of the parapet so that it will better blend in with surrounding ground



111.7 Discuss the advantages and disadvantages of a two-man fighting hole. [ref. a, p. 1-15-3]

Disadvantages: Since it is longer than the one-man type, the two-man fighting hole offers somewhat less protection against a tank crossing along the long axis, as well as less protection against strafing, bombing, and shell fragments.

Advantages: It allows continuous observation, mutual assistance and reassurance, and the redistribution of ammunition between the occupants.

111.8 Maintain and ensure the serviceability of the individual combat equipment (782) used for tactical operations. [ref. a, pp. 1-17-9 thru 1-17-15]

Ensure serviceability of gear.782-gear.
- Scrub any soiled spots lightly with a brush, or use a white or colorfast cloth.
- Dry items in the shade or indoors.
- Do not dry items in the sun because direct sunlight will discolor them.
- Do not dry 782-gear in a mechanical/commercial dryer because this creates excessive wear and may damage the dryer.

Maintaining the canteens and canteen cup.
- Wash the canteens and canteen cup with warm, soapy water.
- Rinse thoroughly.
- Keep the canteen cup clean and dry when not using
- Check for holes and rust.

Inspect and clean the flak jacket.
- Visually inspect the flak jacket. Inspect for
- Bunching caused by lumps or distortion in the ballistic nylon filter.
- Tears, punctures, or damages to the outer nylon cover.
- An increase in weight, which indicates that the nylon filter has become wet.
- A damaged or dirty hook-and-pile Velcro fastener.
- Clean the hook-and-pile fastener by washing it with warm, soapy water or by brushing it, as necessary.
- Inspect for broken or missing elastic laces.

NOTE: Turn in a damaged jacket as soon as possible to supply
- Brush off mud and loose dirt.

- Wash the front, back, and the inside of the jacket.
- Air dry the jacket.

Maintaining the helmet.
- Do not heat water in it.
- Do not hammer with it.
- Do not dig with it
- Clean the suspension, headband, chinstrap, and retention band of the helmet.
- Wash the suspension, headband, chinstrap, and retention band, then air dry.

Silence gear.
- To silence 782-gear during combat patrolling, follow the steps below.
- Cover all metal areas with tape.
- Tape up all loose straps.
- Tape anything that could enhance noise.

Waterproof gear.
- To waterproof 782-gear, follow the steps below.
- Use trash and zip lock bags to prevent gear from getting wet.
- Use waterproof bag to keep sleeping bag from getting wet

111.9 Define the Armor Protection Level system. [ref. c, p. 1-2]

The Armor Protection Level System (APLS), was established to define body armor protection levels from level 0 to level 3. Similar to the establishment of Nuclear, Biological and Chemical Mission Oriented Protective Posture (MOPP) levels the 1980s, the intent of establishing standardized body armor protection levels is to
enable commanders to tailor protective postures based on their estimate of the situation and/or based on guidance from Service, Joint, Theater Combatant Commanders.

-Commanders can raise or lower the Armor Protection Level from APL 0 to APL 3.

-Operating Commanders must be at the Lieutenant Colonel level or higher to determine required APL for wear by assigned personnel.

-Armor Protection Levels are as follows:

-Level 0 No body armor worn
-Level 1 Vest/PC with Soft Armor Only
-Level 2 Vest/PC with front and back hard
armor plates.
-Level 3 Vest/PC with Front, Back and side
hard armor plates.

Marine Corps Unit Commanders must rely on mission analysis and military judgment in making critical decisions which affect the personal protective posture of their Marines, and take advantage of the full scalability that the family of Marine Corps Personal Protective Equipment (PPE) provides. Establishing armor protective levels provides standardization while facilitating Commanders' decision making in regards to PPE.

111.11 Discuss camouflage, cover, and concealment. [ref. a, p. 1-17-17]

CAMOUFLAGE: Anything that you can use to keep yourself, your equipment, and your position from looking like what they really are. You can also use both natural and manmade materials for camouflage.

COVER: Anything that gives protection from bullets, fragments of exploding rounds, flame, nuclear effects, and biological and chemical agents. Cover can also conceal you from enemy observation. Cover can be natural or manmade.

CONCEALMENT: Anything that hides you from enemy observation. Concealment does not protect you from enemy fire

111.12 Describe the following individual movements: [ref.a, pp.1-17-33thru1-17-40]

High crawl –
The high crawl is used when
-Cover and/or concealment are available.
- Poor visibility reduces enemy observation.
- Greater speed of movement is required.
To perform the high crawl,
- Keep your body off the ground.
- Rest weight on forearms and lower legs.
-Cradle rifle in arms, keeping the muzzle off the ground.
- Keep knees well behind the buttocks to stay low.
- Move forward, alternately advancing right forearm and left knee, then left forearm and right knee.

Low crawl –
The low crawl is used when
- Cover and concealment are scarce.
- The enemy has good observation over the area in which the scout is moving.
- Speed is not essential.
To perform the low crawl,
- Keep your body as flat as possible against the ground.
- Grasp the rifle sling at the upper sling swivel.
- Let the balance of the rifle rest on the forearm and let the butt of the rifle drag on the ground.
- Keep the muzzle off the ground.
- Start forward by pushing your arms forward and pulling right leg forward.
- Move forward by pulling with arms and pushing with right leg. Change the pushing leg frequently to avoid fatigue.

Back crawl
To perform the back crawl,
- Slide head first, on your back.
- Push yourself forward with your shoulders and heels.
- Carry your weapon lengthwise on your body.

Rush
When starting from the prone position,
- Raise your head slowly and steadily and select a new position.
- Lower your head slowly, draw arms inward, cock right leg forward, and prepare to rush.
- Use one movement to raise the body by straightening both arms.
- Spring to your feet, stepping off with the left foot.

- Bend forward as low as possible when running.
- Never advance directly to the next position; always zigzag.

When hitting the deck,
- Stop.
- Plant both feet in place.
- Drop quickly to the knees and slide the hand to the heel of the rifle.
- Fall forward, breaking your fall with the butt of the rifle. (To confuse the enemy, roll over after hitting the deck and roll into firing position with feet, knees, and stomach flat on the ground.)
- Keep your head down if you do not intend to fire.

When rolling over,
- Hit the deck and assume the prone position.
- Bring the rifle in close to the body, placing the rifle butt in the crotch.

Roll over swiftly to confuse any enemy observers as to your final intended location. Never reappear at the same place you went down.

Night Walk

When walking at night,
- Place the heel down first. Balance the weight of your body on the rear foot until a secure spot is found.
- Lift the forward foot high to clear any stiff grass, brush, or other obstruction.
- Continue to balance body weight on the rear foot, lower the forward foot gently, toe first, to explore the ground for objects that might make noise.

- Step over fallen logs and branches, not on them.

Lower the heel of the forward foot slowly, gradually transferring body weight to that foot.

Creeping

To perform the creeping technique,
- Creep at night on the hands and knees.
- Use your hands to feel for twigs, leaves, or other substances that might make a noise.
- Clear a spot to place your knee. Keeping your hand at that spot, place your knee in the same spot. Keeping your hand at that spot, place your knee on the ground and repeat the action with the other hand and knee.

Crossing a wall
- Reconnaissance the wall before crossing.
- Quickly roll over the wall, keeping a low silhouette. The speed of your movement and a low silhouette deny the enemy a good target

Observing around a corner

Observe the area around a corner before moving beyond it. The most common mistake made at a corner is allowing the weapon to extend beyond the corner before observing, thereby exposing your position.

Short stock technique. The shooter should be capable of both right-handed and left-handed firing of his or her weapon using this technique to be effective around corners. Short stocking the weapon will prevent the muzzle from protruding and keep the weapon ready to fire the instant visual contact is made with the enemy. Furthermore, it reduces the Marine's exposure as a target. A common mistake when firing around corners is firing from the standing position. The shooter exposes him or herself at the height the enemy would expect a target to appear and risks exposing the entire length of the body as a target for the enemy.

Popping the corner technique.

-Get into a prone position near the corner of a building or obstacle around which to observe. The weapon is short stocked, and the muzzle is pointed in the direction

you are looking. This allows you to engage a target, if necessary, when observing around a corner.
- Crawl to the corner but don't expose yourself.
- Raise your upper body onto your elbows. Then push your body forward with your feet and legs without moving your elbows. Your upper body, with the weapon ready, will move forward.
- The final position will expose the weapon, your helmet, and a minimal amount of your face. Your forearms will come to rest on the deck giving you a low profile, the ability to observe around the corner, and the immediate capability to engage targets with your weapon.

Crossing a Danger Area
- Open areas such as streets, alleys, and parks should be avoided. They are natural kill zones for enemy crew-served weapons. They can be crossed safely if certain fundamentals are applied by Marines and small-unit leaders.

- When using the correct procedure for crossing an open area, develop a plan for your own movement. Use smoke from hand grenades or smoke pots to conceal the movement of all Marines. Run the shortest distance between buildings and move along the far building to the next position. By doing so, you reduce the amount of time during which you are exposed to enemy fire.
- Before moving to another position, make a visual reconnaissance and select the position that offers the best cover and concealment. At the same time, select the route that you will take to get to that position.
- When moving from position to position, be careful not to mask your supporting fires. When you reach your next position, be prepared to cover the movement of other members of your assault force or element.

111.13 Discuss the following CASEVAC categories of precedence and the criteria used to determine their assignment: [ref. b, p. 0808H1]

DETERMINE THE PRECEDENCE OF THE CASUALTY. Casualties needing air CASEVAC will be given appropriate degrees of precedence so that, if aircraft space is limited, more urgent patients are evacuated before those whose conditions are less serious. The senior military person present makes the determination to request casualty evacuation and assignment of precedence. This decision is based on the advice of the senior medical person at the scene, the patient's condition, and the tactical situation. Assignment of casualty evacuation precedence is necessary. The precedence provides the supporting medical unit and controlling headquarters with information that is used in determining priorities for committing their evacuation assets. For this reason, correct assignment of precedence cannot be overemphasized; over classification remains a continuing problem. Patients will be picked up as soon as possible, consistent with available resources and pending missions. The following are categories of precedence and the criteria used in their assignment:

Priority 1 - Urgent. Assigned to emergency cases that should be evacuated as soon as possible and within a maximum of 2 hours in order to save life, limb, or eyesight, to prevent complications of serious illness, or to avoid permanent disability.

Priority 1A - Urgent-Surgical. Assigned to patients who must receive far forward surgical intervention to save life and to stabilize them for further evacuation

Priority 2 - **Priority**. Assigned to sick and wounded personnel requiring prompt medical care. This precedence is used when the individual should be evacuated within 4 hours or his medical condition could deteriorate to such a degree that he will become an URGENT precedence, or whose requirements for special treatment are not available locally, or who will suffer unnecessary pain or disability.

Priority 3 - Routine. Assigned to sick and wounded personnel requiring evacuation but whose condition is not expected to deteriorate significantly. The sick and wounded in this category should be evacuated within 24 hours.

Priority 4 - Convenience. Assigned to patients for whom evacuation by medical vehicle is a matter of medical convenience rather than necessity

111.14 Discuss the criteria for selection of a helicopter landing zone. [ref. b, pp. 0808H2, 0808H3]

Landing Zones. CASEVAC pickup zones cannot always be selected in favorable terrain, but mission success is largely dependent upon a pickup site that will accommodate the size of the helicopter employed.
The size of the landing zone will dictate what type of helicopters will be able to support your CASEVAC and may determine how large of a landing zone will need to be cleared. (see Table below) Notice that the size of the obstacles around the
landing zone is paramount, locations requiring vertical ascent or decent are not desirable.

		LANDING ZONE DIAMETER		
		OBSTRUCTION HEIGHT (FEET)		
OVERALL LENGTH				
TYPE	**(FEET)**	**5-40**	**40-80**	**80- +**
UH-1E/N	57/57	100	150	200
CH-46	46/84	175	250	350
CH-53D	56/89	175	250	350
CH-53E	60/99	175	250	350

Landing Zone Diameter

- Site should not contain high obstacles or debris, which will be blown by rotor wash.
-The site should offer some measure of protection for the vulnerable helicopter form enemy direct fire weapons. Terrain cover and an effective base of fire suppressive fire during the critical landing, loading can provide this protection, and departure phases of an evacuation conducted in forward battle areas.
- Flat open spaces and hilltops are good locations for a landing zone.
- All around security (360-degree perimeter defense) should be maintained at all times.
- Landing zones may have to be cleared by the platoon. Tools likely to be used would be chain saws, hatchets, K-bars, entrenching tools, and explosives such as TNT and C-4. In extreme cases, where single and double canopy exists, casualties may have to be evacuated by hoisting as the helicopter hovers overhead.
Selection of a pickup zone necessitates extremely accurate map reading and communications with the helicopter. For normal operations when the helicopter approaches the landing site, the platoon commander should throw a smoke grenade to mark his position and show the pilot the direction of the wind. The platoon commander should also inform the pilot of the friendly position and the enemy position and situation. Particularly in a debris-strewn landing site, a Marine should direct the helicopter in, signaling where it is clear for the aircraft to land in the site. All obstacles within the landing zone need to be marked, so that the pilot has a clear view of the situation. Air panel markers are an excellent means of marking obstacles during good visibility; there are various methods to mark obstacles during low light situations, i.e., colored chemical lights. All Marines in the platoon should be trained in directing helicopters into a landing site, requesting casualty evacuation helicopters from the company commander and communicating with the pilot over the radio. Radio communications are particularly important in night operations. Because of the inherent danger in night evacuation, the seriousness of the wound must be considered. It might be advantageous to wait until first light to evacuate the casualty.

Marking the landing zone. The size of the landing zone is dependent upon the height of the obstacles surrounding the zone and the number and type of helicopters needed on the largest wave planned landing zone size should be determined by using figure 0808-2 and computing the number of landing points needed to support the operation. Simple multiplication should provide good planning data.
- A landing point is a specific point where one helicopter can land. Landing points collectively form landing sites.
- A landing site is an area within a large landing zone used by the helicopter borne unit as a tactical control designator in order to land in predetermined locations. When such separation of units and functions is not required, the helicopter wave or flight leaders should be given the prerogative to land where safety and flight characteristics dictate
- The marking of landing zones varies from the initial marking with smoke for landing zone identification and wind direction to elaborate markings. When using panels, care must be exercised to ensure proper security from the effects of rotor wash, either by distance separation or staking and typing of the panels. Smoke is best used downwind from the landing points so as not to obscure vision during landing.

111.15 Discuss the procedures for requesting a CASEVAC. [ref. b, pp. 0808H3 thru 0808H5]

REQUESTING A CASEVAC.
Helicopters are normally requested through battalion, but the platoon and rifle company commanders should be aware of their availability under all circumstances. A CASEVAC request is submitted to the appropriate unit using a CASEVAC request. The medical evacuation request is used for requesting evacuation support for both air and ground ambulances. There are two established medical evacuation formats and procedures – one for wartime use and one used in peacetime.

Several differences exist between the wartime and the peacetime medical evacuation request formats and procedures. The peacetime request form differs in two line item areas:
- Line 6 – changed to number and type of wound, injury, or illness (two gunshot wounds and one compound fracture). If serious bleeding is reported, the patient's blood type should be given, if known.
- Line 9 – changed to description of terrain (flat, open, sloping, wooded). If possible, include relationship of landing area to prominent terrain features.
Security is another basic difference between wartime and peacetime requesting procedures. Under all non-war conditions, the safety of US military and civilian personnel outweighs the need for security, and clear text transmissions of casualty evacuation requests are authorized. During wartime, the rapid evacuation of patients must be weighed against the importance of unit survivability. Accordingly, wartime casualty evacuation requests are transmitted by secure means only.

REQUESTING A CASEVAC

LINE	ITEM	EXPLANATION	WHERE/HOW OBTAINED	WHO NORMALLY PROVIDES	REASON
1	Location of Pickup site.	Encrypt grid coordinates. When using DRYAD Numerical Cipher, the same SET line will be used to encrypt grid zone letters and coordinates. To preclude misunderstanding, a statement is made that grid zone letters are included in the message (unless unit SOP specifies its use at all times.	From map	Unit Leaders	Required so evacuation vehicle knows where to pickup patient. Also, so that the unit coordinating evacuation mission can plan the route for the evacuation vehicle (if the evacuation vehicle must pick up from more than 1 location).
2	Radio Frequency, call sign, and suffix	Encrypt the frequency of the radio at the pickup site, not a relay frequency. The call sign (and suffix if used) of person to be contacted at the pickup site may be transmitted in the clear.	From SOI	RTO	Required for that evacuation vehicle can contact requesting unit while enrout (obtain additional information or change in situation or direction).
3	Number of Patients by Precedence	Report only applicable information and encrypt the brevity codes. A- Urgent B- Urgent-Surgical C- Priority D- Routine E-Convenience If 2 or more categories reported in the same request, insert the word "Break" between each category.	From SOI	RTO	Required by the unit controlling the evacuation Vehicles to assist in prioritizing missions.
4	Special Equipment Required	Encrypt the applicable brevity codes A- None B-Hoist C- Extraction Equipment D-Ventilator	From evaluation of Patient(s)	Medic or Senior Person Present	Required so that the equipment can be placed on board the evacuation vehicle prior to the start of the mission.
5	Number of Patients by Types	Report only applicable information and encrypt the brevity code. If requesting	From Evaluations of Patient(s)	Medic or Senior Person	required so that the appropriate number of
6	Security of Pickup Site **(Wartime)**	N- No enemy troops in area P- Possibly enemy troops in area (approach with caution) E- Enemy troops in area (approach with caution) X- Enemy troops in area (armed escort required)	From Evaluation of Situation	Unit Leader	Required to assist the evacuation crew in Assessing the situation and determining if assistance is required. More definitive guidance can be furnished the evacuation vehicle while it is enroute (specific location of enemy to assist an aircraft in planning its approach).
6	Number and Type of Wound, Injury, or Illness **(Peacetime)**	Specific information regarding patient wounds by type (gunshot or shrapnel). Report serious bleeding, along with patient blood type, if known	From evaluation of patient.	Medic or Senior Person Present	Required to assist evacuation personnel determining treatment and special equipment needed.

7	Method of Marking Pickup Site	Encrypt the brevity codes. A- Panels B- Pyrotechnic signal C- Smoke Signal D- None E- Other	Based on Situation and Availability	Medic or Senior Person Present.	Required to assist the evacuation crew in identifying the specific location of the pick up. Note that the color of the panels or Smoke should not be transmitted until the evacuation vehicle contacts the unit (just prior To its arrival). For security the crew should identify the Color and unit verify
8	Patient Nationality And Status	The number of patients in each category need not be transmitted. Encrypt only the applicable brevity codes. A- U.S. Military B- U.S. Civilian C- Non U.S. Military D- Non U.S. Civilian E- EPW	From Evaluation of Patient	Medic or Senior Person Present	Required to assist in planning for destination facilities and need for guards. Unit requesting support should ensure that there is an English speaking representative at the pickup site
9	NBC Contamination **WARTIME**	Include this line only when applicable. Encrypt the applicable brevity codes. N- Nuclear B- Biological C- Chemical	From Situation	Medic or Senior Person Present	Required to assist in planning for the mission (Determine which evacuation vehicle will accomplish the mission and when it will be accomplished).
9	Terrain Description **PEACETIME**	Includes details of terrain features in and around proposed landing site. If possible, describe relationship of site to prominent terrain feature (lake, mountain, tower).	From Area Survey	Personnel at Site	Required to allow evacuation personnel to assess route/avenue of approach into area. Of particular importance if hoist operation is required.

112 MARINE CORPS OPERATIONS FUNDAMENTALS

References:

[a] Headquarters Marine Corps, Department of Aviation Website (http://www.hqmc.usmc.mil/)
[b] US Navy Ships Website (http://www.fas.org/man/dod-101/sys/ship/)
[c] Joint Publication 3-07, Joint Doctrine for Military Operations Other Than War
[d] MCWP 3-35.3, Military Operations on Urbanized Terrain (PCN 14300003500)
[e] MCCP 1, Operation Maneuver From the Sea (PCN 14500000100)
[f] MARADMIN 315/04 MV-22 Transition Policy for Enlisted Marines

112.1 Discuss the primary function and mission of the following Marine Corps aviation platforms: [ref. a]

AH-1W Cobra

Primary function: Attack helicopter
Length: 58 feet (17.67 meters) **Height:** 13.7 feet (4.17 meters)
Rotor Diameter: 48 feet (14.62 meters)
Speed: 147 knots (169.05 miles per hour) in basic combat attack configuration **Range:** 256 nautical miles (294.4 miles) in basic combat attack configuration **Ceiling:** 18,700 feet (5703.5 meters) in basic combat attack configuration (limited to 10,000 feet (3050 kilometers) by oxygen requirements)
Crew: 2 officers
Armament: One 20MM turreted cannon with 750 rounds; four external wing stations that can fire 2.75"/5.0" rockets and a wide variety of precision guided missiles, to include TOW/Hellfire (point target/anti-armor), Sidewinder (anti-air) and Sidearm (anti-radar).
Mission: Fire support and security for forward and rear area forces, point target/anti-armor, anti-helicopter, armed escort, supporting arms control and coordination, point and limited area air defense from enemy fixed-wing aircraft, **Features:** The AH-1W Super Cobra is a Marine Corps attack helicopter capable of operating in day, night and limited visibility. The AH-1W provides enroute escort for our assault helicopters and their embarked forces. The AH-1W is a two-place, tandem-seat, twin-engine helicopter capable of land- or sea -based operations. The Cobra provides fire support and fire support coordination to the landing force during amphibious assaults and subsequent operations ashore

CH-46E Sea Knight

Primary function: Medium lift assault support helicopter
Length:
Rotors unfolded: 84 feet, 4 inches (25.69 meters) Rotors folded: 45 feet, 7.5 inches (13.89 meters)
Width:
Rotors unfolded: 51 feet (15.54 meters) Rotors folded: 14 feet, 9 inches (4.49 meters) **Height:** 16 feet, 8 inches (5.08 meters)
Range: 132 nautical miles (151.8 miles) for an assault mission **Speed:** 145 knots (166.75 miles per hour)
Crew: 4 - pilot, copilot, crew chief, and 1st mechanic/aerial gunner
Payload:
9-16 passengers/combat troops
Medical evacuation: 15 litters and 2 attendants
Cargo: 2,000 - 4,000 pounds (2270 kilograms) internal or external load
Mission: The mission of the CH-46E Sea Knight helicopter in a Marine Medium Helicopter (HMM) squadron is to provide all-weather, day/night, night vision goggle (NVG) assault transport of combat troops, supplies, and equipment during amphibious and subsequent operations ashore. Troop assault is the primary function and the movement of supplies and equipment is secondary. Additional tasks are: combat and assault support for evacuation operations and other maritime special operations; over-water search and rescue augmentation; support for mobile forward refueling and rearming points; aeromedical evacuation of casualties from the field to suitable medical facilities
Background: The CH-46 Sea Knight was first procured in 1964 to meet the medium-lift requirements of the Marine Corps in Viet Nam with a program buy of 600 aircraft. The aircraft continues to serve the Marine Corps in combat and peacetime environments. However, normal airframe operational and attrition rates have taken these assets to the point where a medium lift replacement is required. Safety and capability upgrades such as the Engine Reliability Improvement Program, the Communication and Navigation Control System, and Dynamic Component Upgrade allow continued safe and effective operation of the Sea Knight fleet while the MV- 22 Osprey is fielded as the medium lift replacement aircraft for the Marine Corps.

CH-53D Sea Stallion

Primary function: Transportation of equipment and supplies during the ship-to-shore movement of an amphibious assault and during subsequent operations ashore. **Length:** 88 feet 6 inches (26.96 meters)
Height: 24 feet 11 inches (7.59 meters)
Rotor diameter: 72 feet 2.7 inches (22.01 meters) **Speed:** 130 knots (149.5 miles per hour)
Range: 690 miles (600 nautical miles) **Armament:** Two XM-218 .50 cal machineguns
Crew: 4 - pilot, copilot, crew chief, and 1st mechanic/aerial gunner
Mission: The CH-53D Sea Stallion is designed for the transportation of equipment, supplies and personnel during the assault phase of an amphibious operation and subsequent operations ashore. Capable of both internal and external transport of supplies, the CH-53D is shipboard compatible and capable of operation in adverse weather conditions both day and night. The CH-53D is now filling a role in the Marine Corps' medium lift helicopter fleet.
Features: The twin-engine helicopter is capable of lifting 7 tons (6.35 metric tons). Improvements to the aircraft include an elastomeric rotor head, external range extension fuel tanks, crashworthy fuel cells, ARC-210 radios, integrated global positioning system (GPS), and defensive electronic countermeasure equipment. The helicopter will carry 37 passengers in its normal configuration and 55 passengers with centerline seats installed.
Background: The CH-53D is a more capable version of the CH-53A introduced into the Marine Corps in 1966. Used extensively both afloat and ashore, the Sea Stallion was the heavy lift helicopter for the Marine Corps until the introduction of the CH-53E triple engine variant of the H-53 family into the fleet in 1981. The CH-53D has performed its multi-role mission lifting both equipment and personnel in training and combat, most recently in Operation Desert Storm, where the helicopter performed with distinction. Now primarily based in Hawaii, the CH- 53D augments the medium lift mission and is scheduled to be replaced by MV-22 in the middle of this decade.

CH-53E Super Sea Stallion

Primary function: Transportation of heavy equipment and supplies during the ship-to-shore movement of an amphib assault and during subsequent operations ashore. **Length:** 99 feet 5 inches (2.64 meters)
Height: 28 feet 4 inches (.81 meters) **Rotor diameter:** 79 feet (24.07 meters) **Speed:** 172.5 miles per hour (150 knots)
Range: *without refueling:* 621 miles, *with aerial refueling:* indefinite
Armament: Two XM-218 .50 caliber machineguns.
Crew: 4 - pilot, copilot, crew chief, and 1st mechanic/aerial gunner
Mission: As the Marine Corps' heavy lift helicopter designed for the transportation of material and supplies, the CH-53E is compatible with most amphibious class ships and is carried routinely aboard LHA (Landing, Helicopter, Assault: an amphibious assault ship) and LHD (Landing, Helicopter, Dock: an amphibious assault ship) type ships. The helicopter is capable of lifting 16 tons (14.5 metric tons) at sea level, transporting the load 50 nautical miles (57.5 miles) and returning. A typical load would be a 16,000 pound (7264 kilogram) M198 howitzer or a 26,000 pound (11,804 kilogram) Light Armored Vehicle. The aircraft also can retrieve downed aircraft including another CH-53E. The 53E is equipped with a refueling probe and can be refueled in flight giving the helicopter indefinite range.
Features: The CH-53E is a follow-on for its predecessor, the CH-53D. Improvements include the addition of a third engine to give the aircraft the ability to lift the majority of the Fleet Marine Force's equipment, a dual point cargo hook system, improved main rotor blades, and composite tail rotor blades. The helicopter seats 37 passengers in its normal configuration and has provisions to carry 55 passengers with centerline seats installed. It can carry external loads at increased airspeeds due to the stability achieved with the dual point system. Precision navigation is provided by an integrated global positioning system (GPS) and augmented by the Helicopter Night Vision System Forward Looking Infrared sensor. **Background:** With four and one half hours' endurance, the CH -53E Super Stallion can mass combat power at long distances over rugged terrain, day or night. The Super Stallion has established itself as the prime workhorse of the Marine Corps' forward deployed units and has become a critical pillar in the expeditionary logistics capability for the future The CH-53E has consistently proven its worth to the Fleet commanders with its versatility and range. During Operation Eastern Exit two CH-53Es launched from amphibious ships and flew 463 nautical miles (532.45 miles) at night, refueling twice en route, to rescue American and foreign allies from the American Embassy in the civil war-torn capital of Mogadishu, Somalia in January of 1990. Two CH- 53Es rescued Air Force Capt. Scott O'Grady in Bosnia in June 1995, and the aircraft has been involved in multiple non-combatant evacuations.

UH-1N Huey

Primary function: Utility helicopter **Length:** 57.3 feet (17.46 meters) **Height:** 14.9 feet (4.54 meters)
Rotor Diameter: 48 feet (14.62 meters)
Speed: 121 knots (139.15 miles per hour) at sea level **Range:** 172 nautical miles (197.8 miles)
Crew:
Officer: 2
Enlisted: 2
Armament: M-240 7.62mm machine gun or the GAU-16 .50 caliber machine gun or the GAU-17 7.62mm automatic gun. All three weapons systems are crew -served, and the GAU-2B/A can also be controlled by the pilot in the fixed forward firing mode. The helicopter can also carry two 7 -shot or 19-shot 2.75" rocket pods. **Mission:** Airborne command and control, combat assault, medical evacuation, maritime special operations, supporting arms control and coordination, fire support and security for forward and rear area forces.
Features: The UH-1N is a twin -piloted, twin-engine helicopter used in command and control, resupply, casualty evacuation, liaison and troop transport. The Huey provides utility combat helicopter support to the landing force commander during ship-to-shore movement and in subsequent operations ashore.
The aircraft can be outfitted to support operations such as command and control with a specialized communication package (ASC -26), supporting arms coordination, assault support, medical evacuation for up to six litter patients and one medical attendant, external cargo, search and rescue using a rescue hoist, and reconnaissance and reconnaissance support. The currently fielding of the 2nd generation Navigational Thermal Imagining System/Forward Looking Infrared Radar for the UH-1N will increase its night mission capability

MV-22B Osprey

Primary function: Amphibious assault transport of troops, equipment and supplies from assault ships and land bases.
Description: The V -22 Osprey is a multi-engine, dual-piloted, self-deployable, medium lift, vertical takeoff and landing (VTOL) tilt-rotor aircraft designed for combat, combat support, combat service support, and Special Operations missions worldwide. It will replace the Corps' aged fleet of CH-46E and CH-53D medium lift helicopters
Mission: Marine Corps Assault Support
Variants: The CV-22 will be utilized by the Air Force and SOCOM for Special Operations missions maintaining maximum commonality with the MV-22. Aircraft avionics peculiar to Air Force/SOCOM unique mission requirements constitute primary aircraft differences. The Navy will use the HV-22 for Combat Search and Rescue and fleet logistics support
Dimensions:
Spread: Length..57' 4"..Width..18' 5"..Height..22' 1
Folded: Length..63' 0"..Width..84' 7" Height ..18' 1"
Cruise Airspeed
MV-22 240 kts (258 kts)

EA-6B Prowler

Primary function: Airborne Electronic Warfare (EW) support to Fleet Marine Forces to include electronic attack (EA), tactical electronic support (ES), electronic protection (EP) and high speed anti-radiation missile (HARM)
Length: 59 feet (17.98 meters) **Height:** 15 feet (4.57 meters) **Wing span:** 53 feet (16.15 meters)
Speed: Maximum .99 mach; cruise .72 mach
Range:
Unrefueled in combat configuration: 850 nautical miles (977.5 miles)
Refueled: unlimited (crew fatigue factor - approximately 8 hours)
Armament: ALQ-99 Tactical Jamming System (TJS); USQ-113 Communications Jammer, High Speed Anti-Radiation Missile (HARM)
Sensors: ALQ-99 On-board System (OBS), USQ-113 Communications Receiver
Crew: 4
Mission: The EA- 6B's ALQ- 99 OBS is used to collect tactical electronic order of battle (EOB) data which can be recorded and processed after missions to provide updates to various orders of battle. The ALQ-99 TJS is used to provide active radar jamming support to assault support and attack aircraft, as well as ground units. Additional suppression of enemy air defenses (SEAD) capability is available with the employment of HARM. The USQ-113 communications jammer can detect and jam a wide range of communication frequencies to further degrade air defense and ground units' capabilities.
Features: Marine Prowlers may be land -based from prepared airfields, or operate from expeditionary airfields (EAF). They may also be sea-based, operating from aircraft carriers. Marine Prowlers are unique in their integration with the Tactical Electronic Reconnaissance Processing and Evaluation System (TERPES). TERPES provides post-mission analysis of EA-6B ES data for reporting and updating orders of battle for EA-6B and MAGTF mission planning. It also provides post-mission analysis of jamming and HARM employment for reporting, assessing and storing mission data.

AV-8B Harrier II

Primary function: Attack and destroy surface targets under day and night visual conditions.
Length: 46.3 feet (14.11 meters) **Wing span:**
30.3 feet (9.24 meters) **Cruise speed:**
Subsonic to transonic
Ferry range: 2100 nautical miles(2416.64 miles)
Combat radius:
close air support : 163 nautical miles (187.45 miles) with 30 minutes time on station
interdiction: 454 nautical miles (522.45 miles)
Armament: Seven external store stations, comprising six wing stations for AIM-9 Sidewinder and an assortment of air-to-ground weapons, external fuel tanks and AGM-65 Maverick missiles; one centerline station for a DECM pod. A GAU-12 25MM six-barrel gun pod and accompanying ammunition pod can be mounted either side of centerline and has a 300 round capacity with a lead computing optical sight system (LCOSS) gunsight.
Crew: 1
Mission: The mission of the VMA STOVL squadron is to attack and destroy surface and air targets, to escort helicopters, and to conduct other such air operations as may be directed. Specific tasks of the AV-8B HARRIER II include:
Conduct close air support using conventional and specific weapons
Conduct deep air support, to include armed reconnaissance and air interdiction, using conventional and specific weapons.
Conduct offensive and defensive antiair warfare. This includes combat air patrol, armed escort missions, and offensive missions against enemy ground-to-air defenses, all within the capabilities of the aircraft.
Be able to operate and deliver ordnance at night and to operate under instrument flight conditions.
Be able to deploy for extended operations employing aerial refueling.
Be able to deploy to and operate from carriers and other suitable seagoing platforms, advanced bases, expeditionary airfields, and remote tactical landing sites.
Features: The AV-8B V/STOL strike aircraft was designed to replace the AV-8A and the A-4M light attack aircraft. The Marine Corps requirement for a V/STOL light attack force has been well documented since the late 1950's. Combining tactical mobility, responsiveness, reduced operating cost and basing flexibility, both afloat and ashore, V/STOL aircraft are particularly well-suited to the special combat and expeditionary requirements of the Marine Corps. The AV-8BII+ features the APG-65 Radar common to the F/A-18, as well as all previous systems and features common to the AV-8B Harrier II

KC130F/R/T Hercules

Primary function: In-flight refueling; tactical transport. **Length:**
Aircraft: 97 feet, 9 inches (22.16 meters). *Cargo compartment:* 41
feet (12.49 meters).
Width of Cargo compartment: 10feet, 3 inches (3.12 meters). **Height:**
Aircraft: 38 feet, 4 inches (11.68 meters).
Cargo compartment: 9 feet (2.74 meters). **Wing span:**
132 feet, 7 inches (40.39 meters). **Speed:** 315 knots
(362.25 miles per hour).
Range: *Tanker mission:* 1000 nautical mile (1150 mile) radius with 45,000 pounds of fuel (20,430 kilograms) (KC-130R/T).
Cargo mission: 2875 nautical miles (3306.25 miles) with 38,258 pounds (17,369 kilograms) of cargo (KC-130R/T) or 92 combat troops or 64 paratroopers or 74 litters. **Landing distance:** Less than 2,600 feet .
Crew: 2 pilots, 1 navigator/systems operator, 1 flight engineer, 1 first mechanic, 1-2 loadmaster
Mission: The KC-130 is a multi-role, multi-mission tactical tanker/transport which provides the support required by Marine Air Ground Task Forces. This versatile asset provides in-flight refueling to both tactical aircraft and helicopters as well as rapid ground refueling when required. Additional tasks performed are aerial delivery of troops and cargo, emergency resupply into unimproved landing zones within the objective or battle area, airborne Direct Air Support Center, emergency medevac, tactical insertion of combat troops and equipment, evacuation missions, and support as required of special operations capable Marine Air Ground Task Forces **Features:** The KC-130 is equipped with a removable 3600 gallon (136.26 hectoliter) stainless steel fuel tank that is carried inside the cargo compartment providing additional fuel when required. The two wing-mounted hose and drogue refueling pods each transfer up to 300 gallons per minute (1135.5 liters per minute) to two aircraft simultaneously allowing for rapid cycle times of multiple-receiver aircraft formations (a typical tanker formation of four aircraft in less than 30 minutes). Some KC-130s are also equipped with defensive electronic and infrared countermeasures systems. Development is currently under way for the incorporation of interior/exterior
night vision lighting, night vision goggle heads-up displays, global positioning system, and jam-resistant radios.

F-18A/B/C Hornet

Primary function: Intercept and destroy enemy aircraft under all-weather conditions and attack and destroy surface targets.
Length: 56 feet (17.06 meters) **Wing span:** 37.5 feet (11.43 meters)
Cruise speed: High subsonic to supersonic
Ferry range: Over 2,000 nautical miles (2300 miles)
Combat radius:
Fighter mission: 400 nautical miles (460 miles) *Attack mission:* 575 nautical miles (661.25 miles)
Armament: Nine external wing stations, comprising two wingtip stations for an assortment of air-to-air and air-to-ground weapons, including AIM-7 Sparrows, AIM-9 Sidewinders, AMRAAMs, AGM- 84 Harpoons and AGM-65 Maverick missiles; two inboard wing stations for external fuel tanks or air-to-ground stations; two nacelle fuselage stations for Sparrows or AN/AAS-38 Forward Looking Infrared Radar (FLIR) pods; and a center station for fuel tank or air-to-ground weapons. Air-to-ground weapons include all GBU series bombs, JSOW, JDAM, Mk 80 series general-purpose bombs, and CBU-59 cluster bombs. AN M61 20mm six -barrel gun is mounted in the nose and has a McDonnell Douglas director gunsight.
Crew: 1
Mission: Specific F/A-18A/C tasks include:
Intercept and destroy enemy aircraft in conjunction with ground or airborne fighter control under all-weather conditions.
Conduct day and night close air support under the weather.
Conduct day and night precision deep air support, under the weather. Deep air support consists of radar search and attack, interdiction, and strikes against enemy installations using all types of weapons compatible with assigned aircraft.
Conduct armed escort of friendly aircraft.
Conduct day and night suppression of enemy air defense (SEAD)
Be able to operate from carriers, advanced bases, and expeditionary airfields.
Be able to deploy or conduct extended range ops employing aerial refueling.
Features: The Marine Corps F/A-18A/C strike fighter multi-mission aircraft was designed to replace the F-4 Phantom. The F/A -18A/C Hornet is missionized for traditional fighter, attack, and close air support roles through selection of external pods/equipment to accomplish specific mission objectives. Any aircraft can quickly be configured to perform either fighter or attack missions, or both, thus providing the Marine Air Ground Task Force (MAGTF) commander more flexibility in employing his tactical aircraft in a rapidly changing scenario. Marine F/A18s may be land-based from prepared airfields, or they can operate from expeditionary airfields (EAF). They may also be sea-based, operating from the decks of aircraft carriers.

F-18D Hornet

Primary function: Attack and destroy surface targets, day or night, under all weather conditions; conduct multi-sensor imagery reconnaissance; provide supporting arms coordination; and intercept and destroy enemy aircraft under all weather conditions.
Length: 56 feet (17.06 meters **Wing span:**
37.5 feet (11.43 meters)
Cruise speed: High subsonic to supersonic
Ferry range: Over 2,000 nautical miles (2300 miles)
Combat radius: *Fighter mission:* 400 nautical miles (460 miles) *Attack mission:* 575 nautical miles (661.25 miles)
Armament: Nine external wing stations, comprising two wingtip stations for AIM-9 Sidewinder air-to-air missiles; two outboard wing stations for an assortment of air-to-air and air-to-ground weapons, including AIM -7 Sparrows, AIM-9 Sidewinders, AMRAAMs, AGM-84 Harpoons and AGM-65 Maverick
missiles; two inboard wing stations for external fuel tanks or air-to- ground stations; two nacelle fuselage stations for Sparrows or AN/AAS-38 Forward Looking Infrared Radar (FLIR) pods; and a center station for fuel tank or air -to-ground weapons such as GBU laser guided bombs, JDAM, JSOW, Mk 80 series general purpose bombs, and CBU-59 cluster bombs. An M61 20mm six-barrel gun is mounted in the nose and has a McDonnell Douglas director gunsight.
Crew: 2
Mission: Specific F/A-18D tasks include:
Conduct day and night deep air support, in all weather. Deep air support consists of armed reconnaissance, radar search and attack, interdiction, and strikes against enemy installations, using all types of weapons compatible with assigned aircraft.
Conduct multi-sensor imagery reconnaissance to include pre-strike and post-strike target damage assessment and visual reconnaissance.
Conduct day and night supporting arms coordination to include forward air control, tactical air coordination and artillery/naval gunfire spotting.
Intercept and destroy enemy aircraft in conjunction with ground and airborne fighter direction.
Conduct battlefield illumination and target illumination.
Conduct armed escort of friendly aircraft.
Be able to operate from carriers, advanced bases, and expeditionary airfields.
Be able to deploy or conduct extended range ops employing aerial refueling. **Features:** Marine F/A-18D aircraft are unique within the Department of the Navy because the Marine Corps employs the F/A-18D as a tactical strike aircraft while the Navy uses it as a trainer. Marine F/A-18Ds may be land-based from prepared airfields, or they can operate from expeditionary airfields (EAF). They may also be sea-based, operating from the decks of Navy aircraft carriers.

112.2 Discuss the primary mission of each of the following classes of ships used to support the Marine Corps mission: [ref. b]

LHA

The primary war-fighting mission of the LHA-1 Tarawa class is to land and sustain United States Marines on any shore during hostilities. The ships serve as the centerpiece of a multi-ship Amphibious Readiness Group (ARG). Some 3,000 Sailors and Marines contribute to a forward-deployed ARG composed of approximately 5,000 personnel.

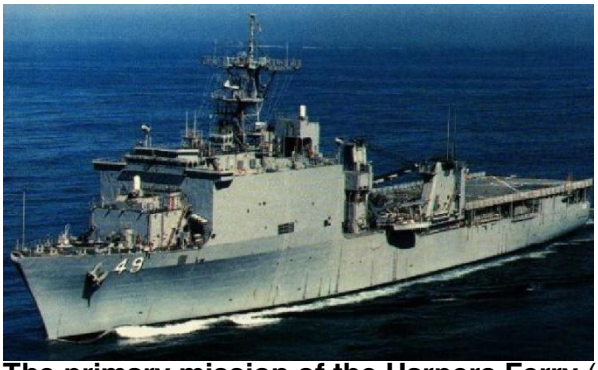
LHD

The Wasp-class LHD are the largest amphibious ships in the world. The LHD is an improved follow-on to the five ship Tarawa-class LHAs, sharing the basic hull and engineering plant. The LHD I has an enhanced well deck, enabling it to carry three LCACs (vice one LCAC in the LHAs). The flight deck and elevator scheme is also improved, which allows the ship to carry two more helicopters than its predecessor, the LHA.

LPD

The LPD 4 Austin class of ship combines the functions of three different classes of ships; the landing ship (LSD), the tank landing ship (LST), and the attack cargo ship (LKA). The Amphibious Transport, Dock, is used to transport and land Marines, their equipment and supplies by embarked landing craft or amphibious vehicles augmented by helicopters in amphibious assault. These ships are configured as a flagship and provide extensive command, control and communications facilities to support an Amphibious Task Force Commander and Landing Force Commander. In an amphibious assault, the ship would normally function as the Primary Control Ship that would be responsible for coordinating boat waves and vectoring landing craft to the beach.

LSD



The primary mission of the Harpers Ferry (Cargo Variant) ship is to dock, transport and launch the Navy's Landing Craft, Air Cushion (LCAC) vessels and other amphibious craft and vehicles with crews and Marines into potential trouble spots around the world. The ship also has the capability to act as primary control ship during an Amphibious Assault.

LCAC

The Landing Craft, Air Cushion (LCAC) Transport weapons systems, equipment, cargo and personnel of the assault elements of the Marine Air/Ground Task Force both from ship to shore and across the beach. The landing craft air cushion (LCAC) is a high-speed, over-the-beach fully amphibious landing craft capable of carrying a 60-75 ton payload. Capable of operating from existing and planned well deck ships, it is used to transport weapons systems, equipment, cargo and personnel from ship to shore and across the beach. The advantages of air-cushion landing craft are numerous. They can carry heavy payloads, such as an M-1 tank, at high speeds. Their payload and speed mean more forces reach the shore in a shorter time, with shorter intervals between trip.

T-AH (sealift)

Two hospital ships [HSS] operated by Military Sealift Command are designed to provide emergency, on-site care for US combatant forces deployed in war or other operations. Hospital ships have two missions. First, to provide a mobile, flexible, rapidly responsive afloat medical capability to provideacute medical and surgical care in support of amphibious task forces, Marine Corps, Army, and Air Force elements, forward deployed Navy elements. Secondly, to provide a full-service hospital asset for use by other government agencies involved in the support of disaster relief and humanitarian operations worldwide. The HSS mission in joint operations is to minimize the effects of wounds, injuries, and disease on unit effectiveness, readiness, and morale. This mission is accomplished by a proactive preventive medicine (PVNTMED) program and a phased health care system (echelons of care) that extends from actions taken at the point of wounding, injury, or illness to evacuation from a theater for treatment at a hospital in the continental United States (CONUS). One measure of this system's effectiveness is its ability to save life and limb, to reduce the disease and nonbattle injury (DNBI) rate, and to return patients to duty quickly and as far forward in the theater as possible. Another measure is the system's ability to stabilize patients for evacuation to the Communications Zone (COMMZ) or out of the theater as appropriate, within the operational evacuation policy guidelines, and with minimum delay.nts of the fleet and fleet activities located in areas where hostilities may be imminent.

T-AK (sealift)

Each of the five ships of the TAK-3000 Cpl. Louis J. Hauge Jr. class carries a full range of Marine Corps cargo, enough cargo to support a Marine Air Ground Task Force for 30 days. Each ship has lift -on/lift-off capabilities, as well as roll-on/roll-off capabilities. Navy lighterage carried onboard consists of causeways, both powered and unpowered, and small boats to move them around. They are certified to land up to CH-53E helicopters. Baugh also has breakbulk cargo capacity, which is used for carrying general cargo. The ships are prepositioned in Diego Garcia.
Thirteen MSC prepositioning ships are specially configured to transport supplies for the US Marine Corps. Known as the Maritime Prepositioning Force, the 13 ships were built or modified in the mid-1980s and are on location in the western Pacific Ocean, the Indian Ocean and the Mediterranean Sea. The 13 Maritime Prepositioning Ships, or MPS, contain nearly everything the Marines need for initial military operations from tanks and ammunition to food and fuel to spare parts and engine oil

112.3 Discuss the difference between war and Military Operations Other Than War (MOOTW). [ref. c, pp. I-1, I-2]

War. When instruments of national power are unable to achieve national objectives or protect national interests any other way, the US national leadership may decide to conduct large-scale, sustained combat operations to achieve national objectives or protect national interests, placing the United States in a wartime state. In such cases, the goal is to win as quickly and with as few casualties as possible, achieving national objectives and concluding hostilities on terms favorable to the United States and its multinational partners

Military Operations Other Than War. MOOTW focus on deterring war, resolving conflict, promoting peace, and supporting civil authorities in response to domestic crises. As Figure I-1 indicates, MOOTW may involve elements of both combat and noncombat operations in peacetime, conflict, and war situations. MOOTW involving combat, such as peace enforcement, may have many of the same characteristics of war, including active combat operations and employment of most combat capabilities. All military operations are driven by political considerations. However, MOOTW are more sensitive to such considerations due to the overriding goal to prevent, preempt, or limit potential hostilities. In MOOTW, political considerations permeate all levels and the military may not be the primary player. As a result, these operations normally have more restrictive rules of engagement (ROE) than in war. As in war, the goal is to achieve national objectives as quickly as possible and

conclude military operations on terms favorable to the United States and its allies. However, the purposes of conducting MOOTW may be multiple, with the relative importance or hierarchy of such purposes changing or unclear; for example, to deter potential aggressors, protect national interests, support the United Nations (UN) or other regional organizations, satisfy treaty obligations, support civil authorities, or provide humanitarian assistance (HA). The specific goal of MOOTW may be peaceful settlement, assistance rendered to civil authorities, or providing security for HA. The Department of Defense (DOD) is often in a support role to another agency, such as the Department of State (DOS) in HA operations. However, in certain types of operations DOD is the lead agency, such as in peace enforcement operations (PEO). These operations usually involve interagency coordination and may also involve nongovernmental organizations (NGOs) or private voluntary organizations (PVOs) . Finally, although MOOTW are generally conducted outside of the United States, some types may be conducted within the United States in support of civil authorities consistent with established law.

112.4 Explain the following types of MOOTW and give examples of each: [ref. c, pp. III-1 thru III-15]

Arms control is a concept that connotes any plan, arrangement, or process, resting upon explicit or implicit international agreement. Arms control governs any aspect of the following: the numbers, types, and performance characteristics of weapon systems (including the command and control, logistic support arrangements, and any related intelligence gathering mechanism); and the numerical strength, organization, equipment, deployment or employment of the armed forces retained by the parties (it encompasses disarmament). Additionally, it may connote those measures taken for the purpose of reducing instability in the military environment. Although it may be viewed as a diplomatic mission, the military can play an important role. For example, US military personnel may be involved in verifying an arms control treaty; seizing WMD (nuclear, biological, and chemical or conventional); escorting authorized deliveries of weapons and other materials (such as enriched uranium) to preclude loss or unauthorized use of these assets; or dismantling, destroying, disposing of weapons and hazardous material. All of these actions help reduce threats to regional security. Other examples include military support for the Conventional Armed Forces in Europe Treaty by conducting and hosting site inspections, participating in military data exchanges, and implementing armament reductions. Finally, the US military's implementation of Vienna Document 1992 confidence and security building measures such as unit/formation inspections, exercise notifications/observations, air and ground base visits, and military equipment demonstrations are further examples of arms control.

Combating terrorism involves actions taken to oppose terrorism from wherever the threat. It includes antiterrorism (defensive measures taken to reduce vulnerability to terrorist acts) and counterterrorism (offensive measures taken to prevent, deter, and respond to terrorism). Antiterrorism programs form the foundation for effectively combating terrorism. The basics of such programs include training and defensive measures that strike a balance among the protection desired, the mission, infrastructure, and available manpower and resources. The US Government may provide antiterrorism assistance to foreign countries under the provisions of Chapter II of the Foreign Assistance Act of 1961. Joint Pub 3-07.2, "JTTP for Antiterrorism," provides detailed guidance on this subject. Counterterrorism provides response

measures that include preemptive, retaliatory, and rescue operations. Normally, counterterrorism operations require specially trained personnel capable of mounting swift and effective action. DOD provides specially trained personnel and equipment in a supporting role to governmental lead agencies. Counterterrorism is a principal special operations mission (see Joint Pub 3-05, “Doctrine for Joint Special Operations.”). DOS, Department of Justice (DOJ) (specifically, the Federal Bureau of Investigation), or the Department of Transportation (DOT) (specifically the Federal Aviation Administration) receive lead agency designation according to terrorist incident location and type. DOS is the lead agency for incidents that take place outside the United States; DOJ is the lead agent for incidents that occur within the United States; and DOT is the lead agent for incidents aboard aircraft “in flight” within the special jurisdiction of the United States. The Assistant to the President for National Security Affairs resolves any uncertainty on the designation of lead agency or responsibilities.

Enforcement of sanctions/maritime intercept operations are operations which employ coercive measures to interdict the movement of certain types of designated items into or out of a nation or specified area. These operations are military in nature and serve both political and military purposes. The political objective is to compel a country or group to conform to the objectives of the initiating body. The military objective is to establish a barrier which is selective, allowing only those goods authorized to enter or exit. Depending on geography, sanction enforcement normally involves some combination of air and surface forces. Assigned forces should be capable of complementary mutual support and full communications compatibility. An example of sanctions enforcement is Operation SUPPORT DEMOCRACY conducted off the coast of Haiti beginning in 1993

Enforcing Exclusion Zones. An exclusion zone is established by a sanctioning body to prohibit specified activities in a specific geographic area. Exclusion zones can be established in the air (no-fly zones), sea (maritime), or on land. The purpose may be to persuade nations or groups to modify their behavior to meet the desires of the sanctioning body or face continued imposition of sanctions, or use or threat of force. The measures are usually imposed by the UN, or other international bodies of which the United States is a member. However, they may also be imposed unilaterally by the United States. Exclusion zones are usually imposed due to breaches of international standards of human rights or flagrant abuse of international law regarding the conduct of states. Situations which may warrant such action include: The persecution of the civil population by a government, to deter an attempt by a hostile nation to acquire territory by force. The sanctions may create economic, political, military, or other conditions where the intent is to change the behavior of the offending nation. Examples of enforcement of exclusion zones are Operation SOUTHERN WATCH in Iraq, initiated in 1992, and Operation DENY FLIGHT in Bosnia, initiated in 1993.

Ensuring freedom of navigation and overflight These operations are conducted to demonstrate US or international rights to navigate sea or air routes. Freedom of navigation is a sovereign right according to international law. International law has long recognized that a coastal state may exercise jurisdiction and control within its territorial sea in the same manner that it can exercise sovereignty over its own land territory. International law accords the right of “innocent” passage to ships of other nations through a state’s territorial waters. Passage is “innocent” as long as it is not

prejudicial to the peace, good order, or security of the coastal state. The high seas are free for reasonable use of all states. Freedom of navigation by aircraft through international airspace is a well-established principle of international law. Aircraft threatened by nations or groups through the extension of airspace control zones outside the established international norms will result in legal measures to rectify the situation. These norms are developed by the International Civil Aviation Organization. An example is the Berlin air corridors that existed from 1948 until 1990, allowing air access to West Berlin. The ATTAIN DOCUMENT series of operations against Libya in 1986 are examples of freedom of navigation operations, both air and sea, in the Gulf of Sidra.

Humanitarian assistance. HA operations relieve or reduce the results of natural or manmade disasters or other endemic conditions such as human pain, disease, hunger, or privation in countries or regions outside the United States. HA provided by US forces is generally limited in scope and duration; it is intended to supplement or complement efforts of host-nation (HN) civil authorities or agencies with the primary responsibility for providing assistance. DOD provides assistance when the relief need is gravely urgent and when the humanitarian emergency dwarfs the ability of normal relief agencies to effectively respond The US military can respond rapidly to emergencies or disasters and achieve order in austere locations. US forces can provide logistics; command, control, communications, and computers; and the planning required to initiate and sustain HA operations. HA operations may be directed by the NCA when a serious international situation threatens the political or military stability of a region considered of interest to the United States, or when the NCA deems the humanitarian situation itself sufficient and appropriate for employment of US forces. DOS or the US ambassador in country is responsible for declaring a foreign disaster or situation that requires HA. Within DOD, the Undersecretary of Defense for Policy has the overall responsibility for developing the military policy for international HA operations. HA operations may cover a broad range of missions. An HA mission could also include securing an environment to allow humanitarian relief efforts to proceed. US military forces participate in three basic types of HA operations: those coordinated by the UN, those where the United States acts in concert with other multinational forces, or those where the United States responds unilaterally .Examples o f h u m a n i t a r i a n assistance are Operations SEA ANGEL I, conducted in 1991, and SEA ANGEL II, conducted in 1992, to provide assistance in the aftermath of devastating natural disasters in Bangladesh.

Military support to civil authorities These operations provide temporary support to domestic civil authorities when permitted by law, and are normally taken when an emergency overtaxes the capabilities of the civil authorities. Support to civil authorities can be as diverse as temporary augmentation of air traffic controllers and postal workers during strikes, restoration of law and order in the aftermath of riots, protection of life and federal property, or providing relief in the aftermath of a natural disaster. Authority for additional support to law enforcement officials is contained in DOD Directive 5525.5, “DOD Cooperation with Civilian Law Enforcement Officials,” and permits such support as loan of equipment, use of facilities, training, and transfer of information. Support is constrained in some instances by the Economy Act (31 US Code Section 1535) which may require the requesting agency to provide reimbursement. Limitations on military forces in providing support to civil authorities include, among others, the Posse Comitatus Act, Title 18, US Code Section 1385--

Use of Army and Air Forces as Posse Comitatus. This Act prohibits the use of federal military forces to enforce or otherwise execute laws unless expressly authorized by the Constitution or Act of Congress. Statutory exceptions to the Posse Comitatus Act which allow active duty military members to respond to civil disturbances are included under Title 10 Sections 331 to 333: Request from a State (331), Enforcement of Federal Law (332), and Protection of Civil Rights (333). Additional important exceptions to Posse Comitatus are found in Title 10 Sections 371-380. Examples of military support to civil authorities are disaster relief provided during Hurricanes Andrew in Florida and Iniki in Hawaii in 1992, and deployment of troops during a civil disturbance in California in 1992. Under DOD Directive 3025.1, "M i l i t a r y S u p p o r t to C i v i l Authorities," the Secretary of the Army is designated the Executive Agent for MSCA.

Nation assistance/support to counterinsurgency is civil or military assistance (other than HA) rendered to a nation by US forces within that nation's territory during peacetime, crises or emergencies, or war, based on agreements mutually concluded between the United States and that nation. Nation assistance operations support an HN by promoting sustainable development and growth of responsive institutions. The goal is to promote long-term regional stability. Nation assistance programs often include, but are not limited to, security assistance, FID, and HCA. All nation assistance actions are integrated through the US Ambassador's Country Plan. Security Assistance. Security assistance refers to a group of programs by which the United States provides defense articles, military training, and other defense-related services to foreign nations by grant, loan, credit, or cash sales in furtherance of national policies and objectives. Some examples of US security assistance programs are Foreign Military sales, Foreign Military Financing Program, International Military Education and Training Program, Economic Support Fund, and commercial sales licensed under the Arms Export Control Act.• Security Assistance Surges. Security assistance surges accelerate release of equipment, supplies, or services when an allied or friendly nation faces an imminent military threat. Security assistance surges are military in nature and are focused on providing additional combat systems (weapons and equipment) or supplies, but may include the full range of security assistance, to include financial and training support.

Noncombatant evacuation operations These operations normally relocate threatened noncombatants from a foreign country. Although principally conducted to evacuate US citizens, NEOs may also include selective evacuation of citizens from the HN as well as citizens from other countries. NEO methods and timing are significantly influenced by diplomatic considerations. Under ideal circumstances there may be little or no opposition; however, commanders should anticipate opposition and plan the operation like any combat operation. NEOs are similar to a raid in that the operation involves swift insertion of a force, temporary occupation of objectives, and ends with a planned withdrawal. It differs from a raid in that force used is normally limited to that required to protect the evacuees and the evacuation force. Forces penetrating foreign territory to conduct a NEO should be kept to the minimum consistent with mission accomplishment and the security of the force and the extraction and protection of evacuees. Pursuant to Executive Order 12656, the DOS is responsible for the protection and evacuation of American citizens abroad and for guarding their property. This order also directs the DOD to advise and assist the DOS in preparing and implementing plans for the evacuation of US citizens. The US Ambassador, or Chief of the Diplomatic Mission, is responsible for the

preparation of Emergency Action Plans that address the military evacuation of US citizens and designated foreign nationals from a foreign country. The conduct of military operations assist implementation of Emergency Action Plans is the responsibility of the geographic combatant commander. Evacuation operations are characterized by uncertainty. Evacuation operations may be directed without warning because of sudden changes in a country's government, reoriented political or military relationship with the United States, a sudden hostile threat to US citizens from elements within or external to a foreign country, or in response to a natural disaster. Joint Pub 3-07.5,"JTTP for Noncombatant Evacuation Operations," provides detailed guidance. Examples of NEO are EASTERN EXIT, conducted in 1991, when US and foreign national personnel were evacuated from Somalia, and QUICK LIFT, also conducted in 1991, when personnel were evacuated from Zaire.

Peace Operations. are military operations to support diplomatic efforts to reach a long-term political settlement and categorized as peacekeeping operations (PKO) and peace enforcement operations. PO are conducted in conjunction with the various diplomatic activities necessary to secure a negotiated truce and resolve the conflict. Additional types of MOOTW (e.g., HA and NEO) may complement peace operations. Military PO are tailored to each situation and may be conducted in support of diplomatic activities before, during, or after conflict. Peacekeeping Operations. PKO are military operations undertaken with the consent of all major parties to a dispute, designed to monitor and facilitate implementation of an agreement (cease fire, truce, or other such agreements) and support diplomatic efforts to reach a long- term political settlement. An example of PKO is the US commitment to the Multinational Force Observers in the Sinai since 1982. Joint Pub 3-07.3, "JTTP for Peace Operations," (in draft) provides additional information on peacekeeping Peace Enforcement Operations. PEO are the application of military force, or threat of its use, normally pursuant to international authorization, to compel compliance with resolutions or sanctions designed to maintain or restore peace and order. PEO missions include intervention operations, as well as operations to restore order, enforce sanctions, forcibly separate belligerents, and establish and supervise exclusion zones for the purpose of establishing an environment for truce or cease-fire. Unlike PKO, such operations do not require the consent of the states involved or of other parties to the conflict. Examples of PEO are Operation POWER PACK conducted in the Dominican Republic in 1965 and the secondary effort in Somalia (UNITAF), 1992-1993. Relationship of Peace Operations to Diplomatic Activities. US military peace operations support political objectives and diplomatic objectives. Military support improves the chances for success in the peace process by lending credibility to diplomatic actions and demonstrating resolve to achieve viable political settlements. In addition to PO, the military may conduct operations in support of the following diplomatic peace activities: Preventive Diplomacy. Preventive diplomacy consists of diplomatic actions taken in advance of a predictable crisis to prevent or limit violence. Military support to diplomacy may, for example, take the form of a preventive deployment. An example is Operation ABLE SENTRY, where US Forces deployed in 1993 to Macedonia in support of the UN effort to limit the fighting in the Former Republic of Yugoslavia. Peacemaking. Peacemaking is the process of diplomacy, mediation, negotiation, or other forms of peaceful settlements that arranges an end to a dispute, and resolves issues that led to conflict. Military activities that support peacemaking include military-to- military relations and security assistance. Peace Building. Peace building consists of post-conflict actions, predominantly diplomatic and economic, that strengthen and rebuild governmental infrastructure and institutions in order to avoid a relapse into conflict. Military support to peace building may include, for example, units rebuilding roads, reestablishing or creating government entities, or the training of defense forces.

Protection of shipping. When necessary, US forces provide protection of US flag vessels, US citizens (whether embarked in US or foreign vessels), and their property against unlawful violence in and over international waters. With the consent of the flag state this protection may be extended to foreign flag vessels under international law. Protection of shipping includes

coastal sea control, harbor defense, port security, counter mine operations, and environmental defense, in addition to operations on the high seas. It requires the coordinated employment of surface, air, space, and subsurface units, sensors, and weapons, as well as a command structure both ashore and afloat, and a logistics base. Protection of shipping is accomplished by a combination of operations. Area operations, either land-based or sea-based, are designed to prevent a hostile force from obtaining a tactical position from which to attack friendly or allied shipping This includes ocean surveillance systems that provide data for threat location and strike operations against offending bases or facilities. Threats not neutralized by area operations must be deterred or addressed by escort operations. Generally, escorts are associated with convoys, although individual ships or a temporary grouping of ships may be escorted for a specific purpose. Mine countermeasures operations are integral to successful protection of shipping and are an essential element of escort operations. An example of protection of shipping is Operation EARNEST WILL, the reflagging of Kuwaiti ships in 1987. Environmental defense operations provide for coordinated Coast Guard/DOD response to major pollution incidents both at home and overseas. These incidents have the potential for grave damage to natural resources, the economy, and military operations.

Recovery operations are conducted to search for, locate, identify, rescue, and return personnel or human remains, sensitive equipment, or items critical to national security. These operations are generally sophisticated activities requiring detailed planning in order to execute them, especially when conducting them in denied areas. They may be clandestine, covert, or overt. Other recovery operations may be conducted in friendly areas, particularly when the HN does not have the means to provide technical assistance in conducting the recovery. An example of a recovery operation is OPERATION FULL ACCOUNTING conducted to account for and recover the remains of US service members lost during the Vietnam War.

Show of force operations These operations, designed to demonstrate US resolve, involve increased visibility of US deployed forces in an attempt to defuse a specific situation that if allowed to continue may be detrimental to US interests or national objectives. US forces deployed abroad lend credibility to US promises and commitments, increase its regional influence, and demonstrate its resolve to use military force if necessary. In addition, the NCA order shows of force to bolster and reassure friends and allies. Show of force operations are military in nature but often serve both political and military purposes. These operations can influence other governments or politico-military organizations to respect US interests as well as international law. A show of force involves the appearance of a credible military force to underscore US policy interests or commitment to an alliance or coalition Political concerns dominate a show of force. Military forces conduct these operations within legal and political constraints. The force coordinates its operations with the country teams affected. A show of force can involve a wide range of military forces including joint US military or multinational forces. Additionally, a show of force may include or transition to joint or multinational exercises. As an example of a show of force, Operation JTF-Philippines was conducted by US forces in 1989 in support of President Aquino during a coup attempt against the Philippine government. During this operation, a large special operations force was formed, USAF fighter aircraft patrolled above rebel air bases, and two aircraft carriers were positioned off the Philippines

Strikes and raids Strikes are offensive operations conducted to inflict damage on, seize, or destroy an objective for political purposes. Strikes may be used for punishing offending nations or groups, upholding international law, or preventing those nations or groups from launching their own offensive actions. A raid is usually a small-scale operation involving swift penetration of hostile territory to secure information, confuse the enemy, or destroy installations. It ends with a planned withdrawal upon completion of the assigned mission. An example of a strike is Operation URGENT FURY, conducted on the island of Grenada in 1983. An example of a raid is Operation EL DORADO CANYON conducted against Libya in 1986, in response to the terrorist bombing of US Service members in Berlin. Joint Pub 3-02, “Joint Doctrine for

Amphibious Operations," provides specific guidance on amphibious raids.

112.5 Define Military Operations on Urbanized Terrain (MOUT) and discuss the Marine Corps' role in urban warfare. [ref. d, pp. 1-1, 1-2]

Throughout history, military planners have viewed cities as centers of gravity. As such, in war, cities are something to be either protected or taken away, depending upon one's perspective (MCDP 1, *Warfightin*g). Cities house the population centers, transportation hubs, seats of government, sources of wealth, centers for industry, information networks, and key nodes of communication within a nation. Recent forecasts based on population statistics and the worldwide migration trend from agrarian to industrialized societies predict that 85 percent of the world's population will reside in urbanized areas by the year 2025. As the world trend toward urbanization increases, the military significance of cities is likely to increase proportionally. Urbanized areas, themselves, may be significant sources of future conflict. Cities historically are where radical ideas ferment, dissenters find allies, mixtures of people cause ethnic friction, and discontented groups receive media attention. Adversaries may focus on the capture of radio and television stations in an attempt to influence public opinion and attain their political goals. Our political leaders may take advantage to neutralize or stabilize some extremely volatile political situations, or to provide assistance to allies in need of support, by deploying U.S. forces into urban environments.

The Marine Corps Role in Urban Warfare. As the Nation's force in readiness, forward deployed with expeditionary forces, Marines must be prepared to fight on urbanized terrain. In the past two decades, MAGTFs ranging in size from MEFs (Saudi Arabia, Desert Shield/Desert Storm; Somalia, Restore Hope) through Marine expeditionary units (MEUs) (Beirut, Lebanon; Grenada, Urgent Fury; Somalia, Eastern Exit and Restore Hope) have participated in MOUT. The task-organization and combined-arms aspect of the MAGTF makes it well suited for combat onurbanized terrain. The results of geographical studies show that 60 percent of politically significant urban areas outside allied or former Warsaw Pact territory are located along or within 25 miles of a coastline; 75 percent are within 150 miles; 87 percent are within 300 miles; 95 percent are within 600 miles; and all are within 800 miles. U.S. embassies and diplomatic facilities are primarily located in cities where the host country's political and economic leadership is concentrated. The Marine Corps will continue to play a prominent role in future evacuations of U.S. citizens, as well as the conduct of peace, counterinsurgency, and contingency operations centered on urbanized areas. Today's Marine air-ground task forces (MAGTFs) are deployed as part of naval expeditionary forces (NEFs) that maintain a global forward presence for rapid crisis response. These integrated combined -arms forces are part of the Nation's proven contingency and naval power projection force. Therefore, Marines may find themselves rapidly deployed and employed in actions across the spectrum of military operations. Many of these trouble spots will likely be located in or around large urban centers. In the years since World War II, the United States has employed military force more than 200 times. Of these, four out of five involved naval forces, and the majority of the naval efforts included Marines embarked in amphibious ships. The reasons are straightforward: availability and adaptability. Availability derives from the loiter time of forward deployed forces embarked on amphibious shipping. Adaptability comes from the Marine Corps' MAGTF organization, doctrine, training, and equipment, which prepare us for expeditionary missions from the sea in support of a variety of missions, including forcible entry. Enhancing our adaptability are the maritime prepositioning forces (MPFs). MPFs provide a rapid buildup of combat and logistics equipment that is joined with Marines on a distant shore, creating a substantial combat force. Despite our availability and adaptability, the prospect of urban warfare combined with an amphibious assault is a complex task which requires special preparation. At the outset of a developing situation, forward-deployed expeditionary forces can move quickly within range of a crisis that threatens the political stability of a country. Urban intervention operation must often be planned and executed in a matter of hours or days (rather than weeks or months) to take

advantage of the internal turmoil surrounding a developing crisis. Navy and Marine forces should anticipate deployment to urbanized areas on a day-to-day basis.

112.6 Discuss the following examples of MOUT [ref. d, pp. 1-9 thru 1-12]

Stalingrad (1942-1943) The tenacious Soviet defense of Stalingrad cost the attacking Germans dearly in every way and set up conditions for a decisive counteroffensive. This classic urban battle involved large forces and resulted in innovative urban combat techniques and the creation of the highly successful storm groups (task-organized assault units). (Length of battle: greater than 30 days) (Casualties: 1,630,000+)

Berlin (1945) The long, bloody Soviet offensive to seize the German capital city effectively concluded the last battle of World War II in Europe. Bitter fighting occurred, but the defense was never well coordinated due in part to poor preparation by the Germans. (Length of battle: 14 - 30 days) (Casualties: estimated in the thousands)

Seoul (1950) Following the Inchon landing, U.S. and Republic of Korea (ROK) forces recaptured the South Korean capital from the North Koreans. The fighting was unusual in that combat was largely centered on seizure of street barricades rather than buildings. (Length of battle: 6 - 13 days) (Casualties: Marines, 2,383; others, estimated in the thousands)

Quang Tri I and II (1972) An objective of the North Vietnamese 1972 winter -spring offensive was the capture of Quang Tri, the northernmost major city in South Vietnam. The NVA overwhelmed the Army, Republic of Vietnam (ARVN) defenders
(I). Later, the city was recaptured (II) by a smaller ARVN force using extensive artillery and air support. The large conventional forces involved on both sides made Quang Tri I and II the major urban battles of the Vietnam War. (Length of battle: Quang Tri I, 6 - 13 days; Quang Tri II, 30 days or greater) (Casualties: battles combined, 30,000+)

Beirut II (1982) The siege of Beirut culminated the Israeli campaign to evict the Palestine Liberation Organization (PLO) from Lebanon. Fighting under domestic and world political pressures, the IDF besieged the PLO, selectively applying heavy ground and air firepower in conjunction with psychological warfare and limited-objective ground operations. The fighting resulted in a negotiated PLO evacuation from the city. (Length of battle: greater than 30 days) (Casualties: 2,300+)

112.7 Discuss the noncombatant's impact on urban warfare. [ref. d, p. 6-1]

Large concentrations of civilians can greatly impede tactical operations. Noncombatants may have the following effects on military operations:

Mobility. Noncombatants civilians, attempting to escape the battlespace, can block military movement. Commanders plan routes to be used by civilians and seek the assistance of the civil police in refugee control.

Firepower. The presence of noncombatants can restrict the use of firepower. Areas may be designated no-fire areas to prevent noncombatant casualties. Other areas may be limited to small-arms fire and grenades. The control of fire missions may be complicated by the requirement for positive target identification. Detailed guidance on the use of fires in the presence of noncombatants is promulgated by the MAGTF commander. In the absence of guidance, the general rules of the law of land warfare apply.

Security. The presence of noncombatants increases security requirements in an urban environment to preclude: Noncombatants entering defensive areas, pilferage of equipment, sabotage, terrorism

Obstacle Employment. The presence and movement of Noncombatants will influence the MAGTFs commander's obstacle plan. Minefields may not be allowed on designated refugee routes or, if allowed, must be guarded until the passage of refugees is completed. The use of boobytraps may be curtailed until noncombatants have been evacuated. Commanders need to review and understand current national and international treaties concerning the employment of mines and boobytraps.

112.8 Discuss the principles of the Operational Maneuver from the Sea (OMFTS) [ref. e, p. 11]

Operational Maneuver from the Sea

- Focuses on an operational objective.
- Uses the sea as maneuver space.
- Generates overwhelming tempo and momentum.
- Pits strength against weakness.
- Emphasizes intelligence, deceptions, and flexibility.
- Integrates all organic, joint, and combined assets.

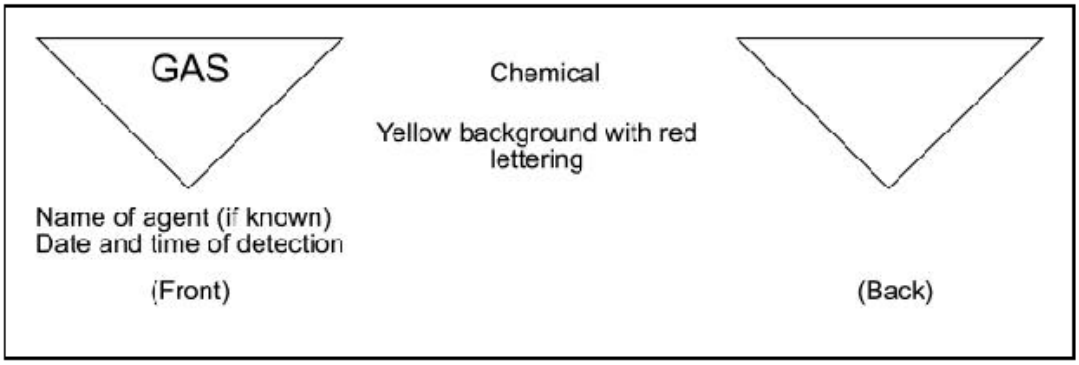
113 CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR (CBRN) DEFENSE FUNDAMENTALS

References:

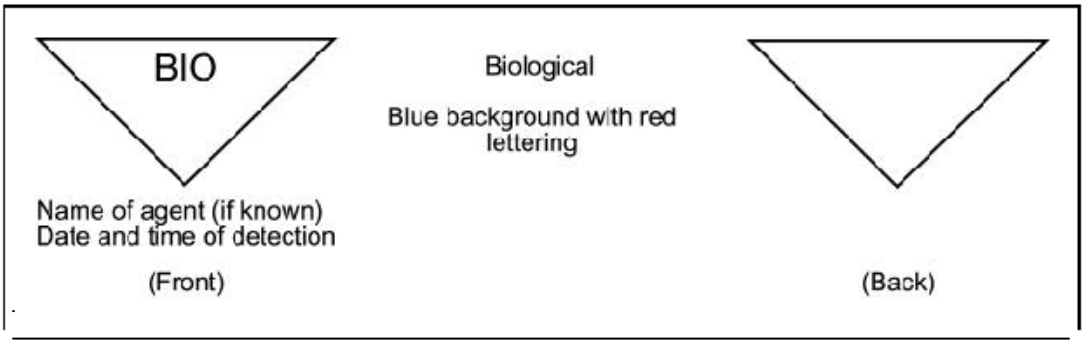
[a] Marine Corps Common Skills Handbook, Book 1B (PCN 50600000900)
[b] MCRP 3-37A, NBC Field Handbook (PCN 14400004300)
[c] NAVEDTRA 14295, Hospital Corpsman

113.1 Explain the shape, colors, and purposes of the standard North Atlantic Treaty Organization(NATO) Nuclear, Biological, Radiological and Nuclear (CBRN) contamination markers and the information contained on them. [ref. a, pp. 1-20-1 thru 1-20-3]

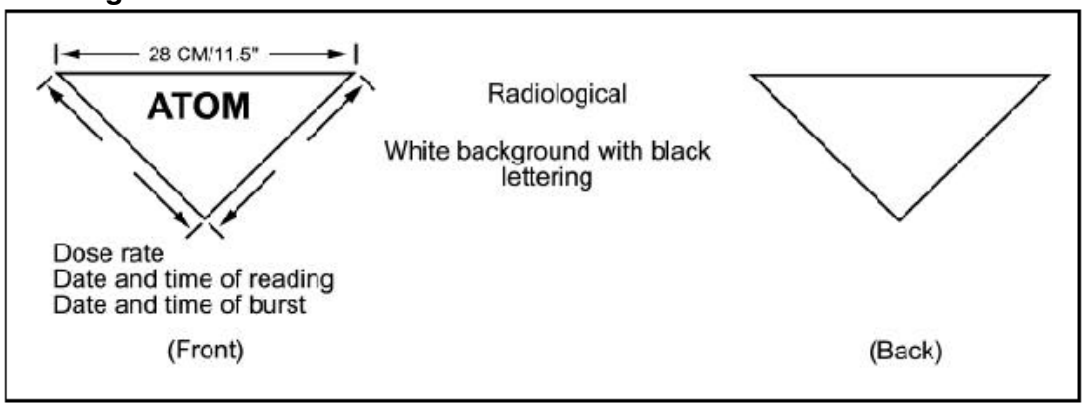
Chemical



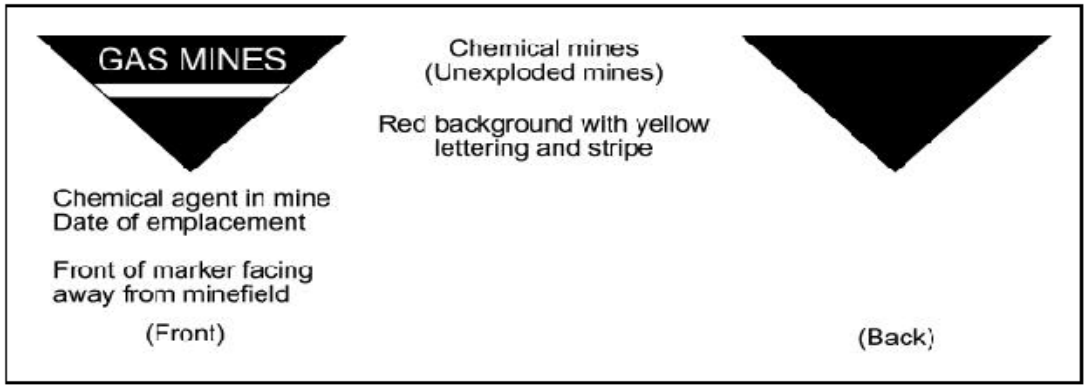
Biological



Radiological



Chemical Minefield



113.2 Discuss the purpose of the M-40 field protective mask. [ref. a, p. 1-20-5]

The M40 field protective mask is designed to protect the wearer from field concentrations of chemical and biological agents. The mask consists of a faceblank, a filter canister (which is used to cleanse contaminated air), dual voicemitter assemblies, inlet and outlet valves, and a water drinking system

113.3 Identify the following CBRN alarms: [ref. a, pp. 1-20-19, 1-20-20]

Vocal - alarm for chemical/biological attack is **GAS-GAS-GAS**. The word gas is repeated three times

Visual - The arms are extended straight out to the side and the hands made into a fist. As the word **GAS** is said, bend the arms at the elbows so the fists are placed to the ears, then repeat three times.

Percussion - Metal on metal. Metal triangles are used to give the NBC alarm by striking them repeatedly. Sirens, intermittent horns, biological/chemical alarm systems, or other devices as outlined by unit's standard operating procedures (SOP)

113.4 Discuss the proper way to don and clear a gas mask. [ref. a, pp. 1-20-20 thru 1-20-24]

Upon receiving the command or detecting a contamination presence
- Stop breathing, close your mouth and eyes.
CAUTION: This does not mean take one last breath.
- Place the rifle between your legs.
- Remove the headgear and place it on the weapon.
NOTE: Make sure that you remove glasses if you are wearing them.
CAUTION: Do not wear contact lenses with any field protective mask. Wearing contact lenses with the optical inserts will over correct your vision.
- Remove the mask from its carrier
- Allow the hood to hang down in front of the mask.
- Put your chin into the chin pocket of the facepiece. The mask is stored with the head harness pulled over the front of the mask
- Clear the field protective mask by covering the outlet valve with the palm of one hand. Exhale sharply so the air escapes around the edges of the facepiece. Cover the air inlet port of the canister with the palm of your free hand, and then breathe in. The facepiece should collapse against your face and remain there while holding your breath

If	**Then**
Facepiece collapses	Consider it airtight.
Facepiece does not collapse	Check for hair, clothing, or other interference between the facepiece and your face. Repeat steps to clear the mask until there is an airtight seal

- Adjust the M40 mask.
Grasp the tab, then pull the head harness over your head. Make sure the square harness patch is centered comfortably in the rear of your head.
CAUTION: Make sure that unit NBC personnel properly fit your mask. The temple and forehead straps are adjusted during fitting.
Maintain the seal while holding the facepiece to your face with one hand.
Use your free hand to tighten the cheek straps one at a time
Make sure that straps lie flat against your head.
- Should a leak or an improper seal be suspected, Clear the field protective mask as outlined in performance step 2.f. Recheck facepiece for leaks.
WARNING: Check the mask for leaks each time you put it on. Air should circulate over the eyelenses inside the mask. If air flows in from around the edges of the mask, you may have a leak.
Run your finger around the edges of the mask to check for bulging material.
When time permits, have another Marine check the facepiece.
- Resume breathing normally.
CAUTION: The mask must be donned, cleared, and sealed within 9 seconds.

113.5 Explain Mission Oriented Protective Posture (MOPP) levels. [ref. a, p. 1-20-27]

The need to balance protection with the threat, temperature, and urgency of the mission led to the concept of MOPP.
- Commanders can raise or lower the amount of protection through six levels of MOPP—MOPP Ready through MOPP 4.
- In addition, commanders have a mask-only option.

- Protection increases with progression from MOPP Ready through MOPP 4, but efficiency decreases correspondingly.
- The elements of MOPP gear that take the longest to put on and that degrade mission performance the least are put on first.
- The MOPP gear elements that can be put on quickly and degrade performance of individual tasks the most are put on last.
- MOPP Ready is when a Marine carries his or her protective mask. MOPP level 0 is the condition that exists when a Marine has all of his or her MOPP gear available but is not wearing it.

MOPP level zero is the condition that exists when a Marine has all of his or her MOPP gear available but is not wearing it.

MOPP LEVELS				
Levels	**Overgarment**	**Booties**	**Mask**	**Gloves**
1	Worn open or closed	Carried	Carried	Carried
2	Worn open or closed	Worn	Carried	Carried
3	Worn open or closed	Worn	Worn with hood open or closed	Carried
4	Worn	Worn	Worn	Worn

113.6 Explain the uses of M9 and M8 paper. [ref. a, pp. 1-20-39, 1-20-40]

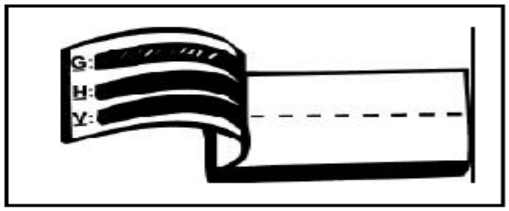
When identifying chemical agents, use the most expedient method. Using M8 or M9 detectors will take only seconds, whereas using the M256A1 will take approximately 15 minutes. Disadvantages of M8 and M9 over the M256A1 are their inability to test for vapor hazards and the limited number of agents detected.

M9 detector paper.
- M9 detector tape is usually issued 1 roll per squad or gun team and is worn around the ankles, wrists, and biceps on the exterior of protective clothing. Its purpose is to detect the presence of chemical agents, but will not identify the agent.
- Open package of M9 tape.
-Unroll a small portion of detector tape.
-Blot, do not rub, the M9 tape on suspect liquid. Its use is primarily on barely visible droplets.
-observe for a color change.
- When in contact with contamination, the color will appear as a light pink to a reddish brown or violet tint

M8 detector paper.
- M8 paper is issued with your field protective mask and the M256A1 chemical agent detector kit as an SL-3 component. Its use is primarily on suspected liquid forms such as puddles, small drops, or barely visible droplets.
- Remove and open M8 paper from the M256A1 kit or mask carrier, tearing off and discarding the plastic bag
- Test the liquid. Tear out a sheet of M8 paper (use half a sheet if it is perforated). Expose M8 paper to suspected liquid agent.
CAUTION: Make sure the M8 paper is held in the down position to prevent liquid contaminants from running onto protective glove
Blot—do not rub the M8 on suspected contamination. Compare any color changes by observing the colors shown on the inside cover of the book of M8 paper.

The chart below identifies the color associated with the agent when using the M8 paper.

Color	Series	Agent
Yellow/gold	G	Nerve
Dark green	V	Nerve
Pink/red	H	Blister
Note: Some G agents give a red-brown color typical between H and G colors.		



NOTES: Where decontaminants have been used, positive results must be confirmed by tests with the sampler-detector. Some decontaminants will produce false positive test on M8 paper. Check the decontaminant itself with a sampler-detector because some decontaminants will produce false indications on the sampler- detector. Never assume that an area is uncontaminated. When in doubt, re-test the area with an M256A1 kit and report the findings

113.7 Discuss the three levels of decontamination. [ref. b, pp. 3-34, 3-35]

Immediate Decon minimizes casualties, saves lives, and limits the spread of contamination. Immediate decon is carried out by individuals upon becoming contaminated. There are three immediate techniques: skin decon, personnel wipe down, and operator's spray down.

Operational Decon sustains operations, reduces the contact hazard, and limits the spread of contamination to eliminate the necessity or reduce the duration of wearing MOPP gear. Operational decon is carried by individual and/or units. It is restricted to specific parts of operationally essential equipment/material and/or working areas, in order to minimize contact and transfer hazards and to sustain operations. Further decon may be required to reduce contamination to negligible risk levels. There are two operational decon techniques: vehicle wash down and MOPP gear exchange

Thorough Decon reduces or eliminates the need for individual protective clothing. Thorough decon is carried out by units with assistance from chemical units to reduce contamination on personnel, equipment/material, and/or working areas to the lowest possible level (negligible risk) to permit the reduction or removal of individual protective equipment and maintain operations with minimal degradation. This may include decontamination of terrain as required. There are three thorough decon techniques: detailed troop decon, detailed equipment decon, and detailed aircraft decon.

Table 3-31. Comparison data for decon types.				
Level	**Technique**	**Best Start Time***	**Done By**	**Gains**
Immediate	Skin Decon	Before 1 minute	Individual	Stops agent from penetrating
	Personal Wipedown	Within 15 minutes	Individual or Crew	
	Operator Spraydown			
Operational	MOPP Gear Exchange**	Within 6 hours	Unit	Possible temporary relief from MOPP4. Limit liquid agent spread.
	Vehicle Washdown***		Battalion Crew or decon PLT (-)	
Thorough	Detailed Equipment/Aircraft Decon	When mission allows reconstitution	Decon platoon	Probable long-term MOPP reduction with minimum risk
	Detailed Troop Decon		Unit	

* The techniques become increasingly less effective the longer they are delayed.
** Performance degredation and risk assessment need to be considered when exceeding 6 hours. See FM 3-4, BDO risk assessment.
*** Vehicle washdown is most effective if started within 1 hour, but will often have to be delayed for logistical reasons.

113.8 Discuss the immediate actions required for a nuclear attack without warning. [ref. a, pp. 1-20-63 thru 1-20-65]

Take immediate action for a nuclear attack without warning - Upon seeing a brilliant flash of light, an exceptionally loud explosion, or when the alarm is sounded, immediate action must be taken. When possible, look for protective cover. **WARNING:** Never hesitate in taking immediate action.

React without weapon - Immediately drop face down, with head toward blast, if possible. If cover is available, use it. A log, large rock, or any depression in the earth's surface provides some protection. Close your eyes. Protect or cover exposed skin by putting hands and arms under or near the body and keeping your helmet on. Keep your head down

React with weapon - Immediately drop face down, with head toward blast, if possible. If cover is available, use it. A log, large rock, or any depression in the earth's surface provides some protection. Close your eyes. Protect or cover exposed skin by putting hands and arms under or near the body and keeping your helmet on. Make sure your weapon is placed under your body or beside you with the strap/sling wrapped tightly around your arm and the muzzle angled away from your face. Keep your head down. Remain face down for 90 seconds or until all debris has stopped falling. Use any protection available such as fighting holes, whenever possible. Fighting holes provide excellent protection against nuclear weapon effects. Other examples of hasty protection may include ditches, culverts, hills, large rocks, or armored vehicles. Put anything between yourself and the nuclear weapon's blast.

113.9 Discuss the immediate actions required for a chemical or biological attack without warning. [ref. a, pp. 1-20-67 thru 1-20-71]

React to a gas attack in 15 seconds or less

- Stop breathing, close your mouth and eyes.
CAUTION: This does not mean take one last breath.
- Place the rifle between your legs.
- Remove the headgear and place it on the weapon.
NOTE: Make sure that you remove glasses if you are wearing them.
CAUTION: Do not wear contact lenses with any field protective mask. Wearing contact lenses with the optical inserts will over correct your vision.
- Remove the mask from its carrier.
- Put your chin into the chin pocket of the facepiece. The mask is stored with the head harness pulled over the front of the mask.
- Clear the field protective mask by covering the outlet valve with the palm of one hand. Exhale sharply so the air escapes around the edges of the facepiece. Cover the air inlet port of the canister with the palm of your free hand, and then breathe in. The facepiece should collapse against your face and remain there while holding your breath.

If	**Then**
Facepiece collapses	Consider it airtight.
Facepiece does not collapse	Check for hair, clothing, or other interference between the facepiece and your face. Repeat steps to clear the mask until there is an airtight seal

- Adjust the M40 mask.
Grasp the tab, then pull the head harness over your head. Make sure the square harness patch is centered comfortably in the rear of your head.
CAUTION: Make sure that unit NBC personnel properly fit your mask. The temple and forehead straps are adjusted during fitting.
Maintain the seal while holding the facepiece to your face with one hand.
Use your free hand to tighten the cheek straps one at a time
Make sure that straps lie flat against your head.
- Should a leak or an improper seal be suspected, Clear the field protective mask as outlined in performance step 2.f. Recheck facepiece for leaks.
WARNING: Check the mask for leaks each time you put it on. Air should circulate over the eye lenses inside the mask. If air flows in from around the edges of the mask, you may have a leak.
Run your finger around the edges of the mask to check for bulging material.
When time permits, have another Marine check the facepiece.
- Resume breathing normally.
CAUTION: The mask must be donned, cleared, and sealed within 9 seconds.
- Sound the alarm to warn others.
- Give vocal alarm for a chemical/biological attack.
The universal command to put the mask on is **GAS-GAS-GAS**.
The word gas is repeated three times.
-Give visual alarm for a chemical/biological attack as shown in figure 6.
The arms are extended straight out to the side and hands made into a fist.
As the word **GAS** is said bend the arms at the elbows so that the fists are placed to the ears, and repeat three times.
- Secure weapon, helmet, and mask carrier.
- Check for contamination and decontaminate as necessary using the buddy system if possible.
- Assume appropriate MOPP level as directed.
- Continue the mission.

113.10 Define and discuss the types, symptoms, and treatment for the following chemical agents: [ref. c, pp. 8-5 thru 8-10]

Nerve agents produce their effect by interfering with normal transmission of nerve impulses in the parasympathetic autonomic nervous system. Physically, nerve agents are odorless, almost colorless liquids, varying greatly in viscosity and volatility. They are moderately soluble in water and fairly stable unless strong alkali or chlorinating compounds are added. They are very effective solvents, readily penetrating cloth either as a liquid or vapor. Other materials, including leather and wood, are fairly well penetrated. Butyl rubber and synthetics, such as polyesters, are much more resistant. Pharmacologically, the nerve agents are cholinesterase inhibitors (interfering with normal transmission of nerve impulses in the parasympathetic autonomic nervous system). Their reaction with cholinesterase tends to be irreversible, and reaction time varies with the agent.

SIGNS AND SYMPTOMS OF EXPOSURE. - Nerve-agent intoxication can be readily identified by its characteristic signs and symptoms. If a vapor exposure has occurred, the pupils will constrict, usually to a pinpoint. If the exposure has been through the skin, there will be local muscular twitching where the agent was absorbed. Other symptoms will include rhinorrhea, dyspnea, diarrhea and vomiting, convulsions, hypersalivation, drowsiness, coma, and unconsciousness.

TREATMENT. - Specific therapy for nerve agent casualties is atropine, an acetylcholine blocker. When exposed, each member of the Navy and Marine
Corps is issued three 2 mg autoinjectors of atropine and three 600 mg autoinjectors of 2-PAM Cl. **DO NOT** give nerve agent antidotes for preventive purposes **before** contemplated exposure to a nerve agent. The atropine autoinjector consists of a hard plastic tube containing 2 mg (0.7 ml) of atropine in solution for intramuscular injection. It has a pressure-activated coiled-spring mechanism that triggers the needle for injection of the antidote solution. These injectors are designed to be used by individuals on themselves when symptoms appear. For medical personnel, the required therapy is to continue to administer atropine at 15-minute intervals until a mild atropinization occurs. This can be noted by tachycardia and a dry mouth. Atropine alone will not relieve any respiratory muscle failure. Prolonged artificial respiration may be necessary to sustain life. A second autoinjector containing oxime therapy (using pralidoxime chloride, or 2-PAMCl) can also be used for regeneration of the blocked cholinesterase. Since 2-PAMCl is contained in the kit of autoinjectors, additional oxime therapy is not generally medically recommended for those who have already received treatment by autoinjection. The 2-PAM Cl autoinjector is a hard plastic tube that, when activated, dispenses 600 mg of 2-PAM Cl (300 mg/ml) solution. It also has a pressure-activated coiled-spring mechanism identical to that in the atropine autoinjector

Self-Aid. If you experience the **mild** symptoms of nerve-agent poisoning, you should **IMMEDIATELY** hold your breath and put on your protective mask. Then, administer **one set** of (atropine and 2-PAM Cl) injections into your lateral thigh muscle or buttocks, as illustrated in figures 8-4 and 8-5. Position the needle end of the **atropine** injector against the injection site and apply firm, even pressure (not jabbing motion) to the injector until it pushes the needle into your thigh (or buttocks). Make sure you **do not** hit any buttons or other objects. Using a jabbing motion may result in an improper injection or injury to the thigh or buttocks. Hold the **atropine** injector firmly in place for **at least 10 seconds.** The seconds can be estimated by counting one thousand one, one thousand two, and so forth. Firm pressure automatically triggers the coiled mechanism and plunges the needle through the clothing into the muscle and at the same time injects the atropine antidote into the muscle tissue. Next, inject yourself in the same manner with the **2-PAM Cl** injector, using the same procedure as you did for the atropine. This will now complete one set of nerve-agent antidotes. Attach the used injectors to your clothing (fig. 8-6) (to indicate the number of injections you have already received After administering the first set

of injections, wait 10 to 15 minutes (since it takes that long for the antidote to take effect) before administering a second set, if needed. If the symptoms have not disappeared within 10 to 15 minutes, give yourself the second set of injections. If the symptoms still persist after an additional 15 minutes, a third set of injections may be given by nonmedical personnel. After administering each set of injections, you should decontaminate your skin, if necessary, and put on any remaining protective clothing.

Buddy Aid. If you encounter a service member suffering from severe signs of nerve-agent poisoning, you should provide the following aid:
- Mark the casualty, if necessary. Do not fasten the hood.
- Administer, in rapid succession, **three** sets of the nerve-agent antidotes. Follow the procedures for administration as described previously in the self-aid section.
NOTE: Use the casualty's own autoinjectors when providing aid. Do not use your injectors on a casualty. If you do, you may not have any antidote available when needed for self-aid.

Blister agents, or vesicants, exert their primary action on the skin, producing large and painful blisters that are incapacitating. Although vesicants are classed as nonlethal, high doses can cause death. Common blister agents include mustard (HD), nitrogen mustard (HN), and Lewisite (L). Each is chemically different and will cause significant specific symptoms. They are all similar in their physical characteristics and toxicology. Mustards are particularly insidious because they do not manifest their symptoms for several hours after exposure. They attack the eyes and respiratory tract as well as the skin There is no effective therapy for mustard once its effects become visible. Treatment is largely supportive: to relieve itching and pain, and to prevent infection.

MUSTARD (HN) - HD and HN are oily, colorless or pale yellow liquids, sparingly soluble in water. HN is less volatile and more persistent than HD but has the same blistering qualities.

Signs and Symptoms of Exposure. -The eyes are the most vulnerable part of the body to mustard gas. Contamination insufficient to cause injury elsewhere may produce eye inflammation. Because the eye is the most sensitive part of the body, the first noticeable symptoms of mustard exposure will be pain and a gritting feeling in the eyes, accompanied by spastic blinking of the eyelids and photophobia. Vapor or liquid may burn any area of the skin, but the burns will be most severe in the warm, sweaty areas of the body: the armpits, groin, and on the face and neck. Blistering begins in about 12 hours but may be delayed for up to 48 hours. Inhalation of the gas is followed in a few hours by irritation of the throat, hoarseness, and a cough. Fever, moist rales, and dyspnea may develop. Brochopneumonia is a frequent complication. The primary cause of death is massive edema or mechanical pulmonary obstruction

Treatment. - There is no specific antidotal treatment for mustard poisoning. Physically removing as much of the mustard as possible, as soon as possible, is the only effective method for mitigating symptoms before they appear. All other treatment is symptomatic, that is, the relief of pain and itching, and control of infection.

LEWISITE (L). - Lewisite is an **arsenical** (an arsenic-based compound). This blistering compound is a light- to dark-brown liquid that vaporizes slowly.

Signs and Symptoms of Exposure. - The vapors of arsenicals are so irritating that conscious persons are immediately warned by discomfort to put on the mask. No severe respiratory injuries are likely to occur, except in the wounded who are incapable of donning a mask. The respiratory symptoms are similar to those produced by mustard gas. While distilled mustard and nitrogen mustard cause no pain on the skin during absorption, Lewisite causes intense pain

upon contact.

Treatment. - Immediately decontaminate the eyes by flushing with copious amounts of water to remove liquid agents and to prevent severe burns. Sodium sulfacetamide, 30 percent solution, may be used to combat eye infection within the first 24 hours after exposure. In severe cases, morphine may be given to relieve pain. In cases of systemic involvement, British Anti-Lewisite (BAL), dimercaprol, is available in a peanut oil suspension for injection. BAL is a specific antiarsenical that combines with the heavy metal to form a water-soluble, nontoxic complex that is excreted. However, BAL is somewhat toxic, and an injection of more than 3 mg/kg will cause severe symptoms. Aside from the use of dimercaprol for the systemic effects of arsenic, treatment is the same as for mustard lesions.

Blood Agents interfere with enzyme functions in the body, i.e., block oxygen transfer. Hydrocyanic acid (AC) and cyanogen chloride (CK) are cyanide- containing compounds commonly referred to as blood agents. These blood agents are chemicals that are in a gaseous state at normal temperatures and pressures. They are systemic poisons and casualty-producing agents that interfere with vital enzyme systems of the body. They can cause death in a very short time after exposure by interfering with oxygen transfer in the blood. Although very deadly, they are nonpersistent agents.

SIGNS AND SYMPTOMS OF EXPOSURE.- These vary with concentration and duration of exposure. Typically, either death or recovery takes place rapidly. After exposure to high concentrations of the gas, there is a forceful increase in the depth of respiration for a few seconds, violent convulsions after 20 to 30 seconds, and respiratory failure with cessation of heart action within a few minutes.

TREATMENT. - There are two suggested antidotes in the treatment of cyanides: amyl nitrite in crush ampules (provided as first aid) and intravenous sodium thiosulfate solution. In an attack, if you notice sudden stimulation of breathing or an almond-like odor, hold your breath and don your mask immediately. In treating a victim, upon notification by competent authority that there are no blood agents remaining in the atmosphere, crush two ampules of amyl nitrite in the hollow of your hand and hold it close to the victim's nose. You may repeat this procedure every few minutes until eight ampules have been used. If the atmosphere is contaminated and the victim must remain masked, insert the crushed ampules into the mask under the face plate. Whether amyl nitrite is used or not, sodium thiosulfate therapy is required after the initial lifesaving measures. The required dose is 100 to 200 mg/kg, given intravenously over a 9-minute period. The key to successful cyanide therapy is speed; cyanide acts rapidly on an essential enzyme system. The antidotes act rapidly to reverse this action. If the specific antidote and artificial respiration are given soon enough, the chance of survival is greatly enhanced

Choking The toxicity of lung agents is due to their effect on lung tissues; they cause extensive damage to alveolar tissue, resulting in severe pulmonary edema. This group includes phosgene (CG) and chlorine (Cl), as well as chloropicrin and diphosgene. However, CG is most likely to be encountered, and its toxic action is representative of the group. Phosgene is a colorless gas with a distinctive odor similar to that of new-mown hay or freshly cut grass. Unfortunately, even at minimal concentrations in the air (i.e., below the threshold of olfactory perception), CGcan cause damage to the eyes and throat. Generally speaking, CG does not represent a hazard of long duration; therefore, an individual exposed to a casualty-producing amount should be able to smell it.

SIGNS AND SYMPTOMS OF EXPOSURE. - There may be watering of the eyes, coughing, and a feeling of tightness in the chest. More often, however, there will be no symptoms for 2 to 6 hours after exposure. Latent symptoms are rapid, shallow, and labored breathing; painful cough;

cyanosis; frothy sputum; clammy skin; rapid, feeble pulse; and low blood pressure. Shock may develop, followed by death.

TREATMENT. - Once symptoms appear, complete bed rest is mandatory. Keep victims with lung edema only moderately warm, and treat the resulting anoxia with oxygen. Because no specific treatment for CG poisoning is known, treatment has to be symptomatic.

Incapacitating Agents- Incapacitating agents, which are mainly comprised of psychochemicals, produce mental confusion and an inability to function intelligently. The psychochemicals temporarily prevent an individual from carrying out assigned actions. These agents may be administered by contaminating food or water, or they may be released as aerosols. The following are characteristics of the incapacitants:
- High potency (i.e., an extremely low dose is effective) and logistic feasibility
- Effects produced mainly by altering or disrupting the higher regulatory activity of the central nervous system
- Duration of action comprising hours or days, rather than momentary or transient action No permanent injury produced.

SIGNS AND SYMPTOMS OF EXPOSURE. - The first symptoms appear in 30 minutes to several hours and may persist for several days. Abnormal inappropriate behavior may be the only sign of intoxication. Those affected may make irrational statements and have delusions or hallucinations. In some instances, the victim may complain of dizziness, muscular in coordination, dry mouth, and difficulty in swallowing. The standard incapacitant in the United States is 3-quinuclidinyl benzilate (BZ), a cholinergic blocking agent, which is effective in producing delirium that may last several days. In small doses it will cause an increase in heart rate, pupil size, and skin temperature, as well as drowsiness, dry skin, and a decrease in alertness. As the dose is increased to higher levels, there is a progressive deterioration of mental capability, ending in stupor.

TREATMENT. - The first aid is to prevent victims from injuring themselves and others during the toxic psychosis. Generally, there is no specific therapy for this type intoxication. However, with BZ and other agents in the class of compounds known as glycolates, physostigmine is the drug treatment of choice. It is not effective during the first 4 hours following exposure; after that, it is very effective as long as treatment is continued. However, treatment does not shorten the duration of BZ intoxication, and premature discontinuation of therapy will result in relapse.

Riot control/harassing is the collective term used to describe a collection of chemical compounds, all having similar characteristics which, though relatively nontoxic, produce an immediate but temporary effect in very low concentrations. These agents are used to harass enemy personnel or to discourage riot actions. Generally, patients require no therapy; removal from the environment is sufficient to effect recovery in a short time. There are two classes of riot-control/harassment agents: lacrimators and vomiting agents

LACRIMATORS. - Lacrimators (or tear gases) are essentially local irritants that act primarily on the eyes. In high concentrations, they also irritate the respiratory tract and the skin. The principal agents used are chloracetophenone (CN) and orthochlorobenzilidine malanonitrile (CS). Although CS is basically a lacrimator, it is considerably more potent than CN and causes more severe respiratory symptoms. CN is the standard training agent and is the tear gas most commonly encountered because it is not as potent. CS is more widely used by the military as a riot-control agent. Protection against all tear agents is provided by protective masks and ordinary field clothing secured at the neck, wrists, and ankles. Personnel handling CS should wear rubber gloves for additional protection

Signs and Symptoms of Exposure. - Lacrimators produce intense pain in the eyes with

excessive tearing. The symptoms following the most severe exposure to vapors seldom last over 2 hours. After moderate exposure, they last only a few minutes

Treatment. - First aid for lacrimators is generally not necessary. Exposure to fresh air and letting wind blow into wide open eyes, held open if necessary, is sufficient for recovery in a short time. Any chest discomfort after CS exposure can be relieved by talking. An important point to remember is that this material adheres tenaciously to clothing, and a change of clothing may be necessary. Do not forget the hair (both head and facial) as a potential source of recontamination.

VOMITING AGENTS. -Vomiting agents comprise the second class of agents in the riot-control category. The principal agents of this group are diphenylaminochloroarsine (Adamsite (DM)), diphenylchloroarsine (DA), and diphenylcyanoarsine (DC). They are used as training and riot-control agents. They are dispersed as aerosols and produce their effects by inhalation or by direct action on the eyes. All of these agents have similar properties and pathology.

Signs and Symptoms of Exposure. – Vomiting agents produce a strong pepper-like irritation in the upper respiratory tract, with irritation of the eyes and lacrimation. They cause violent uncontrollable sneezing, coughing, nausea, vomiting, and a general feeling of malaise. Inhalation causes a burning sensation in the nose and throat, hypersalivation, and rhinorrhea. The sinuses fill rapidly and cause a violent frontal headache

Treatment. - It is of the utmost importance that the mask be worn in spite of coughing, sneezing, salivation, and nausea. If the mask is put on following exposure, symptoms will increase for several minutes in spite of adequate protection. As a consequence, victims may believe the mask is ineffective and remove it, further exposing themselves. While the mask must be worn, it may be lifted from the face briefly, if necessary, to permit vomiting or to drain saliva from the face piece. Carry on duties as vigorously as possible. This will help to lessen and shorten the symptoms. Combat duties usually can be performed in spite of the effects of vomiting agents if an individual is motivated. First aid consists of washing the skin and rinsing the eyes and mouth with water. A mild analgesic may be given to relieve headache. Recovery is usually spontaneous and complete within 1 to 3 hours.

SCREENING SMOKES. - Screening smokes fit in with riot-control agents. Their primary use is to obscure vision and to hide targets or areas. When used for this purpose outdoors, they are not generally considered toxic. However, exposure to heavy smoke concentration for extended periods, particularly near the source, may cause illness or death. Under no circumstances should smoke munitions be activated indoors or in closed compartments. Symptomatic treatment of medical problems or discomfort resulting from exposure to screening smokes will generally suffice

WHITE PHOSPHORUS. - White phosphorus (WP) is a pale, waxy solid that ignites spontaneously on contact with air to give a hot, dense, white smoke composed of phosphorus pentoxide particles. While field concentrations of the smoke may cause temporary irritation to the eyes, nose, and throat, casualties from the smoke have not occurred in combat operations. No treatment is necessary, and spontaneous recovery is rapid once the patient is removed from the WP source. White phosphorus smoke not only creates an obscuring smoke, but it also has a secondary effect upon personnel if it contacts the skin. When burning particles of WP embed in the skin, they must be covered with water, a wet cloth, or mud. A freshly mixed 0.5 percent solution of copper sulfate (which produces an airproof black coating of copper phosphide) may be used as a rinse but must not be used as a dressing. The phosphorus particles must be removed surgically.

114 UNITED STATES MARINE CORPS DRILL AND CEREMONIES FUNDAMENTALS

References:

[a] USMC, Marine Corps University Sergeant's Course 0503
[b] Marine Corps Drill and Ceremonies Manual (PCN10001337900)
[c] USMC, Marine Corps University Career Course 0401

114.1 Explain the five purposes of close order drill. [ref. a, p. 0503H-2]

The purpose of close order drill is to enable a commander to:
Move his unit from one place to another in a standard, orderly manner, while maintaining the best appearance possible.
Provide simple formations from which combat formations may be readily assumed.
Teach discipline by instilling habits of precision and automatic response to orders.
Increase the confidence of his junior officers and of his noncommissioned officers through the exercise of command, by giving the proper commands and the control of drilling troops.
Give Marines an opportunity to handle individual weapons

114.2 Discuss the meaning of the following drill terms: [ref. a, pp. 0503H-2, 0503H3]

Element - An individual, squad, section, platoon, company, or other unit which is part of a larger unit.

Formation - An arrangement of elements on line, in column, or in any other prescribed manner.

Line - A formation in which the elements are abreast, except that a section or platoon is in line when its squads are in line and one behind the other.

Rank - A line of Marines or vehicles placed side by side.

Column - A formation in which elements are placed one behind the other, except that a section or platoon is in column when its squads are in column and abreast of each other.

File - A single column of Marines or vehicles one behind the other.

Flank - The right or left extremity of a unit either on line or in column. The element on the extreme right or left of the line. A direction at a right angle to the direction an element of a formation is facing.

Interval - The lateral space between elements on the same line. Interval is measured between individuals from shoulder to shoulder. It is measured between elements rather than individuals and between formations from flank to flank. Unit commanders and those with them are not considered in measuring interval between elements of the unit with which it is posted.

Normal Interval - Normal interval between individuals is one arm's length.

Close Interval - Close interval is the horizontal distance between shoulder and elbow when the left hand is placed on the left hip.

Alignment - The dressing of several elements on a straight line.

Guide - The individual (base) upon whom a formation, or other elements, thereof, regulates its march. "To guide" means to regulate the interval, direction, alignment and cadence on a base file (right, left, or center).

Center - The middle element of a formation within an odd number of elements or the left center element of a formation with an even number of elements. Remember the guide will be included in the count.

Pace - The length of a full step at quick time, which is 30 inches and is measured from the back of one heel to the back of the other heel.

Step (half, back, right-left, quick & double time) - The distance from heel to heel between the feet of a marching man. The half step and back step are 15 inches. The right and left steps are 12 inches. The steps in quick and double time are 30 and 36 inches respectively.

Cadence (slow time, quick time & double time) - A rhythmic rate of march at a uniform step.

114.3 Discuss the four characteristics of command voice. [ref. a, p. 0503H-4]

Voice Control. The voice is controlled by opening the throat, using the mouth to shape the words, and using the diaphragm to control the volume.
- The loudness of a command is adjusted to the number of men in the unit.
- The only position for giving commands is at the position of attention. Here is a point in leadership. If you demonstrate military bearing, so will your men. If you slouch, your men will have a tendency to do likewise.
- The most important muscle used in breathing is the diaphragm. This is the large muscle that separates the chest cavity from the abdominal cavity.
- The cavities of the throat, mouth, and nose act as amplifiers and help to give fullness and projection to the voice.

Distinctness. All commands can be pronounced correctly without loss of effect.
- Distinctness depends on the correct use of your tongue, lips, and teeth which form the separate sounds of a word.
- To develop the ability to give clear, distinct commands, practice giving commands slowly and carefully, prolonging the syllables. Gradually increase your rate of delivery until you develop the proper cadence, while continuing to enunciate each syllable distinctly

Inflection. Inflection is the rise and fall in pitch and tone in the voice.

Cadence. Cadence when speaking in regards to commands means a uniform and rhythmic flow in words. The interval between commands is generally of uniform length for any given troop unit. This is necessary so that everyone in the unit will be able to understand the preparatory command and will know when to expect the command of execution. Except when supplementary commands need to be given, the best interval of time for the squad or platoon on the march is that which allows one step to be taken between the preparatory command and the command of execution

114.4 Discuss the two types of drill commands: [ref. a, p. 0503H-4]

Preparatory command is the command which indicates the movement to be executed.
Beginning Pitch. Normal speaking voice.
Inflection. Rising inflection

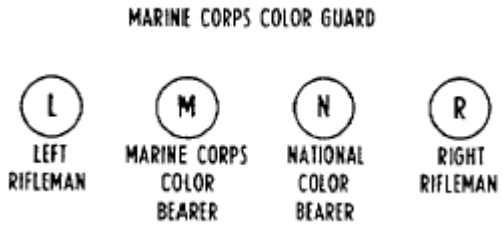
Command of execution is the command which indicates when a movement is to be executed.
Beginning Pitch. Higher than the last pitch of the preparatory command.

Inflection. None.
Snap. Given sharply and succinctly.

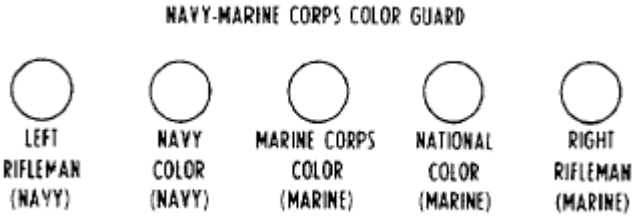
114.5 Discuss the positions of individuals in the following color guards: [ref. b, p. 12-1]

The color guard consists of four men. Two noncommissioned officers are the color bearers, and two other men, junior to the color bearers, are the color guards. The color bearers are unarmed, but the color bearer carried the national color and commands the color guard. He gives the necessary commands for movements and rendering honors. The junior color bearer carries the organizational color, which is always on the left of the national color. When only the national color is carried, the color guard will include only one color bearer. The position of individuals in the Marine Corps color guard, Navy-Marine Corps color guard, and Joint Armed Forces color guard are shown below:

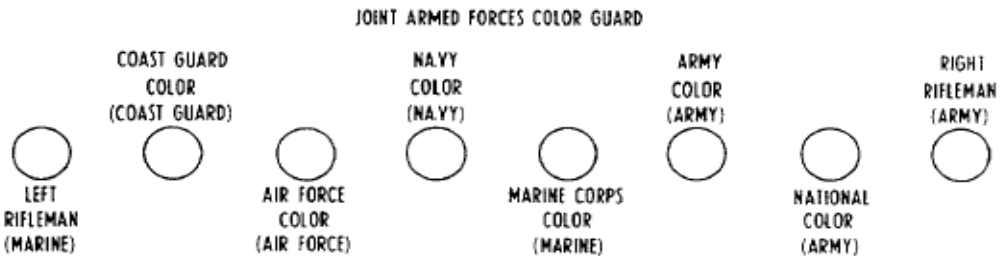
Marine Corps color guard



Navy-Marine Corps color guard



Joint Armed Forces color guard



114.6 Discuss the following recognized Marine Corps traditional events: [ref. c, pp. 0401H-1 thru 0401H-4]

Wet down is a party thrown by a newly promoted Staff NCO or officer to celebrate his new rank. It must be pointed out that this is not an initiation. At no time will any one be humiliated, hazed, or forced to do something against their will. The following general guidelines should be followed:

- The Wet Down should be held soon after the promotion, usually within a month or so. It is usually held at the Staff NCO Club.
- The amount of money spent by the recently promoted Marine is normally one month's pay raise. If several Marines from the same unit have been promoted within a short period of time they can get together and have one single Wet Down. This permits a more lavish celebration. The money is spent on beverages and sometimes on food.
- The invited guests are usually fellow Marines of equal or superior rank to that of the recently promoted Marine.
- The warrant of the newly promoted Marine is displayed prominently. In the past, the warrant was doused with alcohol at some point during the gala, thus the term "Wet Down." This practice is rarely followed today.

Hail and farewell This serves the purpose of introducing any SNCO's and their spouses who have arrived since the last Hail and Farewell and saying good-bye to any SNCO's who are leaving before the next Hail and Farewell. These functions can be scheduled periodically, such as monthly or quarterly, or they can be scheduled on a case-by-case basis. It can be scheduled to coincide with a SNCO Call. It often is given at the SNCO Club, though some units schedule Farewell Luncheons at the section level to make the Farewell more personal.
- **Hail**. This is usually a brief introduction of any newly arrived SNCO's with comments on where they are coming from and where they will be working.
- **Farewell**. This normally takes longer than a Hail. The Marine's current section should be mentioned as well as where he is going. This is also an appropriate time to present him with any plaques or mementos. If he/she is given a Farewell Luncheon, then the Marine who is leaving should be permitted to select the location of the meal. Further, since he/she is the Guest of Honor, the other attendees should pick up the tab for his/her meal. If the number of Marines present is small, then each Marine may be given the chance to make comments on the character of the departing Marine. Additionally, the departing Marine should be given the chance to make comments.

Promotions and reenlistments - In the spring of 1923, the first group of Staff Sergeants received their warrants. Prior to this date the Marine Corps had weaknesses in its hierarchy and did not recognize some enlisted ranks.
Promotions and Re-enlistment’s are required ceremonies to recognize milestones in an individual Marines career. First the time, date, and place for the ceremony must be designated and the information disseminated. The size of the unit and the space available for the formation will determine whether the unit will be formed at close interval or at normal interval. Once the unit has been formed, the individual or individual's to be recognized will form up in the rear of the formation. They form according to precedence of award, medals, certificate of commendation, meritorious mast, letter of appreciation, etc
- Personal awards presented first.
- Promotions second.
- Re-enlistments third.
When the unit is formed, the formation of Marines to be recognized will be formed normally in one rank behind the formation. The formation is reported to the Commander by the senior enlisted. The commander will then command **“POST”.** The senior enlisted marches in a most direct route to the left of the Commander. The senior enlisted will then command **"PERSONNEL TO RECEIVE AWARDS, PROMOTIONS, etc., CENTER** (Marines to be recognized will execute a right face) **MARCH".** They will march to a position in front of the formation approximately 5 paces in front and centered on the Commander, at which time the senior enlisted will command **"MARK TIME MARCH", "DETAIL HALT", "RIGHT FACE", "HAND SALUTE,** after the Commander has returned the salute, the senior enlisted will

command **"READY TWO".**
The designated Marine will read the orders and citations to be presented. After the reading of the first citation, the senior officer, accompanied by designated necessary staff personnel, advances to the first person to be recognized. The commander will then hand or attach the appropriate award to the Marine and then moves to the next person to receive a promotion or citation and that promotion or re-enlistment citation is read. The commander will also congratulate each person with a hand shake for receiving a promotion or re-enlistment. Immediately after shaking hands, the person being promoted or re-enlisted salutes the senior officer. The commander returns the salute before proceeding to the next person. After shaking hands with the last person, the commander and the senior enlisted returns to their post. Once the commander is positioned, the senior Marine of the detail will give the command "**HAND SALUTE"**, after the commander renders his/her salute, the senior Marine of the detail gives the command "**READY TWO, LEFT FACE, FORWARD MARCH",** the detail will then march by the most direct route to the rear of the formation.

Dining-in - The Commanding Officer may desire to conduct a formal dinner in honor of recognizing a new member to the unit, or saying farewell to a departing member. This has commonly been referred to as a Dining In. It may be given in recognition of a dignitary, or to individual or unit achievements. It can also simply be used as a means for the members of a command to get together in a formal setting to become more acquainted. When conducting a Dining In, the guidelines for a Mess Night are adhered to, but adjustments for attire are allowed.
- When a dining In is conducted spouses, boyfriends, girlfriends, and other non-military guests may attend.
- The attendance of these individuals makes the event a dining In, rather than a Mess Night. The Mess Night is a stag affair. In other words, non-military guests are not invited unless they are being recognized at the dinner.
- Guests The spouses of the members of the Mess are considered guests of the Mess and must be treated as such. When determining the official guest(s) of the Mess, care must be taken to include the spouse(s). Ideally, the Guest of Honor should be a military or civilian couple that has, by their example, jointly contributed to the nation.
- Invitations The invitations may include spouses and will indicate the attire to be worn. For the ladies, it is a formal occasion, and as such, formal dresses are expected. Bare shoulders are not considered appropriate.
- Seating Arrangement. Care must be taken not to place a lady at the end of the table.
- Miscellaneous. Flowers may be ordered for each of the ladies and the after dinner speeches should be of interest to both Marines and their spouses

Marine Corps birthday - The following procedure is prescribed as a guide for the conduct of the Marine Corps Birthday Ceremony. It is outlined on the basis of a Marine Corps post commanded by a general officer. At posts where no general officer is present, and in enlisted men's messes, modifications may be made as necessary to meet local conditions. Rehearsals must be conducted to ensure that the ceremony proceeds smoothly and precisely. It is recognized that considerable variation must be made in this ceremony to conform to the configuration of the dance floor or in the absence of a band or field music. Examples are:
- When the ceremony is conducted at posts where there is no general officer commanding, the senior line officer will follow the procedure outlined for the commanding general. At such posts, the escorts will be formed from appropriate ranks present.
- When the ceremony is conducted at NCO's or other enlisted messes, appropriate ranking NCO's will preside and form the escort.
- Where the ballroom is of sufficient size, two officers or enlisted personnel of each rank will be assigned to the escort

- Where practicable, the uniform worn will be, evening dress or blue dress.
- The birthday cake will be mounted on a mess serving cart or similar conveyance covered with scarlet and gold bunting.
- Where swords are not available, escorts will execute hand salute at appropriate commands

Relief/Appoint - When practicable, the ceremony set forth below will be held upon the change of command for an organization of battalion or squadron size, or larger units and directors of schools. The ceremony is normally a parade, however, it may be a review or as simple as a formation of the unit affected.
-The color guard is normally trooped as part of the sequence of events.
However, if the incoming commander is being promoted at the parade or the outgoing commander is retiring or receiving an award during the parade, the color guard marches on with the formation and the colors are brought forward for the promotion/retirement/awards portion of the ceremony.

115 LAND NAVIGATION FUNDAMENTALS

References:

[a] USMC, Marine Corps University Sergeants' Course 1201

115.1 Explain the following components of a map: [pp. 1201H-2, 1201H-3]

Sheet Name - A map is named after the most prominent cultural or geographical feature. Whenever possible, the name of the largest city on the map is used. The sheet name is found in two places: the center of the upper margin and either the right or left side of the lower margin.

Sheet Number - The sheet number is used as a reference number for that map sheet. It is found in two places: the upper right margin and the lower left margin.

Scale - The scale note is a representative fraction that gives you the ratio of a distance on the map to the corresponding distance on the earth's surface. For example, the scale note 1:50,000 on many maps indicates that one inch on the map equals 50,000 inches on the ground. Maps with different scales will display different degrees of topographical detail. For example, a map with a scale of 1:25,000 will give more detail than a 1:50,000 map because one inch on the map represents only 25,000 inches on the ground, rather than the 50,000 inches of the 1:50,000 map. The scale is found both in the upper left margin after the series name and in the center of the lower margin.

Elevation Guide - The elevation guide is a miniature characterization of the terrain shown. The terrain is shown by bands of elevation, spot elevations, and major drainage features. The elevation guide helps you rapidly identify major land forms. It is normally found in the lower right margin

Declination Diagram - This indicates the angular relationships of true north, grid north, and magnetic north. Recent edition maps have a note indicating how to convert azimuths from grid to magnetic and from magnetic to grid next to the declination diagram. The declination diagram is located in the lower margin.

Bar Scales - Bar scales are used to convert map distance to ground distance. Maps may have three or more bar scales, each in a different unit of measure. Exercise care when using the scales, especially in the selection of the unit of measure. The bar scales are located in the center of the lower margin.

Legend - The legend illustrates and identifies the topographic symbols used to depict some of the more prominent features on the map, such as railroad tracks, buildings, and swamps. The symbols are not always the same on every map. Always refer to the legend to avoid error when reading a map. The legend is located in the lower left margin

115.2 Explain the following as they apply to map reading: [p. 1201H-3]

Grid Lines - Grid lines are a series of straight lines intersected at right angles and forming a series of squares. It furnishes the map reader with a system of squares similar to the block system of most city streets. Two digits are printed in large type at each end of the grid lines, and these same two digits appear at intervals along the grid lines on the face of the map. They are called principal digits. They are of major importance to the map reader because they are the numbers he will use most often for referencing points.

Grid Squares - These intersect at right angles of the horizontal and vertical grid lines. The most common military map contains grid squares that measure 1000 meters by 1000 meters (not 1000 square meters as many people think). Any point located within the grid square is considered to be part of the grid square.

Basic Map Reading Rule - The designation of a point is based on the principle: Read right then up. Always read right on the vertical grid lines then up on the horizontal grid lines.

Grid Square Identification - It is important that all of you understand how to apply the map reading rule to identify a grid square and locate a point within a grid square.

115.3 The following grid coordinates will locate a point on a map within how many meters: [pp. 1201H-3, 1201H-4]

A four digit grid coordinate locates a point to within 1000 square meters, on the map, which is called a grid square.

A six digit grid coordinate will locate a point on a map within 100 meters.

An eight digit grid coordinate will locate a point on a map within 10 meters

115.4 Explain the difference between true north, magnetic north, and grid north. [p. 1201H-20]

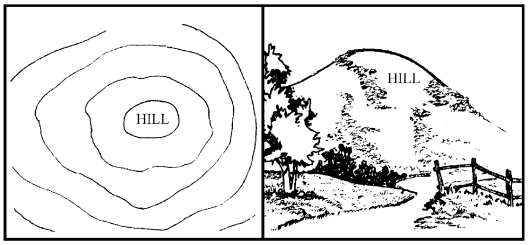
True North. The true north line is a line from any point on the earth's surface to the North Pole. True north can be found at night by locating the North Star, which always points towards true north. True north is usually represented on the declination diagram by a line ending with a star. True north is used almost exclusively when navigating without a compass.

Magnetic North. The earth has a magnetic field that is close to (but not exactly on) the North Pole. The direction to this north magnetic pole is indicated by the north-seeking arrow of your lensatic compass. Magnetic north is usually symbolized on the declination diagram by a line ending with a half arrowhead. Anytime you use the compass to plan or follow an azimuth in the field, you must work with azimuths measured from magnetic north.

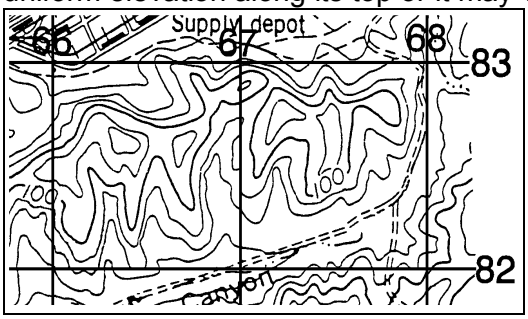
Grid North. This base line is established by using the vertical grid lines on the map. Grid north may be symbolized on the declination diagram by the letters GN. Anytime you use a protractor in conjunction with a vertical grid line to determine or plot an azimuth on a map, you must work with an azimuth measured from grid north.

115.5 Identify the following type of terrain features found on a map: [pp. 1201H-9 thru 1201H-14]

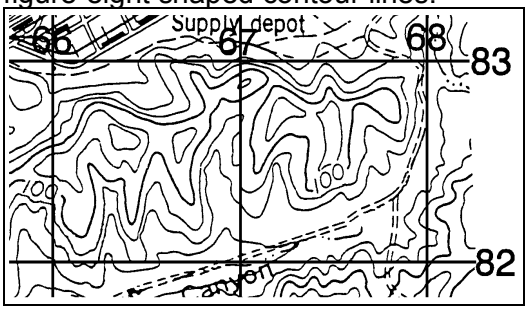
Hill - A hill is an area of high ground. From a hilltop, the ground slopes down in all directions. A hill is shown on a map by contour lines forming concentric circles. The inside of the smallest closed circle is the hilltop.



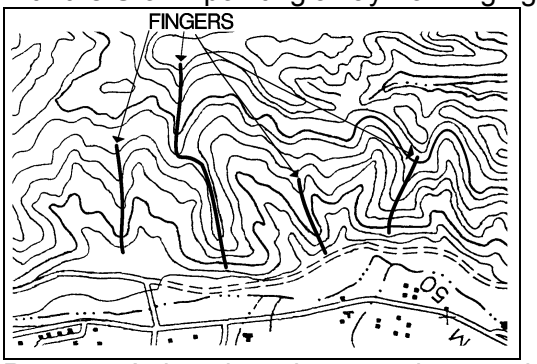
Ridge - A ridge is a series of hills that are connected to each other near the top. A ridge line may extend for many miles. It may be winding or quite straight. It may have a reasonably uniform elevation along its top or it may vary greatly in elevation



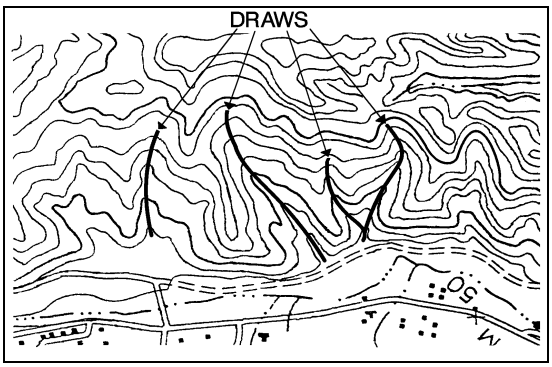
Saddle - This is a dip or low point between two areas of higher ground. A saddle is not necessarily the lower ground between two hilltops; it may be simply a dip or break along a level ridge crest. If you are in a saddle, there is high ground in two opposite directions and low ground in the other two directions. A saddle is normally represented as an hourglass or by figure-eight shaped contour lines.



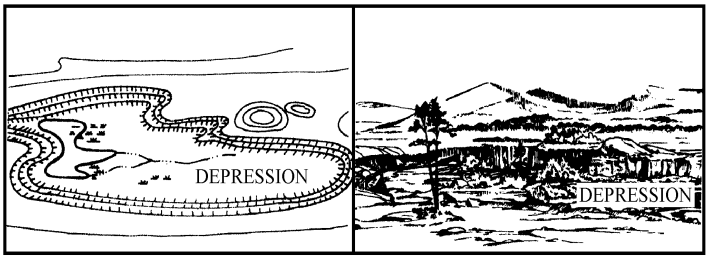
Finger/Spur - A finger is a short, continuous sloping line of higher ground, normally jutting out from the side of a ridge or hill. A finger is often formed by two roughly parallel draws. The ground slopes down in three directions and up in one. Contour lines on a map depict a finger with the U or V pointing away from high ground.



Draw - . A draw is a short, continuous sloping line of low ground, normally cut into the side of a ridge or hill. Often, there is a small stream running down the draw. In a draw, there is essentially no level ground. Therefore, little or no maneuver room exists within its confines. If you are standing in the middle of a draw, the ground slopes upward in three directions and downward in the other direction. Contour lines (see figure 1201-12) on a map depict a draw with the U or V pointing toward high ground.



Depression - This is a low point in the ground or a sinkhole. It is an area of low ground surrounded by higher ground in all directions, or simply a hole in the ground. Usually only depressions that are equal to or greater than the contour interval will be shown. On maps, depressions are represented by closed contour lines that have tick marks pointing toward low ground



115.6 Identify and explain the following as they relate to the lensatic compass: [pp. 1201H-23, 1201H-24]

Cover - This protects the floating dial and the glass encasement. It contains the sighting wire and two luminous sighting dots for night navigation.

Base -
Floating Dial. This is mounted on a pivot so that it rotates freely when the compass is held level. It contains the magnetic needle. A luminous arrow and the letters "E" and "W" are printed on the dial. The arrow points to magnetic north. Letters fall at the east (E) 90 degrees and (W) 270 degrees. There are two scales: outer - denotes MILS (black); inner - denotes DEGREES (red).
NOTE: Mil, is another unit of measure. The mil (abbreviated m) is mainly used in artillery, tank, and mortar gunnery. The mil expresses the size of an angle formed when a circle is divided into 6,400 angles with the vertex of the angles at the center of the circle. A relationship can be established between degrees and mils. A circle equals 6400 mil divided by 360 degrees, or 17.78 mils. To convert degrees to mils, multiply degrees by 17.78.
Glass Encasement. This houses the floating dial and contains a fixed black index line. **Bezel Ring**. This device that clicks when turned. It contains 120 clicks when rotated fully. Each click equals 3 degrees. A short luminous line is used in conjunction with the north-seeking arrow during night navigation.
Thumb Loop. This is attached to the base.

Rear Sight - This is used to lock the floating dial. The rear sight must be opened more than 45 degrees to allow the floating dial to float freely.
Lens. This is used to read the floating dial.
Rear Sight Slot: This is used in conjunction with the front sighting wire when aiming at objects.

115.7 Explain how to convert a magnetic azimuth to a grid azimuth. [pp. 1201H-26, 1201H-27]

Azimuths measured with a protractor are grid azimuths (measured from grid north), and azimuths determined with the compass are magnetic azimuths (measured from magnetic north). You cannot follow a grid azimuth with a compass, nor can you plot a magnetic azimuth with a protractor because of the angular difference between grid north and magnetic north. This angular difference (between grid north and magnetic north) is called the G-M ANGLE (Grid-Magnetic angle**). The G-M angle varies for each map.** Because of this angular difference (the G-M angle), before you can plot a magnetic azimuth on a map, you must convert it to a grid azimuth. Likewise, before you can use a grid azimuth to navigate, you must convert it to a magnetic azimuth. Declination diagrams display the difference between grid and magnetic north. A complete set of instructions is included in MOST declination diagrams for your use in converting azimuths. The G-M angle often is not expressed as a whole degree, such as 1/2 degrees or 7 degrees 15'. Since you will not need to work with such precise numbers as minutes, round the G-M angle off to the nearest whole degree. If the G-M angle is 1/2o or 30' then round the angle up to the next highest whole degree.
Conversion Notes. Refer to the conversion notes that appear with the declination diagrams explaining the use of the G-M angle. One note provides instructions for converting a magnetic azimuth to a grid azimuth. The other provides instructions for converting a grid azimuth to a magnetic azimuth. The conversion (addition or subtraction) is governed by the direction of magnetic north relative to grid north.
TO CONVERT A MAGNETIC AZIMUTH TO A GRID AZIMUTH ADD G-M ANGLE

115.8 Discuss the technique used to orient a map using the following methods: [pp. 1201H-32, 1201H-33]

Compass - When orienting a map with a compass, remember that compasses measure magnetic azimuths. Since the north-seeking arrow of the compass points to magnetic north, pay special attention to the declination diagram. Use the following technique to orient your map.
- **With the map flat on the ground**, place the straightedge (on the left side of the compass) along the magnetic north arrow on the declination diagram so that the cover of the compass is pointing toward the top of the map. This will put the fixed black index line of the compass parallel to the magnetic north arrow of the declination diagram
- **Keeping the compass aligned** as directed above, rotate the map and compass simultaneously until the north-seeking arrow is below the fixed black index line on the compass. Your map is now oriented.
Terrain Association - You can orient your map using terrain association when a compass is not available or when you have to make quick references as you move across country. Using this technique requires careful examination of the map and the features on the ground.
- Identify prominent terrain features on the map that you can find on the ground.
- Align terrain features with the map. If there is a tower to your right front, then orient the map so that the tower is to your right front. If there is a road off to your left, then ensure the road on the map is parallel to the road on the ground. Once all of the features are lined up, your map is oriented

115.9 Discuss the technique for determining your position using the following methods: [pp. 1201H-33, 1201H-34]

Location by inspection - You are standing in the vicinity of several prominent features which can easily be located on the map. By orienting the map and estimating your relation to these features, you should have no difficulty in determining your location.

Location by One -Point – Resection - One-point resection is an accurate technique of

determining your location when you are on or near a linear feature that you can identify both on the ground and on the map. You must also be able to identify another prominent feature, both on ground and on the map. To determine your location by one-point resection follow these steps
- Identify the linear terrain feature that you are located on or near in respect to the ground on your map.
- Identify a prominent feature on the ground and locate that feature on your map.
- Using the compass-to-cheek technique, sight in on the feature and read the magnetic azimuth
- Convert the magnetic azimuth to a grid azimuth.
- Convert this grid azimuth to a grid back azimuth.
- With your protractor, plot this grid back azimuth from the feature on the map and extend it until it crosses the linear feature.
- Conduct a map inspection to verify your resection.
- When selecting a terrain feature, choose one that is perpendicular to the axis of the linear terrain feature so that when you plot the back azimuth on the map, the line will cross the linear feature more or less at a right angle.

Location by Two -Point – Resection - Usually you will find that you are not located on or near a prominent linear feature. Since the accuracy of a one-point resection under these conditions depends on your ability to accurately estimate distance, it is better to use a two-point resection. The procedures for two-point resections are basically the same as for one-point resections except you must select two features instead of one. The back azimuths from each feature is determined and plotted on your map. You are located at the point where these lines cross. If you have a compass and a protractor then follow these steps.
- Select two prominent features on the ground whose positions can be located on the map. These features should be at least 30^{o} but not greater that 150^{o} apart.
- Using the compass-to-cheek technique, determine the magnetic azimuth to each object.
- Convert these magnetic azimuths to grid back azimuths.
- With your protractor, draw the respective back azimuths from these two points on your map
- Extend the azimuth lines from these two points until they intersect. You are located at the point where these two lines cross.
- Conduct a map inspection to verify your position.

LCE

TABLE OF CONTENTS

129 Logistic Combat Element (LCE), Logistic Combat Element (LCE) Fundamentals

References:

[a] MCRP 5-12D, Organization of Marine Corps Forces
[b] MCWP 4-1, Logistics Operations
[c] Marine Corps Bulletin 5400 020011ZSEP 2005
[d] MARADMIN 576/05 Logistics Combat Element Reorganization Update and POA&M

129.1 Define a Logistics Combat Element:

A Logistics Combat Element (LCE) is task organized to provide the full range of combat service support necessary to accomplish the Marine Air Ground Task Force (MAGTF) mission. The LCE can provide supply, maintenance, transportation, deliberate engineering, health, dental, postal, disbursing, prisoner of war, information systems, exchange, utilities, legal, and graves registration services. The LCE varies in size from a Combat Logistics Company (CLC), to a Marine Logistics Group (MLG). Normally, there is only one LCE in a MAGTF.

129.2 Define Combat Service Support (CSS):

Combat Service Support (CSS) is defined as the essential capabilities, functions, activities, and tasks necessary to sustain all elements of operating forces in theater at all levels of war on the battlefield. It includes, but is not limited to, supporting the aspects of supply, maintenance, transportation, health services, and other services required by the Marine Air Ground Task Force (MAGTF). CSS in the Marine Corps is provided by the Marine Logistics Group (MLG) and is a function or tasking associated with a unit that, by table of organization (T/O) and table of equipment (T/E), is organized, equipped, and trained to perform CSS operations.

129.3 Define the following terms:

LTI- Limited Technical Inspection: Equipment inspections that are limited in scope and objective. LTI's are generally directed at inspecting equipment conditions to determine the extent and level of maintenance required to restore it to a specified condition or to check for serviceability status.

TAM- Table of Authorized Material: A source document of information for logistics planning with respect to selected material authorized for use by organizations, activities, and detachments of the Marine Corps, both regular and reserve. Items listed in the table of authorized material include the three supply types of material, subsistence, and petroleum, oils and lubricants.

T/E- Table of Equipment: A document listing the equipment which a unit is required to possess and maintain in order to accomplish its mission. When used with the table of organization, it serves as the basis for determining what publications and additional equipment may be required by the unit.

T/O- Table of Organization: A document which provides the authority for personnel staffing of a unit and the basis for all other resources. The table of organization contains a unit's mission, organization, concept of employment, administrative capabilities, and logistics capabilities.

129.4 Define logistics:

Logistics is defined as "the science of planning and carrying out the movement and maintenance of forces". Those aspects of military operations deal with:

Design and development, acquisition, storage, movement, distribution, maintenance, evacuation and disposition of material

Movement, evacuation and hospitalization of personnel

Acquisition or construction, and disposition of facilities

Acquisition or furnishing of services

129.5 Discuss the three levels of logistic support:

Strategic: The level of war at which a nation, often as a member of a group of nations, determines national or multinational (alliance or coalition) security objectives and guidance, and develops and uses national resources to accomplish those specific objectives. Some examples of activities at this level would be; national and multinational military objectives, sequence initiatives, defined limits and risks assessments for the use of military and other instruments of national power, the development of global plans or theater war plans which aid in achieving these objectives, and military forces provided in accordance with strategic plans.

Operational: The level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within the theater or areas of operations. Activities at this level link tactics and strategy by establishing objectives needed to accomplish sequencing events that achieve the operational objectives. These activities differ from tactics because they provide a broader dimension of time and or space to ensure the logistic and administrative support of tactical forces is successfully met.

Tactical: The level of war at which battles and engagements are planned and executed to accomplish military objectives assigned to tactical units or task forces. Activities at this level focus on the ordered arrangement and maneuverability of combat elements in relation to each other and to the enemy to achieve combat objectives.

129.6 State the six functional areas of tactical logistics:

Supply: Supply is a cyclic process of acquiring and issuing material to supported units. This material may be consumable or durable material, components, and end items.

Maintenance: Maintenance involves those actions taken to keep material in serviceable condition (preventative maintenance) and actions required to return material to serviceable condition (corrective maintenance). Maintenance tasks are grouped by levels of support that determine assignment of maintenance responsibilities.

Transportation: Transportation is moving from one location to another. Throughput is the amount of cargo and personnel passed through transportation systems. The transportation system includes the means and the controls for managing the transportation means. The transportation sub-functions are generally applicable to all levels of support, although the means, methods, control, and management procedures employed at each level will vary. Although transportation is discussed as a logistic function, at the tactical level, transportation is a combat support function. Combat organizations use organic, attached, and supporting transportation assets for tactical movement.

General Engineering: General engineering is distinct from combat engineering. General engineering is typically considered a LCE function (i.e., Engineer Support Battalion), while combat engineering is considered a combat support function (i.e., Combat Engineer Battalion). General engineering assets at the tactical level may be used to reinforce or augment combat engineer organizations in specific situations for mobility, counter mobility, or survivability tasks. These assets are normally in general support of the MAGTF for a wide range of tasks. These tasks often involve more detailed planning and preparation and higher standards of design and construction than typical combat engineer tasks.

Health Services: Health services support (HSS) seeks to minimize the effect that wounds, injuries, and disease have on unit effectiveness, readiness, and morale. HSS is accompanied by a preventive-medicine program that initially safeguards personnel against potential health risks and by the establishment of a system that provides medical support from the point of wounding, injury, or illness.

Services: The services function provides for the effective administration, management, and employment of military organizations. Services sub functions are essentially administrative in nature and can include postal, disbursing, information systems, exchange, legal, and graves registration services. These are categorized as either command services, which are services provided to Marines by their individual commands, or LCE services, which are services provided by a LCE unit.

129.7 Discuss the seven principles of logistics support:

There are seven principles of logistics support that apply to all three levels of logistics, and attaining these principles is essential to ensuring operational success. These principles, like the principles of war, are guides for planning, organizing, managing, and executing. They are not rigid rules, nor will they apply at all times. As few as one or two may apply in any given situation. Therefore, these principles should not be interpreted as a checklist, but rather as a guide for analytical thinking and prudent planning. These principles require coordination to increase logistics effectiveness. The application of these principles by effective logisticians requires flexibility, innovation, and in maneuver warfare, boldness.

Responsiveness: Responsiveness is the right support in the right place at the right time. Among the logistics principles, responsiveness is the keystone. All other principles become irrelevant if logistics support does not support the commander's concept of operations.

Simplicity: Simplicity fosters efficiency in both the planning and execution of logistics operations. Mission-type orders and standardized procedures contribute to simplicity. Establishment of priorities and preallocation of supplies and services by the supported unit can simplify logistics support operations.

Economy: Economy is providing sufficient support at the least cost without impairing mission accomplishment or jeopardizing lives. At some level and to some degree, resources are always limited. A commander applies economy by prioritizing limited resources and allocating them sufficiently to achieve success without imbalance or inordinate excess.

Flexibility: Flexibility is the ability to adapt logistics structure and procedures to changing situations, missions, and concepts of operation. Logistics plans and operations must be flexible to achieve both responsiveness and economy. The principle of flexibility also includes the concepts of alternative planning, anticipation, reserve assets, redundancy, forward support of phased logistics, and centralized control with decentralized operations.

Attainability: Attainability (or adequacy) is the ability to provide the minimum, essential supplies and services required to begin combat operations. The commander's logistics staff develops the concept of logistics support, completes the logistics estimate, and initiates resource identification on the basis of the supported commander's requirements, priorities, and apportionment. An operation should not begin until minimum essential levels of support are on hand.

Sustainability: Sustainability is the ability to maintain logistics support to all users throughout the area of operations for the duration of the operation. Sustainability focuses the commander's attention on long-term objectives and capabilities of the force. Long-term support is the greatest challenge for the logistician, who must not only attain the minimum, essential materiel levels to initiate combat operations (readiness), but also must maintain those levels for the duration to sustain operations.

Survivability: Survivability is the capacity of the organization to protect its forces and resources. Logistics units and installations are high-value targets that must be guarded to avoid presenting the enemy with a critical vulnerability. Since the physical environment typically degrades logistics capabilities rather than destroying them, it must be considered when planning. Survivability may dictate dispersion and decentralization at the expense of economy.

129.8 Define War Reserve Material (WRM):

WRM is defined as mission-essential principal end items, secondary items, and munitions required to attain operational objectives in the scenarios authorized for sustainability planning and other stockage objectives approved for programming in the Defense Planning Guidance. WRM inventories are acquired during peacetime. These inventories are flexible, and they provide an expansion capability that can respond to spectrum regional contingencies, while minimizing investment in resources.

129.9 State the number of days of logistics capability the following types of Marine Air/Ground Task Forces (MAGTF's) deploy with in order to sustain themselves:

MEU- Marine Expeditionary Unit: A Marine expeditionary unit normally deploys with the logistic capability to sustain itself with some classes of supply for up to 15 days.

MEB: A brigade sized MAGTF (MEF forward) can sustain itself for up to 30 days.

MEF: A Marine Expeditionary Force can sustain itself for up to 60 days.

129.10 Explain the concept of the Maritime Prepositioning Force (MPF):

The Maritime Prepositioning Force (MPF) concept reflects brigade-sized unit deployment/MEF employment utilizing Military Sealift Command (MSC) chartered ships to preposition necessary supplies and equipment. Several MSC chartered ships of various capabilities deploy to form a single maritime prepositioning ship squadron (MPSRON). Equipment and supplies administratively embarked in each MPSRON are based on the T/E, individual materiel readiness lists, and/or the tables of allowances for units assigned to the MPF's geographical responsibility. Each MPSRON is designed to sustain one MEF (MEB)-sized unit for 30 days in most classes of supply. Prior to employment, the MPF fly-in echelon comprised of personnel and essential air transportable equipment deploy to an airfield near a port or beach where ships of the MPSRON can be offloaded. When maritime prepositioned equipment and supplies (MPE/S) are unloaded, they are issued to the arriving units and personnel of the MAGTF.

130 Logistic Combat Element (LCE), Marine Logistics Group (MLG) Fundamentals

References:

[a] MCRP 5-12D Organization of Marine Corps Forces
[b] MARADMIN 576/05 Logistics Combat Element Reorganization Update and POA&M

130.1 Define a Marine Logistics Group (MLG) and its significant attributes:

The **MLG** is a permanently organized grouping of functional components that provides logistic combat element support above the capability of supported units to all elements of the Marine Expeditionary Force (MEF). The MLG in its deployed or forward status is also known as the Marine Logistics Brigade (MLB), commonly referred to as the MLG (FWD). The most significant attribute of the MLG is that all elements are structured to provide permanently organized sub-elements to support independently deployed battalions, regiments, MEU's (i.e. task-organized groups to provide support, as required and pre-planned), or geographically separated units in garrison. It is staffed and equipped to support a one-division/one wing MEF or four MEU's simultaneously.

130.2 Define the following terms:

Direct Support: A mission requiring a force to support another specific force and authorizing it to answer directly to the supported force's request for assistance.

General Support: That support which is given to the supported force as a whole and not to any particular subdivision thereof.

Task Organization: An organization which assigns the means to accomplish assigned tasks in any planned action to responsible commanders. It is the process of allocating available assets to subordinate commanders and establishing their command and support relationships.

130.3 Define the mission of the MLG Command Element (CE):

Mission: The MLG CE provides general and direct support above the organic capabilities of supported elements of the MAGTF in the functional areas of a LCE during deployment and employment of the MEF, and smaller, geographically separated MAGTFs in all levels of conflict.

130.4 Discuss the six tasks of the MLG CE:

Provide centralized ground supply support beyond supported units' organic capabilities for the sustainment of the MEF. This includes procurement, storage, care in storage, distribution, salvage, disposal, bulk fuel, and water supply support.

Provide authorized overflow organizational and intermediate maintenance support beyond supported units' organic capabilities for Marine Corps-furnished ground equipment of the MEF including inspection, classification, servicing, adjustment, tuning, testing, calibration, repair, modification, rebuilding overhaul, reclamation, recovery assistance, and evacuation.

Coordinate transportation and throughput support beyond supported units' organic capabilities for the deployment and employment of the MEF. This includes embarkation, landing support, port and terminal operations, motor transport, air delivery, and freight/passenger transportation support.

Provide general engineering support to the MEF. This includes engineering reconnaissance horizontal construction of roads, LCE installations and other support facilities, vertical construction and maintenance of encampment and other personnel support facilities, emplacement of standard and nonstandard bridging and rafting, demolition and obstacle removal, augmentation for tasks beyond the organic engineering capabilities of supported units, and explosive ordnance disposal (EOD).

Provide health service (medical and dental) support beyond the supported units' organic capabilities to the MEF. This includes health maintenance, patient collection and treatment, temporary hospitalization, patient regulation and evacuation, disease control, hygienic services, and a comprehensive dental program.

Coordinate services support, beyond supported units' organic capabilities for the MEF. This includes security support, postal, disbursing, exchange services, legal services, CE related support and graves registration.

131 Logistic Combat Element (LCE), Combat Logistics Regiment (CLR) Fundamentals

References:

[a] MCWP 4-11.8, Services in an Expeditionary Environment
[b] Marine Corps Bulletin 5400 020011ZSEP 2005
[c] MARADMIN 576/05Logistics Combat Element (LCE) Reorganization Update and POA&M

131.1 Define the mission of the MLG Combat Logistics Regiment (Forward)
Mission: Provide command and control, administration, communications, food services, services, landing support and security support for the MLG. Provide landing support and services beyond supported unit organic capabilities, to the Marine Expeditionary Force (MEF) or smaller Marine Air-Ground task forces (MAGTF). Enable Reception, Staging, Onward movement and Integration (RSOI) capability in order to achieve rapid buildup of combat power. Provide Logistics Combat Elements (LCE) for Marine Expeditionary Units (MEUs). Provide the LCE for a Marine Expeditionary Brigade (MEB) or a Special Marine Air-Ground Task Force (SPMAGTF).

131.2 Define the eight tasks of the CLR (FWD):

Provide necessary command support functions for the MLG and CLR (FWD).

Provide services to the MEF and MAGTFs smaller than a MEF, beyond organic capabilities of supported units, in the sub functional areas of disbursing, postal, exchange, legal, and personnel retrieval and processing.

Enable Reception, Staging, Onward movement and Integration (RSOI) capability in support of MAGTF operations. If required, provide personnel and equipment for a landing force support party.

Provide communications support for the MLG headquarters, subordinate MLG organizations, and LCEs of MAGTFs.

Provide security support to the MLG, to include; battlefield circulation control, area security, enemy prisoner of war (EPW) management, and support for the maintenance of law and order.

Provide food service support to the MLG and beyond the organic capabilities of supported units of the MEF.

Provide the nucleus staff for coordination of marshalling and deployment support for the MEF, with necessary augmentation from supported units as required.

Provide general support tactical logistics to support Marine Expeditionary Units (MEUs).

131.3 Define the mission of the CLR (FWD) Headquarters Company:
Mission : Provide command and control, administration and command support functions for the CLR (FWD) and the Logistics Combat Element (LCE) headquarters.

131.4 Define the mission of the CLR (FWD) Communications Company:

Mission : Provide communications support to the headquarters of the MLG and subordinate Logistics Combat Elements (LCE) beyond their organic communications capabilities in support of Marine Air-Ground Task Force (MAGTF) operations.

131.5 Define the mission of the CLR (FWD) Military Police Company:

Mission : Provide security support, to include battlefield circulation control, area security, enemy prisoner of war (EPW) management, and law and order operations to the MLG.

131.6 Define the mission of the CLR (FWD) Service Company:

Mission : Provide general support services such as postal, disbursing, legal, and exchange services support for the Marine Expeditionary Force (MEF).

131.7 Define the mission of the CLR (FWD) Landing Support Company:

Mission : Provide aerial delivery, landing and throughput support operations in support of the Marine Expeditionary Force (MEF) and Marine Air-Ground Task Forces (MAGTFs) smaller than a MEF at designated helicopter landing zones, assault beaches, and transport terminals.

131.8 Define the mission of the CLR (FWD) Food Services Company:

Mission: Provide general support and field food service support for the MLG, the MEF Command Element (CE) and the Ground Combat Element (GCE), exceeding their organic capability.

131.9 Define the mission and organization of a MLG General Support (GS) CLR:
Mission: To provide intermediate supply, distribution system support, intermediate maintenance and health service support to the war fighter across the spectrum of conflict in any environment. To provide logistics support to the MEF in order to sustain MAGTF operations beyond the supported unit's organic capabilities.

Organization: The regiment consists of a Headquarters Company, two Combat Logistics Companies (CLC), and other functional battalions that are equipped and organized to provide general supply, maintenance, and medical support.

131.10 Define the mission and organization of a MLG Direct Support (DS) CLR:

Mission: To provide direct logistics support to the Marine Division beyond it's organic capabilities in any environment and throughout the spectrum of conflict in order to allow the division to continue operations independent of any logistically driven operational pauses.

Organization: The regiment consists of a Headquarters Company, a General Support Motor Transportation company and three direct support Combat Logistics Battalions. The battalions are equipped and organized to provide logistic and tactical cargo vehicle support and petroleum support.

131.11 Discuss the four tasks of MLG CLRs:

Provide Medium and heavy lift transport and distribution of bulk dry/water cargo, class III and III (A), and class V and V (A) supplies.

Provide line haul and unit/supply point distribution of bulk liquids, with motor transport augmentation as required from supported unit(s).

Provide heavy equipment lift augmentation, including evacuation of tracked vehicles, to supported units of the MEF.

Provide personnel lift augmentation to supported units of the MEF.

131.12 Define the mission of the CLR H&S Company:

Mission: The H&S Company provides command, control, administration, and command support functions for the regiment.

132 Logistic Combat Element (LCE), Combat Logistics Battalion (CLB)

References:

[a] Marine Corps Bulletin 5400 020011ZSEP 2005
[b] MARADMIN 576/05 Logistics Combat Element Reorganization Update and POA&M

132.1 Define the mission of the Combat Logistics Battalion:

Mission: To provide a full range of expeditionary combat service support in direct support to the Ground Combat Element, Aviation Combat Element, or Command Element of the MEU in order to enable the accomplishment of all assigned missions across a wide spectrum of conflict and conventional and selected maritime special operations. To be prepared to conduct simultaneous, self-sufficient tactical security operations to ensure that the provision of this support is not interrupted in a hostile environment and to allow the supported unit to continue operations independent of any logistically driven operational pauses.

132.2 Define the 10 tasks of the CLB and its companies:

Provide intermediate maintenance support for ground element equipment (less critical low-density equipment within the supported units' organic capability).

Provide repair parts from a repairable issue point.

Provide Maintenance Support Teams that inspect, diagnose, classify, and repair equipment at forward sites.

Provide ground vehicle recovery and evacuation.

Provide supply point and unit re-supply via mobile combat service support elements.

Provide transportation support including material-handling equipment.

Coordinate and conduct Force Protection defensive operations to include rear area security and internal security.

Conduct convoy operations and associated convoy security preparations.

Train and organize to deploy as the command element and other task organized LCE's that support worldwide exercises and operations.

Conduct engineering operations to include mobility, counter mobility, survivability, construction and demolition

132.3 Define the mission of the Combat Logistics Company:

Mission: To provide intermediate supply support and intermediate motor transport and engineer ground equipment maintenance to their Marine Aircraft Wings (MAWs); operate the Aerial Port of Embarkation/Debarkation (APOE/D) under the guidance of the Marine Expeditionary Force (MEF); and provide personnel to the Fleet Assistance Program (FAP) in support of legal, postal, exchange, security (military police), personnel administration, freight/passenger transportation (TMO) and bulk fuel support for their respective Marine Corps Air Station.

Organization: Combat Logistics Companies provide intermediate ground logistics support to aviation units, to include supply and maintenance beyond organic capabilities.

133 Logistic Combat Element (LCE), Maintenance Battalion

References:

[a] MCRP 5-12D, Organization of Marine Corps Forces
[b] MCWP 4-11.4, Maintenance Operations
[c] Marine Corps Bulletin 5400 020011ZSEP 2005
[d] MARADMIN 576/05 Logistics Combat Element Reorganization Update and POA&M

133.1 Define the mission and organization of Maintenance Battalion:

Mission: To provide intermediate-level maintenance support to include wheeled and tracked vehicle recovery, salvage and disposal, and general maintenance support, for the MEF's ground equipment in order to improve and sustain MAGTF combat power. Provide Secondary Repairable Management, including inventory management, storage, financial accounting, and maintenance for secondary low-density repairable.

Organization: The Maintenance Battalion is a functional battalion within a Combat Logistics Regiment and is structured to provide command and control for centralized coordination and decentralized execution of maintenance efforts to sustain the combat power of the MEF. Subordinate companies are organized along functional area lines to provide maintenance support in commodity areas that are critical to the war fighting capabilities of the MEF.

133.2 Discuss the eight tasks of the Maintenance Battalion:

Provide 3d echelon maintenance on end items by means of component/subassembly replacement or repair.

Provide intermediate (4th echelon) maintenance in support of the secondary repairable program, including repairing and rebuilding components and subassemblies of end items.

Provide a tracked-vehicle evacuation capability.

Provide calibration services for electronic and mechanical test, measurement and diagnostic equipment.

Provide organizational (2d echelon) and intermediate (3d and 4th echelon) maintenance on end items.

Provide technical assistance and overflow organizational (2d echelon) maintenance for supported units as directed by higher headquarters.

Provide intermediate maintenance and modification applications on in-stock equipment.

Provide technical inspection services, as required, in support of equipment maintenance programs of the MEF.

133.3 Define the mission and organization the Maintenance Battalion H&S Company:

Mission: Provide command and control, administration, and command support functions for the maintenance battalion.

Organization: The Company is organized to plan, coordinate, and supervise the logistic/CSS functions of the subordinate elements of the battalion with assistance from the battalion supply and motor transport sections. It is structured to facilitate task organization for maintenance operations in support of the MEF or any combination of smaller MAGTFs.

133.4 Define the mission and organization of the Maintenance Battalion Ordnance Maintenance Company:

Mission: Provide intermediate (3d and 4th echelon) maintenance support for Marine Corps-furnished ordnance equipment of a MEF.

Organization: The Company is structured to provide the appropriate technical, supervisory personnel, equipment, and ordnance maintenance support, to the MEF. It is organized to facilitate the task organization of ordnance maintenance assets for support of a MEF or up to four MEUs.

133.5 Define the mission and organization of the Maintenance Battalion Engineer Maintenance Company:

Mission: Provide intermediate (3d and 4th echelon) maintenance support for Marine Corps-furnished engineering equipment of a MEF.

Organization: The Company is structured to provide the appropriate technical, supervisory personnel and equipment necessary to provide engineering maintenance support to the MEF. It is organized to facilitate the task organization of engineering maintenance assets for support of a MEF or up to four MEUs.

133.6 Define the mission and organization of the Maintenance Battalion Electronics Maintenance Company:

Mission: Provide intermediate maintenance (3d and 4th echelon) support for the Marine Corps-furnished ground communications-electronics equipment of a MEF.

Organization: The Company is structured to provide the appropriate technical, supervisory personnel and equipment necessary to provide communications-electronics maintenance support to the MEF. It is organized to facilitate the task organization of communications-electronics maintenance assets for support of a MEF or up to four MEUs.

133.7 Define the mission and organization of the Maintenance Battalion Motor Transport Maintenance Company:

Mission: Provide intermediate (3d and 4th echelon) maintenance support for the motor transport equipment of the MEF.

Organization: The Company is structured to provide the appropriate technical, supervisory personnel and equipment necessary to provide motor transport maintenance support of a MEF. It is organized to facilitate the task organization of motor transport maintenance assets for support of a MEF or up to four MEUs.

133.8 Define the mission and organization of the Maintenance Battalion General Support Maintenance Company:

Mission: Provide general support intermediate (3d and 4th echelon) maintenance support, including component rebuilding for Marine Corps-furnished ground equipment of a MEF, except for communications-electronics equipment and fire control components.

Organization: The Company is structured to provide the appropriate technical, supervisory personnel and equipment necessary to augment the maintenance elements of a LCE with a general support intermediate maintenance capability. It is organized to facilitate the task organization of general support maintenance assets for support of a MEF or up to four MEUs.

133.9 Discuss each echelon/level of ground equipment maintenance:

Three categories of maintenance exist within the Marine Corps' ground equipment maintenance system; organizational, intermediate, and depot. Within these three categories are five echelons of maintenance. To manage maintenance effectively, commanders must understand their maintenance responsibilities and the maintenance responsibilities of those units in support.

Organizational maintenance: The using unit performs organizational maintenance on its assigned equipment. Organizational maintenance focuses on the operator and crew preventive/corrective measures which normally consist of inspecting, servicing, lubricating, adjusting, and replacing parts, minor assemblies, and subassemblies. Organizational maintenance includes first and second echelon maintenance responsibilities. First echelon maintenance is performed by the user/equipment operator. Second Echelon maintenance is performed by specially trained personnel within the organization.

Intermediate maintenance: Intermediate maintenance is the responsibility of and performed by designated maintenance activities in direct support of using organizations. Intermediate maintenance normally consists of calibration, repair, or replacement of damaged or unserviceable parts. Intermediate maintenance includes third and fourth echelon maintenance. Third and Fourth Echelon maintenance is almost always performed by specially trained personnel at designated maintenance activities.

Depot maintenance: Depot maintenance is performed on materiel that requires a major overhaul or a complete rebuilding of parts, assemblies, subassemblies, and end items. This level of maintenance normally consists of the manufacture of parts, modifications, testing, and reclamation, as required. Depot maintenance also provides stocks of serviceable equipment that are not available in lower echelon maintenance activities and includes the fifth echelon of maintenance. Fifth Echelon maintenance is almost always performed at the depot level; however, it can be performed at intermediate maintenance activities if specifically authorized by the Commandant of the Marine Corps.

133.10 Define the following maintenance terminologies:

Overhaul: The restoration of an item to a completely serviceable condition as prescribed by maintenance serviceability standards.

Preventive maintenance: The care and servicing by personnel for the purpose of maintaining equipment and facilities in satisfactory operating condition before failures occur or before they develop into major defects.

Rebuild: The restoration of an item to a standard as nearly as possible to its original condition in appearance, performance, and life expectancy.

Repair: The restoration of an item to serviceable condition through correction of a specific failure or unserviceable condition.

Unserviceable: An item in a condition unfit for use, but which can be restored to a serviceable condition after repair, rebuild, or overhaul.

134 Logistic Combat Element (LCE), Supply Battalion

References:

[a] MCRP 5-12D, Organization of Marine Corps Forces
[b] MCWP 4-1, Logistics Operations
[c] MCWP 4-11.1, Health Service Support Operations
[d] Marine Corps Bulletin 5400 020011ZSEP 2005
[e] MARADMIN 576/05 Logistics Combat Element Reorganization Update and POA&M

134.1 Define the mission and organization of the Supply Battalion:

Mission: To provide general support, ground supply support, less bulk fuel, and Navy funded stock/programs and Distribution system management for the sustainment of Marine Air Ground Task Force operations.

Organization: The Supply Battalion a functional battalion within a Combat Logistics Regiment and is organized to provide commodity-oriented, task-organized detachments for the sustainment of MAGTF operations.

134.2 Discuss the 12 tasks of the Supply Battalion of the MLG:

Provide supply support management for the MLG and other MEF elements beyond organic capabilities of supported units, to include; management of the MEF's special allowance training pool items and initial issue of provisioning assets; management of the MEF's secondary repairables through maintenance; technical management, data research, customer service, and general assistance to the MEF for supply matters; providing status reports for the MEF as required; and interface for the MEF with financial and maintenance management systems.

Provide contracting support and cross servicing services for supported units, as required.

Provide a warehousing capability in support of the MEF.

Provide accounting for classes I, II, IV, VII, VIII, and IX supplies, initial issue provisioning assets, and authorized levels of war reserve.

Provide subsistence support to the MEF, including operation of class I subsistence dumps and storage, issue, and accounting for subsistence items.

Provide receipt, storage, and forwarding of class III (packaged) supplies.

Provide receipt, storage, issue, and accounting functions for class V items.

Provide technical assistance in receipt, storage, assembly, and provision of nuclear ordnance.

Provide for the receipt, storage, issue, and organizational and intermediate maintenance support for class VIII supplies and equipment

Provide intermediate-level shop stores issue points for the MEF.

Provide procurement services for the MEF for items decentralized by the integrated materiel manager

Provide packing, preservation, and packaging (PP&P) services

134.3 Name and define the 10 classes of supply:

I Subsistence: includes gratuitous health and welfare items and rations.

II Clothing: individual equipment, tentage, organizational tool sets and kits, hand tools, administrative and housekeeping supplies, and equipment.

III Petroleum: oils and lubricants, which consist of petroleum fuels, lubricants, hydraulic and insulating oils, liquid and compressed gases, bulk chemical products, coolants, de-icing and antifreeze compounds, and coal.

IV Construction: includes all construction material; installed equipment; and all fortification, barrier, and bridging materials.

V Ammunition: including but not limited to; chemical, radiological, special weapons, bombs, explosives, mines, detonators, pyrotechnics, missiles, rockets, propellants, and fuses.

VI Personal: demand items or nonmilitary sales items.

VII Major end items: are the combination of products assembled and configured in their intended form and ready for use (e.g., launchers, tanks, mobile machine shops, vehicles).

VIII Medical/dental material: which includes medical-unique repair parts, blood and blood products, and medical and dental material.

IX Repair parts: (less class VIII), including components, kits, assemblies, and subassemblies (repairable and non-repairable), required for maintenance support of all equipment.

X Material: to support nonmilitary requirements and programs not included in classes I through IX. For example, materials needed for agricultural and economic development.

134.4 State the six functions of supply:

The six functions of supply are:
- Requirements determination: routine, pre-planned, or long-range.

- Procurement

- Distribution

- Disposal

- Storage

- Salvage

134.5 Define the mission and organization of the Supply Battalion H&S Company:

Mission: To provide command and control administration, and command support functions for the supply battalion and general subsistence supply support to the MEF.

Organization: The Company is organized to plan, coordinate, and supervise the command support functions of the battalion and to provide specified general support supply functions for the MAGTF. It is structured to facilitate task organization of detachments for operations conducted by the battalion in support of MAGTF operations.

134.6 Define the mission and organization of the Supply Battalion Supply Company:

Mission: Provide general supply support, including supply management and control, to sustain the operations of the MEF.

Organization: The Company is organized to facilitate the task organization of detachments that are capable of providing control and management of supply support to elements of the MEF or for MAGTFs smaller than a MEF.

134.7 Define the mission and organization of the Supply Battalion Ammunition Company:

Mission: To provide general class V supply support to the MEF.

Organization: The Company is organized to plan, coordinate, and supervise class V support functions. It is structured to facilitate task organization of detachments for operations conducted by the supply battalion in support of the MEF and any combination of smaller MAGTFs.

134.8 Define the mission and organization of the Supply Battalion Medical Logistics Company:

Mission: To provide general supply and maintenance support for class VIII materiel to the MEF.

Organization: The Company is organized to plan, coordinate, and supervise the command support functions of the battalion. It is structured to facilitate task organization of detachments in support of MAGTF operations.

134.9 Define AMAL and ADAL:

Authorized Medical Allowance Lists (AMALs) and Authorized Dental Allowance Lists (ADALs) are configured in equipment and supply assemblages. The equipment assemblage contains equipment and reusable materiel required to establish a basic function (e.g., an operating room). The supply assemblage contains the consumable material to support the function in treating a designated number of casualties or to perform a specific task. For readiness purposes, an equipment module may be stored in combination with its supply module. The materiel listed in each AMAL/ADAL is the minimum amount to be maintained. Marine Corps Order 4400 series contains AMAL and ADAL procurement policies and procedures. AMALs and ADALs are maintained and resupplied by the Medical Logistics Company.

134.10 State the AMAL and ADAL descriptions:

AMAL	DESCRIPTION	AMAL	DESCRIPTION
618	LAB EQUIPMENT	640	OPERATING ROOM SUPPLY
619	LAB SUPPLY	645	FORWARD RESUSCITATIVE SURGERY SYSTEM
631	SHOCK SURGICAL/TRIAGE EQUIPMENT	646	FRSS RESUPPLY
632	SHOCK SURGICAL/TRIAGE SUPPLY	647	ERCS
635	BATTALION AID STATION EQUIPMENT	648	CASEVAC
636	BATTALION AID STATION SUPPLY	651	PREVMED ENTO
637	PREVENTIVE MEDICINE EQUIPMENT	691	MEDLOG TEST/REPAIR EQUIPMENT
638	PREVENTIVE MEDICINE SUPPLY	662	FIELD DENTAL OPERATORY
639	OPERATING ROOM EQUIPMENT	699	SICKCALL

135 Logistic Combat Element (LCE), Medical Battalion

References:

[a] MCRP 5-12D, Organization of Marine Corps Forces
[b] MCWP 4-11.1, Health Service Support Operations
[c] Marine Corps Bulletin 5400 020011ZSEP 2005
[d] MARADMIN 576/05 Logistics Combat Element Reorganization Update and POA&M

135.1 Describe the mission and organization of the Medical Battalion:

Mission: To provide health service support to the operating units of the Marine Expeditionary Force to save every life.

Organization: The Medical Battalion a functional battalion within a CLR and is organized to plan, coordinate, and supervise the medical support functions of the MEF. It is structured to facilitate task organization for operations conducted by the battalion in support of the MEF or any combination of smaller MAGTFs operating in widely separated geographical areas.

135.2 Discuss the six tasks of the Medical Battalion:

Provide health care through the 2d echelon of medical care, including initial resuscitative care, resuscitative surgery, and temporary hospitalization of casualties, to the MEF.

Provide medical regulating services for the MEF.

Provide preventive medicine support to the MEF.

Assist in the collection, analysis, and dissemination of medical intelligence.
Provide the medical elements for the establishment of casualty decontamination and treatment stations.

Provide medical support for management of mass casualties and combat stress casualties.

135.3 Define the mission and organization Medical Battalion H&S Company:

Mission: Provide command, control, and command support functions for the medical battalion.

Organization: The Company is organized to plan, coordinate, and supervise the command support functions for the battalion. It is structured to facilitate task organization for operations conducted by the battalion in support of MAGTF operations.

135.4 Discuss four tasks of Medical Battalion H&S Company:

Provide administrative, organic supply, light motor transportation, and maintenance support to the battalion.

Provide limited medical evacuation for the battalion.

Provide medical data coordination for the battalion.

Provide medical department personnel, as required, to the headquarters elements.

135.5 Define the mission and organization of Medical Battalion Surgical Support Company:

Mission: Provide general medical support to the MEF, including medical treatment facilities for medical and surgical care and temporary casualty holding.

Organization: The Company is organized to plan, coordinate, and supervise assigned functions of medical support for the battalion. It is structured to facilitate task organization for operations conducted by the battalion in support of the MEF, the MEF (FWD), or any combination of smaller MAGTFs. The Company consists of a headquarters platoon, a triage/evacuation platoon, a surgical platoon, a holding platoon, a combat stress platoon, and an ancillary service platoon. The surgical platoon consists of three surgical sections that support one operating room for 24-hour operations. The holding platoon contains three ward sections, each containing 20 medical/surgical beds. The ancillary services platoon contains two laboratory sections, two pharmacy sections and two X-ray sections.

135.6 Discuss the six tasks of the Surgical Support Company:

Establish medical treatment facilities for resuscitative surgery, medical treatment, and **temporary hospitalization** of casualties.

Be prepared to receive casualties from the next forward medical treatment echelon in the evacuation chain.

Establish medical treatment facilities for resuscitative surgery, medical treatment, and **temporary holding** of casualties from supported forces.

Prepare to evacuate casualties whose medical requirements exceed the established theater evacuation policy.

Provide and coordinate medical evacuation for the landing force.

Provide medical support to personnel of other services and nations as provided in applicable regulations and agreements, and provide humanitarian care as required by international law.

135.7 Define the mission and organization of Medical Battalion Shock-Trauma Platoon:

Mission: Provide direct medical support to the MEF, including collecting, clearing, and evacuating casualties from supported MEF elements, and provide medical treatment facilities for resuscitative treatment care and temporary holding of casualties.

Organization: The shock-trauma platoon is the smallest mobile medical support element of the medical battalion and is the first medical treatment facility of the MAGTF in support of the BAS. The eight shock-trauma platoons are structured to facilitate task organization for operations conducted by the battalion in support of the MEF, the MEF (FWD), or any combination of

smaller MAGTFs. The platoon consists of a stabilization section and a collecting and evacuation section. Each collecting and evacuation section has two tactical ambulances for collecting casualties from the next forward medical support echelon, and the stabilization section has 7-ton trucks to move the shock-trauma platoon personnel and equipment.

135.8 Discuss four tasks of the Shock Trauma Platoon:

Establish and operate clearing stations, as required.

Establish medical treatment facilities for resuscitative treatment and temporary holding of casualties.

Provide and coordinate medical evacuation.

Provide medical support to personnel of other services and nations as provided in applicable regulations and agreements and provide humanitarian care as required by international law.

135.9 Define the mission and organization of the Medical Battalion Forward Resuscitative Surgery System (FRSS):

Mission: To provide surgery capability that can be quickly configured and erected to support any tactical medical situation ashore in a forward combat environment. To provide life saving capabilities to support Marine Air-Ground Task Force operations on a continuous 24-hour basis, with a minimum mission duration of 48 hours without resupply.

Organization: The forward resuscitative surgery system is a free standing or connected modular configuration, highly mobile package that includes personnel and medical material that transforms into a supplied surgical cockpit and/or encasement. The FRSS is capable of providing trauma management, resuscitative surgery, ancillary services, and temporary patient holding.

135.10 Define the following acronyms:

BAS	**B**attalion **A**id **S**tation
BDC	**B**lood **D**onor **C**enter
CRTS	**C**asualty **R**eceiving and **T**reatment **S**hip
FMC	**F**ield **M**edical **C**ard
HSS	**H**ealth **S**ervice **S**upport
HSAP	**H**ealth **S**ervice **A**ugmentation **P**rogram
MTF	**M**edical **T**reatment **F**acility
STP	**S**hock **T**rauma **P**latoon
CSH	**C**ombat **S**urgical **H**ospital (Army)
TMIP	**T**heater **M**edical **I**nformation **P**rogram
TAH	**T**- MSC **A**uxiliary **H**ospital Ship

135.11 Define the following echelons of care:

Level I: **Initial emergency care**, it includes; Buddy aid, Company Corpsman, BAS, and STP care.

Level II: **Initial resuscitative surgical care**, it includes; FRSS's and CRTS's.

Level III: **Resuscitative care**, includes; Fleet Hospitals, TAH's and Army CSH's

Level IV: **Definitive care** includes overseas MTF's.

Level V: **Rehabilitative care** includes CONUS facilities capable of rehabilitating patients to the greatest extent possible.

136 Logistic Combat Element (LCE), Engineering Support Battalion (ESB)

References:

[a] MCRP 5-12D, Organization of Marine Corps Forces
[b] MCWP 3-17, Engineering Operations
[c] Marine Corps Bulletin 5400 020011ZSEP 2005
[d] MARADMIN 576/05 Logistics Combat Element Reorganization Update and POA&M

136.1 Define the mission and organization of the Engineering Support Battalion:

Mission: The Engineer Support Battalion provides general engineering support of an expeditionary nature to the MEF. This includes survivability, counter mobility, and mobility enhancements, EOD, and general supply support incident to the handling, storage, dispensing of bulk class I (water) and bulk class III and III (A) items.

Organization: The Engineering Battalion is an independent battalion and is organized to plan, coordinate, and supervise the general engineering and supply support functions of the battalion. It is structured to facilitate task organization for operations conducted by the battalion in support of the MEF or combinations of smaller MAGTFs.

136.2 Discuss the 15 tasks of the Engineering Support Battalion:

Conduct engineering reconnaissance that is necessary to support the battalion's mission or other engineering needs of the MEF.
Construct, improve, and maintain airfields, including expeditionary airfields.
Construct, improve, and maintain encampments and other MEF-required support facilities by using available material or pre-engineered structures.

Conduct mobility enhancement operations, including the construction, improvement, and maintenance of lines of communications and main supply routes.

Provide bulk class III and III (A) fuel support, including receipt, storage, and dispensing of bulk fuel products.

Provide utilities support, including mobile electric power beyond supported units' capabilities and electrical power distribution within camps.

Provide water purification and bulk class I (water) storage and dispensing for the MLG and other elements of the MEF when requirements exceed supported units' capabilities.

Provide survivability enhancements, including the construction of protective structures.

Install and/or supervise other units in the installation of standard and nonstandard fixed-panel and floating bridging, including planning and controlling bridging operations in support of MEF mobility requirements.

Provide bath and laundry services beyond supported units' capabilities.

Provide EOD support, as required, to the MEF.

Construct field-expedient deception devices.

Conduct counter mobility operations through installation of obstacles and barriers, including explosive and nonexplosive obstacles.

Conduct mobility operations, including breaching, reducing, and removing explosive or non-explosive obstacles.

Provide specialized demolition operations beyond supported units' capabilities.

136.3 Define the mission and organization of ESB H&S Company:

Mission: Provide command and control, administration, and command support functions for the engineer support battalion to the MEF.

Organization: The Company is organized to plan, coordinate, and supervise the command support functions for the battalion. It is structured to facilitate task organization for operations conducted by the battalion in support of MAGTF operations

136.4 Define the mission and organization of the ESB Engineer Support Company:

Mission: Provide direct support maintenance support for specified equipment that is organic to the battalion; direct support transportation and services support to the battalion, and general support/reinforcing augmentation, as required, to the engineer companies of the battalion in support of the MEF operations.

Organization: The Company is organized to plan, coordinate, and supervise the command support functions for the company and to facilitate task organization for engineer maintenance support for operations conducted by the battalion in support of MAGTF operations.

136.5 Define the mission and organization of the ESB Bridge Company:

Mission: Provide general support standard tactical bridging support to enhance the tactical mobility of the MEF.

Organization: The Company is organized to plan, coordinate, and supervise bridging support operations of the battalion. It is structured to facilitate task organization for bridging operations conducted by the battalion in support of the MEF or any combination of smaller MAGTFs.

136.6 Define the mission and organization of the ESB Bulk Fuel Company:

Mission: Provide general support, class III supply support to the MEF, including distribution to, but not within, air bases in support of MEF operations.

Organization: The Company is organized to plan, coordinate, and supervise the bulk fuel support of the battalion. It is structured to facilitate task organization for bulk fuel operations conducted by the battalion in support of the MEF or any combination of smaller MAGTFs.

136.7 Define the mission and organization of the ESB Engineer Company:

Mission: Provide general engineering support of an expeditionary nature to the MEF.

Organization: The Company is organized to plan, coordinate, and supervise the engineering support functions of the battalion. It is structured to facilitate task organization for operations conducted by the battalion in support of the MEF or any combination of smaller MAGTFs.

136.8 Define the mission and organization of the EOD Company:

Mission: The USMC EOD mission is to support Marine operating forces, national security strategy, and force protection by locating, accessing, identifying, rendering safe, neutralizing, and disposing of hazards from foreign and domestic, CBRNE, UXO, IEDs and weapons of mass destruction (WMD) that present a threat to operations, installations, personnel, or material." (MCRP 3-17.2C)

Organization: The Company is organized to plan, coordinate, and supervise the explosive ordnance disposal functions of the battalion. Explosive Ordnance Disposal Company consists of: EOD Company Head Quarters, EOD General Support Platoon (containing an Platoon Commander and an EOD Officer and 3 sections of 8 Marines each), EOD Platoons (One platoon is established to support each Infantry Regiment. Each platoon is structured the same as the GS Platoon (three sections of 8 and 2 officers).

137 Logistic Combat Element (LCE), Dental Battalion

References:

[a] MCRP 5-12D, Organization of Marine Corps Forces
[b] MCWP 4-11.1, Health Service Support Operations
[c] Marine Corps Bulletin 5400 020011ZSEP 2005
[d] MARADMIN 576/05 Logistics Combat Element Reorganization Update and POA&M

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137. 1 Define the mission and organization of the Dental Battalion:

Mission: Provide general support dental health care to the MEF.

Organization: The Dental Battalion is and independent battalion and is organized to plan, coordinate, and supervise dental health care for the MEF. It is structured to facilitate task organization for operations conducted by the battalion in support of the MEF, or any combination of smaller MAGTFs operating in widely separated geographical areas.

137.2 Discuss the four tasks of the Dental Battalion:

Provide a comprehensive program of dental health care for the MEF.

Coordinate MEF dental health care support requirements.

Provide dental detachments, as required, to support MAGTFs smaller than a MEF.

Supervise implementation of dental health care delivery programs for the MEF.

137.3 Define the mission and organization the Dental Battalion H&S Company:

Mission: Provide command, control, and command support functions.

Organization: The Company is organized to plan, coordinate, and supervise command support functions for the battalion. It is structured to facilitate task organization for operations conducted by the battalion in support of MAGTF operations.

137.4 Discuss two tasks of the Dental Battalion H&S Company:

Provide command support functions for the operation of the battalion.

Assist with and coordinate professional matters such as quality assurance, infection control, dental readiness, the dental information retrieval system, and professional and in-service training for the battalion.

137.5 Define the mission and organization of the Dental Battalion Dental Company:

Mission: Provide general support dental health care to the major subordinate elements of the MEF.

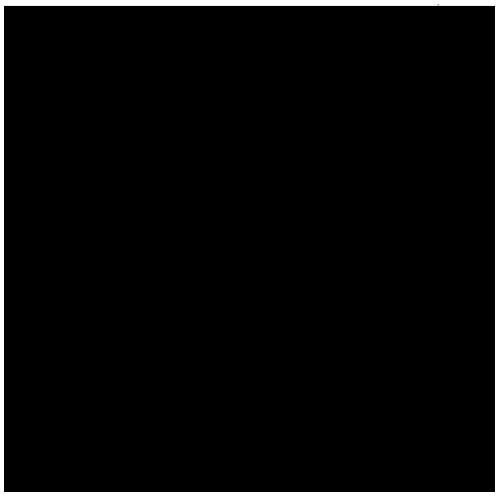
Organization: Three dental companies are organized to provide support to each of the major subordinate elements of the MEF and to facilitate task organization as detachments in support of MAGTFs smaller than a MEF.

137.6 Discuss two tasks of the Dental Battalion Dental Company:

Maintain MAGTF units in an acceptable state of dental readiness.

Provide a comprehensive dental program for the MEF, including emergency dental treatment and specialty disciplines with the exception of maxillofacial surgery.

Naval Education and Training Command
NAVEDTRA 43908-A
APRIL 2010



PERSONNEL

QUALIFICATION

STANDARD

FOR

FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST

NAME (Rate/Rank) ----------

Although the words “he”, “him,” and “his” are used sparingly in this manual to enhance communication, they are not intended to be gender driven nor to affront or discriminate against anyone reading this material.

PREFACE

Warfare Qualified Sailors are an essential element of our Navy's Operational Primacy. The objective of the Fleet Marine Force Enlisted Warfare Specialist Program is to provide the candidate an introduction into the processes and topics necessary to support the warfighting requirements of our Navy. This personnel warfare qualification standard will focus on mission effectiveness, combat readiness, and survivability as well as introducing an overall understanding of how an individual unit's mission fits into and supports naval doctrine and its objectives. Experience shows it is essential that every warrior in our Navy be totally familiar with the mission of their command and be able to apply this knowledge to support the successful execution of the command's current and future missions.

TABLE OF CONTENTS

TABLE OF CONTENTS (CONT'D)

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INTRODUCTION

P Q S PROGRAM

This PQS program is a qualification system for officers and enlisted personnel where certification of a minimum level of competency is required prior to qualifying to perform specific duties. A PQS is a compilation of the minimum knowledge and skills that an individual must demonstrate in order to qualify to stand watches or perform other specific routine duties necessary for the safety, security or proper operation of a ship, aircraft or support system. The objective of PQS is to standardize and facilitate these qualifications.

CANCELLATION

This Standard cancels and supersedes NAVEDTRA 43908.

APPLICABILITY

This PQS is applicable to all personnel serving in Fleet Marine Force (FMF) units which are authorized to grant FMF Enlisted Warfare Specialist designations IAW OPNAVINST 1414 (series).

MODEL MANAGER

The Model Manager Command manages a specific PQS manual. This includes overseeing the process of monitoring and updating assigned PQS manuals from the standpoint of technical content and relevance within the community.

TAILORING

To command tailor this package, first have it reviewed by one or more of your most qualified individuals. Delete any portions covering systems and equipment not installed on your ship, aircraft or unit. Next, add any line items, fundamentals, systems and watchstations/workstations that are unique to your command but not already covered in this package. Finally, the package should be reviewed by the cognizant department head and required changes approved by the Commanding Officer or his designated representative. Retain the approved master copy on file for use in tailoring individual packages.

INTRODUCTION (CONT'D)

QUALIFIER

The PQS Qualifier is designated in writing by the Commanding Officer to sign off individual watchstations. Qualifiers will normally be E-5 or above and, as a minimum, must have completed the PQS they are authorized to sign off. The names of designated Qualifiers should be made known to all members of the unit or department. The means of maintaining this listing is at the discretion of individual commands. For more information on the duties and responsibilities of PQS Qualifiers, see the PQS Unit Coordinator's Guide.

CONTENTS

PQS is divided into three sections. The 100 Section (Fundamentals) contains the fundamental knowledge from technical manuals and other texts necessary to satisfactorily understand the watchstation/workstation duties. The 200 Section (Systems/Mission Areas) is designed to acquaint you with the systems you will be required to operate at your watchstation/workstation. The 300 Section (Watchstations) lists the tasks you will be required to satisfactorily perform in order to achieve final PQS qualification for a particular watchstation/workstation. All three sections may not apply to this PQS, but where applicable, detailed explanations are provided at the front of each section.

REFERENCES

The references used during the writing of this PQS package were the latest available to the workshop, however, the most current references available should be used when qualifying with this Standard.

NOTES

Classified references may be used in the development of PQS. If such references are used, do not make notes in this book as answers to questions in this Standard may be classified.

TRAINEE

Your supervisor will tell you which watchstations/workstations you are to complete and in what order. Before getting started, turn to the 300 Section first and find your watchstation/workstation. This will tell you what you should do before starting your watchstation/workstation tasks. You may be required to complete another PQS, a school, or other watchstations/workstations within this package. It will also tell you which fundamentals and/or systems from this package you must complete prior to qualification at your watchstation/workstation. If you have any questions or are unable to locate references, contact your supervisor or qualifier. Good luck!

P Q S FEEDBACK REPORTS

This PQS was developed using information available at the time of writing. When equipment and requirements change, the PQS needs to be revised. The only way the PQS Development Group knows of these changes is by you, the user, telling us either in a letter or via the Feedback Report contained in the back of this book. You can tell us of new systems and requirements, or of errors you find.

ACRONYMS USED IN THIS PQS

Not all acronyms or abbreviations used in this PQS are defined here. The Subject Matter Experts from the Fleet who wrote this Standard determined the following acronyms or abbreviations may not be commonly known throughout their community and should be defined to avoid confusion. If there is a question concerning an acronym or abbreviation not spelled out on this page nor anywhere else in the Standard, use the references listed on the line item containing the acronym or abbreviation in question.

ACE	Air Combat Element
CE	Command Element
LCE	Logistics Combat Element
MLG	Marine Logistics Group
GCE	Ground Combat Element
MEF	Marine Expeditionary Force
MEU	Marine Expeditionary Unit
MOOTW	Military Operations Other Than War
MOPP	Mission Oriented Protective Posture
NATO	North Atlantic Treaty Organization
SINCGARS	Single Channel Ground and Airborne Radio

100 INTRODUCTION TO FUNDAMENTALS

100.1 INTRODUCTION

This PQS begins with a Fundamentals section covering the basic knowledge and principles needed to understand the equipment or duties to be studied. Normally, you would have acquired the knowledge required in the Fundamentals section during the school phase of your training. If you have not been to school or if you need a refresher, the references listed at the beginning of each fundamental will aid you in a self-study program. All references cited for study are selected according to their credibility and availability.

100.2 HOW TO COMPLETE

The fundamentals you will have to complete are listed in the watchstation (300 section) for each watchstation. You should complete all required fundamentals before starting the systems and watchstation portions of this PQS, since knowledge gained from fundamentals will aid you in understanding the systems and your watchstation tasks. When you feel you have a complete understanding of one fundamental or more, contact your Qualifier. If you are attempting initial qualification, your Qualifier will expect you to satisfactorily answer all line items in the fundamentals. If you are requalifying or have completed the appropriate schools, your Qualifier may require you to answer representative line items to determine if you have retained the necessary knowledge for your watchstation. If your command requires an oral board or written examination for final qualification, you may be asked any questions from the fundamentals required for your watchstation.

101 PROFESSIONAL LIBRARY

No single book or group of books contained in this fundamental section is intended to be a mandatory reading item when completing this PQS manual.

101.1 SUPPLEMENTAL READING:

The following lists are included as a source of supplemental reading for personnel who desire to obtain additional information which supports the heritage and doctrine fundamentals contained in this PQS manual. Additionally, the information contained in these suggested readings should not be used as written or oral board testing material.

101.1.1 THE MARINE CORPS PROFESSIONAL READING BOOK LIST

As the Marine Corps' reading list is updated annually, the most current version can be found through the internet at the following address:

www.mcu.usmc.mil/mcu/newhome/cmcrdlst.htm

.2 THE MCPON's "NAVAL HERITAGE AND CORE VALUES" READING LIST, PARTS "A" AND "B"

As the MCPON Reading List is updated annually; the most current version can be found in the MCPON directline publication or through the internet at the following address:

www.chinfo.navy.mil/navpalib/mcpon/readgide.html

www.history.navy.mil/faqs/faq46-7.htm

.3 OTHER BOOKS OF INTEREST TO SAILORS SERVING WITH THE FLEET MARINE FORCE (FMF).

a. Achilles in Vietnam by Jonathon Shay, M.D., PH.D
b. Medic (America's Medical Soldiers, Sailors, and Airmen in Peace and War) by Elloise Engel
c. Corpsmen by Turner Publishing
d. Marine (A Guided Tour of a Marine Expeditionary Unit) by Tom Clancy.
e. Combat Surgeon (On Iwo Jima with the 27th Marines) by James S. Vedder
f. Flags of our Fathers by James Bradley

102 MARINE CORPS HISTORY, RANK STRUCTURE, AND COURTESIES FUNDAMENTALS

References:
[a] Marine Corps Common Skills Handbook, Book 1A (PCN 50600000900)

102.1 Discuss what significant events occurred during the following years in Marine Corps history: [pp. 1-2-3 thru 1-2-5]

a. 1775
b. 1776
c. 1805
d. 1847
e. 1859
f. 1868
g. 1883
h. 1900
i. 1913
j. 1917
k. 1933
l. 1965
m. 1982
n. 1991
o. 2001
p. 2003
q. 2004a
r. 2004b

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(Signature and Date)

.2 Describe the importance of the following conflicts as they relate to Marine Corps history: [pp. 1-2-5, 1-2-6]

a. The Battle of Belleu Wood
b. The Battle of Guadalcanal
c. The Battle of Tarawa
d. The Battle of Mariana Islands
e. The Battle of Iwo Jima
f. The Battle of Chosin Reservior
g. The Battle of Hue City

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(Signature and Date)

102 MARINE CORPS HISTORY, RANK STRUCTURE, AND COURTESIES FUNDAMENTALS (CONT'D)

102.3 Describe the accomplishments of the following noteworthy Marines and Sailors as related to Marine Corps history: [pp. 1-2-6, 1-2-7]

a. Archibald Henderson
b. John Quick
c. Dan Daly
d. Louis B. "Chesty" Puller
e. Gregory R. "Pappy" Boyington
f. Ira H. Hayes
g. Opha Mae Johnson
h. Margaret A. Brewer
i. Robert E. Bush
j. John H. Bradley
k. Robert R. Ingram

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(Signature and Date)

.4 Discuss the circumstances when a hand salute is rendered and when it is not. [pp 1-2-15 thru 1-2-19]

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(Signature and Date)

.5 Identify the Marine Corps rank and pay grade in order of seniority from E-1 to O-10. [pp. 1-2-21, 1-2-22]

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(Signature and Date)

.6 Discuss the procedures for rendering honors and the circumstances during which honors are rendered during colors, the national anthem, and boarding naval vessels. [pp. 1-2-23, 1-2-24]

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(Signature and Date)

103 UNITED STATES MARINE CORPS MISSION AND ORGANIZATION FUNDAMENTALS

References:
[a] Marine Corps Common Skills Handbook, Book 1A (PCN50600000900)
[b] MCRP 5-12D, Organization of Marine Corps Forces (PCN 14400005000)

103.1 **Discuss the seven elements of the Marine Corps mission. [ref. a, p. 1-2-1]**

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(Signature and Date)

.2 **Discuss the two parallel chains of command that exist within the Marine Corps. [ref. b, p. 1-1]**

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(Signature and Date)

.3 **Identify and discuss the three Marine Corps operating force. [ref. b, pp. 1-1 thru 1-3]**

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(Signature and Date)

.4 **Discuss the purpose of the Headquarters Marine Corps (HQMC). [ref. b, p.1-6]**

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(Signature and Date)

.5 **Describe, in general, a Marine Air-Ground Task Force (MAGTF). [ref. b, p. 2-1]**

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(Signature and Date)

.6 **Discuss the organization and mission of the following Marine Expeditionary Forces (MEF) elements and their components: [ref. b, pp. 2-2, 2-3, 6-1, 6-2]**

a. Command Element (CE)
b. Marine Air Wing, Air Combat Element (ACE)
c. Marine Division, Ground Combat Element (GCE)
d. Marine Logistic Group, Logistic Combat Element (LCE)

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(Signature and Date)

103 UNITED STATES MARINE CORPS MISSION AND ORGANIZATION FUNDAMENTALS (CONT'D)

103.7 Identify the location of the three standing Marine Expeditionary Forces (MEFs). [ref. b, p. 2-3]

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(Signature and Date)

.8 Discuss the organization and mission of the following Marine Expeditionary Brigades (MEB) elements and their components: [ref. a, p. 1-2-33]

a. CE
b. ACE
c. GCE
d. LCE

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(Signature and Date)

.9 Discuss the organization and mission of the following Marine Expeditionary Units (MEUs) (Special Operations Capable (SOC)) elements and their components: [ref. b, pp. 2-4, 2-5, 6-3, 6-4]

a. CE
b. ACE
c. GCE
d. LCE

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(Signature and Date)

.10 Identify the location of each of the seven MEUs (SOC) command elements and the MEFs in which it resides. [ref. b, p. 2-4]

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(Signature and Date)

103 UNITED STATES MARINE CORPS MISSION AND ORGANIZATION FUNDAMENTALS (CONT'D)

103.11 Discuss the organization and mission of the following Special Purpose Marine Air-Ground Task Force (SPMAGTF) elements and their components. [ref. a, p. 1-2-32]

a. CE
b. ACE
c. GCE
d. LCE

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(Signature and Date)

104 ADMINISTRATIVE FUNDAMENTALS

References:
[a] BUPERSINST 1610.10, Navy Performance Evaluation and Counseling System
[b] SECNAVINST 5216.5, Correspondence Manual
[c] NAVPERS 15560C, Navy Military Personnel Manual
[d] Marine Corps Common Skills Handbook, Book 1A (PCN 50600000900)
[e] 10804UM-01, Enlisted Distribution Verification Report User's Manual

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104.1 Discuss the following as they apply to the Navy performance evaluation/fitness report and counseling system: [ref. a, encl. 1, pp. 1 thru 5]

a. Reporting senior
b. Raters and senior raters
c. Performance counseling
d. Types of reports
e. Administrative blocks
f. Guidance on trait grades
g. Comments block
h. Promotion recommendation
i. Promotion recommendation summary groups
j. Misconduct reporting
k. Responsibilities and rights of members

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(Signature and Date)

.2 Discuss the formats for the following types of naval correspondence: [ref. b, pp. 33 thru 82]

a. Standard letter
b. Endorsements
c. Memorandums

_____
(Signature and Date)

.3 Discuss the purpose of the following enlisted service record pages: [ref. c, pp. 1070-270 thru 1070-320]

a. Page 2
b. Page 4
c. Page 5
d. Page 13

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(Signature and Date)

104 ADMINISTRATIVE FUNDAMENTALS (CONT'D)

104.4 Explain the purpose of the Uniform Code of Military Justice, who is responsible for upholding it, and who is subject to it. [ref. d, pp. 1-1-1, 1-1-2]

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(Signature and Date)

.5 Explain the differences in the following types of courts-martial: [ref. d, pp. 1-1-7, 1-1-8]

a. Summary
b. Special
c. General

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(Signature and Date)

.6 Explain the following in regards to Non-Judicial Punishment (NJP): [ref. d, p 1-1-11]

a. The value of NJP to the commander and to the Marine
b. When NJP can be administered
c. The right to refuse NJP
d. The right and procedures to appeal

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(Signature and Date)

.7 Explain the Marine Corps position on the following policies: [ref. d, pp. 1-7-13 thru 1-7-21]

a. Sexual assualt
b. Sexual harassment
c. Equal opportunity
d. Hazing
e. Fraternization
f. Suicide prevention

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(Signature and Date)

.8 State the purpose and discuss the contents of the Enlisted Distribution Verification Report (EDVR). [ref. e, pp.1-1, 1-2]

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(Signature and Date)

105 OPERATIONAL RISK MANAGEMENT AND OCCUPATIONAL SAFETY FUNDAMENTALS

References:
[a] MCO 3500.27A, Operational Risk Management (ORM)
[b] MCO P5100.8F, Marine Corps Occupational Safety and Health Program
[c] OPNAVINST 5100.19C, Navy Occupational Safety and Health Program Manual for Afloat

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105.1 **Discuss the term ORM and the concept of the ORM process. [ref. a, encl. 1, pp. 1, 2]**

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(Signature and Date)

.2 **Discuss the following ORM terms: [ref. a, encl. 1, p. 2]**

a. Hazard
b. Risk
c. Risk assessment

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(Signature and Date)

.3 **Explain the five-step process of ORM: [ref. a, encl. 1, pp. 2, 3**

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(Signature and Date)

.4 **Explain the four principles of ORM: [ref. a, encl. 1, pp. 4, 5]**

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(Signature and Date)

.5 **Discuss the requirements and give examples of each of the following Personal Protection Equipment (PPE): [ref. b, art.13004 thru 13007]**

a. Head protection
b. Hearing protection
c. Foot protection
d. Eye protection

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(Signature and Date)

105 OPERATIONAL RISK MANAGEMENT AND OCCUPATIONAL SAFETY FUNDAMENTALS (CONT'D)

105.6 Define the following terms: [ref. c, pp. B3-1, B3-2]

a. Hazardous material
b. Hazardous waste

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(Signature and Date)

.7 Explain the purpose and information contained on the Material Safety Data Sheet (MSDS): [ref. c, pp. B3-6, B3-7]

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(Signature and Date)

106 GENERAL COMBAT LEADERSHIP FUNDAMENTALS

References:
[a] Marine Corps Common Skills Handbook, Book 1A (PCN 50600000900)
[b] USMC, Marine Corps University Sergeant's Course (SCRS0810)

106.1 **Identify and explain the nine common elements found in a combat environment. [ref. a, p. 1-8-3]**

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(Signature and Date)

.2 **Explain the characteristics that enable Marines and Sailors to overcome fear. [ref. a, p. 1-8-7]**

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(Signature and Date)

.3 **Discuss and explain the six troop-leading steps (BAMCIS). [ref. b, pp. 0810H-2 thru 0810H-5]**

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(Signature and Date)

.4 **Explain and interpret the six articles of the Code of Conduct. [ref. a, pp. 1-10-1, 1-10-2]**

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(Signature and Date)

.5 **Discuss the rights of a prisoner of war. [ref. a, pp. 1-10-3 thru 1-10-6]**

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(Signature and Date)

.6 **Discuss the obligations of a prisoner of war. [ref. a, p. 1-10-7]**

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(Signature and Date)

107 FIRST AID AND FIELD SANITATION FUNDAMENTALS

References:
[a] NAVEDTRA 14295, Hospital Corpsman
[b] Pre-Hospital Trauma Life Support Chapter 5 (PG113)
[c] Marine Corps Common Skills Handbook, Book 1B (PCN 50600000900

107.1 Discuss the nine general first aid rules. [ref. a, p. 4-1]

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(Signature and Date)

.2 Discuss the protocols for tactical and non-tactical triage. [ref. a, p. 4-2]

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(Signature and Date)

.3 Explain the steps in performing a primary survey. [ref. a, p. 4-4]

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(Signature and Date)

.4 Identify the signs, symptoms, and general treatment procedures for shock. [ref. a, pp. 4-22 thru 4-25]

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(Signature and Date)

.5 Discuss how to control hemorrhage by use of the following: [ref. a, pp. 4-31 thru 4-34]

a. Pressure dressing
b. Pressure points
c. Tourniquet

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(Signature and Date)

.6 Discuss how to identify and treat the following wounds: [ref. a, pp. 4-37 thru 4-39]

a. Head
b. Facial
c. Chest
d. Abdominal

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(Signature and Date)

107 FIRST AID AND FIELD SANITATION FUNDAMENTALS (CONT'D)

107.7 Discuss the difference between open and closed fractures. [ref. a, p. 4-46]

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(Signature and Date)

.8 Discuss the general guidelines for the identification and treatment of the following fractures: [ref. a, pp. 4-46 thru 4-50]

a. Forearm
b. Upper arm
c. Thigh
d. Lower leg
e. Clavicle
f. Rib

_____
(Signature and Date)

.9 Identify the different degrees of thermal burns and discuss the treatment for each. [ref. a, pp. 4-57, 4-58]

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(Signature and Date)

.10 Explain how to prevent, identify symptoms of, and treat the following: [ref. a, pp 4-60 thru 4-65]

a. Heat cramps
b. Heat exhaustion
c. Heat stroke
d. Hypothermia
e. Immersion foot
f. Frostbite

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(Signature and Date)

.11 Discuss how to purify water under field conditions. [ref. b, pp. 1-17-27 thru 1-17-29]

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(Signature and Date)

.12 Discuss how to construct a cat hole/straddle trench. [ref. b, pp. 1-17-30, 1-17-31]

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(Signature and Date)

107 FIRST AID AND FIELD SANITATION FUNDAMENTALS (CONT'D)

107.13 Explain the following methods for carrying a casualty: [ref. b, pp. 1-21-33 thru 1-21-41]

a. Fireman's carry
b. One-man support carry
c. One-man arms carry
d. Saddleback carry
e. Pack strap carry
f. Pistol-belt carry

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(Signature and Date)

.14 Discuss how to improvise a litter to carry a casualty. [ref. b, pp. 1-21-41 thru 1-21-43]

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(Signature and Date)

108 SECURITY FUNDAMENTALS

References:
[a] Marine Corps Common Skills Handbook, Book 1A (PCN 50600000900)
[b] SECNAVINST 5510.36, DON Information Security Program Regulation

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108.1 Discuss the duties of the interior guard. [ref. a, p. 1-9-1]

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(Signature and Date)

.2 Discuss and provide explanation of the eleven general orders. [ref. a, pp. 1-9-3, 1-9-4]

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(Signature and Date)

.3 Discuss the interior guard chain of command. [ref. a, p. 1-9-9]

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(Signature and Date)

.4 Define deadly force and when it may be used. [ref. a, pp. 1-9-11, 1-9-12]

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(Signature and Date)

.5 Discuss and explain the characteristics of the following: [ref. a, p. 1-9-13]

a. Terrorism
b. Perspectives of terrorism
c. Long range goals of terrorism
d. Short range goals of terrorism
e. What motivates terrorists
f. Terrorist operations

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(Signature and Date)

.6 Define the threat condition (THREATCON) system. [ref. a, p. 1-9-14]

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(Signature and Date)

108.7 Explain the four basic THREATCONs: [ref. a, p. 1-9-15]

a. Alpha
b. Bravo
c. Charlie
d. Delta

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(Signature and Date)

.8 Explain the steps in reacting to a terrorist threat/attack. [ref. a, p. 1-9-15]

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(Signature and Date)

.9 Describe the ways to protect yourself from terrorist attacks. [ref. a, p. 1-9-17]

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(Signature and Date)

.10 Discuss the following terms: [ref. b, app. A, pp. A-1 thru A-8]

a. Access
b. Classification
c. Compromise
d. Information

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(Signature and Date)

.11 Identify the three levels of security classifications. [ref. b, art. 4-2]

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(Signature and Date)

.12 Discuss what should be done upon finding unsecured classified material. [ref. a, p. 1-9-19]

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(Signature and Date)

.13 Describe methods that foreign agents use in collecting information. [ref. a, p. 1-9-19]

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(Signature and Date)

109 FIELD COMMUNICATION FUNDAMENTALS

References:
[a] TM 11-5820-890-10-1, SINCGARS Radio Operator's Manual (PCN 35159745100)
[b] Marine Corps Common Skills Handbook, Book 1B (PCN 50600000900)

109.1 Discuss the two modes of operation for the Single Channel Ground and Airborne Radio System (SINCGARS) radio. [ref. a, p. 1-15]

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(Signature and Date)

.2 Discuss the maximum transmission ranges for each of the following settings: [ref. a, p. 1-6]

a. LO (low power)
b. M (medium power)
c. HI (high power)
d. PA (power amplifier)

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(Signature and Date)

.3 Explain the components and assembly process of the following SINCGARS radio configurations: [ref. a, pp. 2-16 thru 2-29]

a. Manpack
b. Vehicle radio component

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(Signature and Date)

.4 Explain the procedures for loading single channel frequencies. [ref. a, pp. 2-33, 2-34]

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(Signature and Date)

.5 Discuss the purpose of the following batteries: [ref. a, p. C-1]

a. BA 5372
b. BA 5590
c. BA 590

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(Signature and Date)

109.6 Discuss the phonetic alphabet. [ref. b, p. 1-19-14]

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(Signature and Date)

.7 Discuss the procedures to perform operator's level maintenance on the AN/PRC 119. [ref. b, pp. 1-19-16, 1-19-17]

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(Signature and Date)

110 WEAPONS FUNDAMENTALS

References:
[a] USMC, Marine Corps University Sergeant's Course 1006
[b] TM05538D/10012B-12/1, USMC Operator's Manual with Components List (Rifle, 5.56 MM, M16A2 W/E; Rifle, 5.56 MM, M16A4 W/E; Carbine, 5.56 MM, M4 W/E; Carbine 5.56 MM, M4A1 W/E) (PCN 18405538000)
[c] USMC, Marine Corps University Sergeant's Course 1001
[d] USMC, Marine Corps University Sergeant's Course 1002
[e] USMC, Marine Corps University Sergeant's Course 1003
[f] USMC, Marine Corps University Sergeant's Course 1004
[g] USMC, Marine Corps University Sergeant's Course 1005
[h] Marine Corps Common Skills Handbook, Book 1B (PCN 50600000900)

110.1 Discuss the following characteristics of the M9 service pistol: [ref. a]

a. Description and technical data [p. 1006H-2]
b. Four weapon safety rules [p. 1006H-1]
c. Condition codes [p. 1006H-2]
d. Load and unload procedures [p. 1006H-3]
e. Immediate and remedial action [p. 1006H-4]

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(Signature and Date)

.2 Discuss the following characteristics of the M16A4 service rifle: [ref. b]

a. Description and technical data [ref. b, ch. 1, sec. 2, pp. 1-3 thru 1-5]
b. Four weapon safety rules [ref. h, p. 1-11-1]
c. Condition codes [ref. h, p. 1-11-1]
d. Load and unload procedures [ref. b, ch. 2, sec. 3, p. 2-32]
e. Immediate and remedial action [ref. b, ch. 2, sec. 3, pp. 2-28 thru 2-31]

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(Signature and Date)

.3 Discuss the following characteristics of the M16M4 service rifle: [ref. b]

a. Description and technical data [ref. b, ch. 1, sec. 2, pp. 1-3 thru 1-5]
b. Four weapon safety rules [ref. h, p. 1-11-1]
c. Condition codes [ref. h, p. 1-11-1]
d. Load and unload procedures [ref. b, ch. 2, sec. 3, p. 2-32]
e. Immediate and remedial action [ref. b, ch. 2, sec. 3, pp. 2-28 thru 2-31]

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(Signature and Date)

110 WEAPONS FUNDAMENTALS (CONT'D)

110.4 Discuss the following characteristics of the M4 Super 90(M1014) Shotgun: [ref. c]

a. Description and technical data [ref. c, pp 1-1, 1-13 thru 1-14]
b. Four weapon safety rules [ref. h, p. 1-11-1]
c. Condition codes [ref. h, p. 1-11-1]
d. Load and unload procedures [ref. c, pp 2-37 thru 2-42]
e. Immediate and remedial action [ref. c, pp –67 thru 2-68]

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(Signature and Date)

.5 Discuss the following characteristics of the M67 Grenade: [ref. d]

a. Description and technical data [ref. d, pp 1-2, 1-3, 1-9]

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(Signature and Date)

.6 Discuss the following characteristics of the M203 grenade launcher: [ref. e]

a. Description and technical data [pp. 1001H-13 thru 1001H-16]
b. Four weapon safety rules [p. 1001H-1]
c. Condition codes [p. 1001H-2]
d. Load and unload procedures [p. 1001H-3]
e. Immediate and remedial action[p. 1001H-4]

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(Signature and Date)

.7 Discuss the following characteristics of the M249 squad automatic weapon: [ref. f]

a. Description and technical data [app. B]
b. Four weapon safety rules [p. 1002-H-2]
c. Condition codes [p. 1002-H-2]
d. Load and unload procedures [p. 1002-H-3]
e. Immediate and remedial action [p. 1002-H-4]

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(Signature and Date)

110 WEAPONS FUNDAMENTALS (CONT'D)

110.8 Discuss the following characteristics of the M240G machine gun: [ref. g]

a. Description and technical data [app. B]
b. Four weapon safety rules [p. 1003-H-2]
c. Condition codes [p. 1003-H-2]
d. Load and unload procedures [p. 1003-H-2, 1003-H-3]
e. Immediate and remedial action [p. 1003-H-3 thru 1003-H-5]

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(Signature and Date)

.9 Discuss the following characteristics of the M2 50 CAL machine gun: [ref. h]

a. Description and technical data [app. B]
b. Four weapon safety rules [p. 1004-H-2]
c. Condition codes [p. 1004-H-2]
d. Load and unload procedures [p. 1004-H-2, 1004-H-3]
e. Immediate and remedial action [p. 1004-H-3 thru 1004-H-5]

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(Signature and Date)

.10 Discuss the following characteristics of the MK19 machine gun: [ref. i]

a. Description and technical data [app. B]
b. Four weapon safety rules [p. 1005-H-1]
c. Condition codes [p. 1005-H-2]
d. Load and unload procedures [p. 1005-H-2, 1005-H-3]
e. Immediate and remedial action [p. 1005-H-3, 1005-H-4]

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(Signature and Date)

.11 Discuss the following characteristics of the Rifle Combat Optic(RCO): [ref. j]

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(Signature and Date)

111 TACTICAL MEASURES FUNDAMENTALS

References:
[a] Marine Corps Common Skills Handbook, Book 1B (PCN 50600000900)
[b] USMC, Marine Corps University Sergeant's Course (SCRS0808)

111.1 Explain unaided day and night observation techniques. [ref. a, pp. 1-13-1 thru 1-13-3]

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(Signature and Date)

.2 Define and discuss the intelligence information report (SALUTE). [ref. a, p. 1-13-11]

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(Signature and Date)

.3 Define and discuss the five paragraphs of the operations order (SMEAC). [ref. a, p. 1-13-17]

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(Signature and Date)

.4 Discuss the following hand and arm signals: [ref. a, pp. 1-14-2 thru 1-14-6]

a. Column formation
b. Echelon left/right
c. Skirmishers left/right
d. Wedge formation
e. Fire team
f. Squad
g. Platoon
h. Close up
i. Open up/extended
j. Halt/stop
k. Dismount/take cover
l. Hasty ambush left/right

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(Signature and Date)

111 TACTICAL MEASURES FUNDAMENTALS (CONT'D)

111.5 Define and discuss the acronym SAFE when constructing a fighting position. [ref. a, p. 1-15-1]

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(Signature and Date)

.6 Discuss the characteristics of the following fighting positions: [ref. a, pp. 1-15-2, 1-15-3]

a. Individual
b. Two-man

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(Signature and Date)

.7 Discuss the advantages and disadvantages of a two-man fighting hole. [ref. a, p. 1-15-3]

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(Signature and Date)

.8 Maintain and ensure serviceability of individual combat equipment (782 gear) used for tactical operations. [ref. a, pp. 1-17-9 thru 1-17-15]

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(Signature and Date)

.9 Define the Armor Protection Level system. [ref. c, p. 1-2]

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(Signature and Date)

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.10 Identify equipment worn for the following Armor Protection Levels: [ref. c, p. 1-2]

a. Level 0
b. Level 1
c. Level 2
d. Level 3

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(Signature and Date)

.11 Discuss camouflage, cover, and concealment: [ref. a, p. 1-17-17]

a. Camouflage
b. Cover
c. Concealment

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(Signature and Date)

.12 Describe the following individual movements: [ref. a, pp. 1-17-33 thru 1-17-40]

a. High crawl
b. Low crawl
c. Back crawl
d. Rush
e. Night walk

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(Signature and Date)

.13 Discuss the following CASEVAC categories of precedence and the criteria used to determine their assignment: [ref. b, p. 0808H1]

a. Priority 1
b. Priority 1A
c. Priority 2
d. Priority 3
e. Priority 4

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(Signature and Date)

.14 Discuss the criteria for selection of a helicopter landing zone. [ref. b, pp. 0808H2, 0808H3]

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(Signature and Date)

.15 Discuss the procedures for requesting a CASEVAC. [ref. b, pp. 0808H3 thru 0808H5]

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(Signature and Date)

112 MARINE CORPS OPERATIONS FUNDAMENTALS

References:
[a] Headquarters Marine Corps, Department of Aviation Website (http://www.hqmc.usmc.mil/)
[b] US Navy Ships Website (http://www.fas.org/man/dod-101/sys/ship/)
[c] Joint Publication 3-07, Joint Doctrine for Military Operations Other Than War
[d] MCWP 3-35.3, Military Operations on Urbanized Terrain (PCN 14300003500)
[e] MCCP 1, Operation Maneuver From the Sea (PCN 14500000100)

112.1 Discuss the primary function and mission of the following Marine Corps aviation platforms: [ref. a]

a. AH-1W Cobra
b. CH-46E Sea Knight
c. CH-53D Sea Stallion
d. CH-53E Super Sea Stallion
e. UH-1N Huey
f. MV-22B Osprey
g. EA-6B Prowler
h. AV-8B Harrier II
i. KC130F/R/T Hercules
j. F-18A/B/C Hornet
k. F-18D Hornet

_____
(Signature and Date)

.2 Discuss the primary mission of each of the following classes of ships used to support the Marine Corps mission: [ref. b]

a. LHA
b. LHD
c. LPD
d. LSD
e. LCAC
f. T-AH (sealift)
g. T-AK (sealift)

_____
(Signature and Date)

.3 Discuss the difference between War and Military Operations Other Than War (MOOTW). [ref. c, pp. I-1, I-2]

_____
(Signature and Date)

112 MARINE CORPS OPERATIONS FUNDAMENTALS (CONT'D)

112.4 Explain the following types of MOOTW and give examples of each: [ref. c, pp. III-1 thru III-15]

a. Arms control
b. Combating terrorism
c. Enforcement of sanctions/maritime intercept operations
d. Enforcing exclusion zones
e. Ensuring freedom of navigation and overflight
f. Humanitarian assistance
g. Military support to civil authorities
h. Nation assistance/support to counterinsurgency
i. Noncombatant evacuation operations
j. Peace operations
k. Protection of shipping
l. Recovery operations
m. Show of force operations
n. Strikes and raids

_____
(Signature and Date)

.5 Define Military Operations on Urbanized Terrain (MOUT) and discuss the Marine Corps' role in urban warfare. [ref. d, pp. 1-1, 1-2]

_____
(Signature and Date)

.6 Discuss the following examples of MOUT: [ref. d, pp. 1-9 thru 1-12]

a. Stalingrad (1942-1943)
b. Berlin (1945)
c. Seoul (1950)
d. Quang Tri I and II (1972)

_____
(Signature and Date)

.7 Discuss the noncombatant's impact on urban warfare. [ref. d, p. 6-1]

_____
(Signature and Date)

.8 Discuss the principles of the Operational Maneuver From The Sea (OMFTS). [ref. e, p. 11]

_____
(Signature and Date)

113 CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR (CBRN) DEFENSE FUNDAMENTALS

References:
[a] Marine Corps Common Skills Handbook, Book 1B (PCN 50600000900)
[b] MCRP 3-37A, NBC Field Handbook (PCN 14400004300)
[c] NAVEDTRA 14295, Hospital Corpsman

113.1 **Explain the shape, colors, and purposes of the standard North Atlantic Treaty Organization (NATO) Nuclear, Biological, and Chemical (CBRN) contamination markers and the information contained on them. [ref. a, pp. 1-20-1 thru 1-20-3]**

_____
(Signature and Date)

.2 **Discuss the purpose of the M-40 field protective mask. [ref. a, p. 1-20-5]**

_____
(Signature and Date)

.3 **Identify the following CBRN alarms: [ref. a, pp. 1-20-19, 1-20-20]**

a. Vocal
b. Visual
c. Percussion

_____
(Signature and Date)

.4 **Discuss the proper way to don and clear a gas mask. [ref. a, pp. 1-20-20 thru 1-20-24]**

_____
(Signature and Date)

.5 **Explain Mission Oriented Protective Posture (MOPP) levels. [ref. a, p. 1-20-27]**

_____
(Signature and Date)

.6 **Explain the uses of M9 and M8 paper. [ref. a, pp. 1-20-39, 1-20-40]**

_____
(Signature and Date)

113.7 Discuss the three levels of decontamination. [ref. b, pp. 3-34, 3-35]

_____
(Signature and Date)

.8 Discuss the immediate actions required for a nuclear attack without warning. [ref. a,pp. 1-20-63, 1-20-65]

_____
(Signature and Date)

.9 Discuss the immediate actions required for a chemical or biological attack without warning. [ref. a, pp. 1-20-67 thru 1-20-71]

_____
(Signature and Date)

.10 Define and discuss the types, symptoms, and treatment for the following chemical agents: [ref. c, pp. 8-5 thru 8-10]

a. Nerve
b. Blister
c. Blood
d. Choking
e. Riot control/harassing
f. Incapacitating

_____
(Signature and Date)

114 UNITED STATES MARINE CORPS DRILL AND CEREMONIES FUNDAMENTALS

References:
[a] USMC, Marine Corps University Sergeant's Course 0503
[b] Marine Corps Drill and Ceremonies Manual (PCN10001337900)
[c] USMC, Marine Corps University Career Course 0401

114.1 Explain the five purposes of close order drill. [ref. a, p. 0503H-2]

_____
(Signature and Date)

.2 Discuss the meaning of the following drill terms: [ref. a, pp. 0503H-2, 0503H-3]

a. Element
b. Formation
c. Line
d. Rank
e. Column
f. File
g. Flank
h. Normal interval
i. Close interval
j. Alignment
k. Guide
l. Center
m. Pace
n. Step (half, back, right-left, quick and double time)
o. Cadence (slow time, quick time and double time)

_____
(Signature and Date)

.3 Discuss the four characteristics of command voice. [ref. a, p. 0503H-4]

_____
(Signature and Date)

114 UNITED STATES MARINE CORPS DRILL AND CEREMONIES FUNDAMENTALS (CONT'D)

114.4 Discuss the two types of drill commands: [ref. a, p. 0503H-4]

a. Preparatory command
b. Command of execution

_____
(Signature and Date)

.5 Discuss the positions of individuals in the following color guards: [ref. b, p. 12-1]

a. Marine Corps color guard
b. Navy-Marine Corps color guard
c. Joint Armed Forces color guard

_____
(Signature and Date)

.6 Discuss the following recognized Marine Corps traditional events: [ref. c, pp. 0401H-1 thru 0401H-4]

a. Wet downs
b. Hail and farewell
c. Promotions and reenlistments
d. Dining-in
e. Marine Corps birthday
f. Relief and Appointment

_____
(Signature and Date)

115 LAND NAVIGATION FUNDAMENTALS

115

References:
[a] USMC, Marine Corps University Sergeants' Course 1201

115.1 Explain the following components of a map: [pp. 1201H-2, 1201H-3]

a. Sheet name/number
b. Scale
c. Elevation guide
d. Declination diagram
e. Bar scales
f. Legend

_____
(Signature and Date)

.2 Explain the following as they apply to map reading: [p. 1201H-3]

a. Grid lines
b. Grid squares
c. Basic map reading rule
d. Grid square identification

_____
(Signature and Date)

.3 The following grid coordinates will locate a point on a map within how many meters: [pp. 1201H-3, 1201H-4]

a. A four-digit
b. A six-digit
c. An eight-digit

_____
(Signature and Date)

.4 Explain the difference between true north, magnetic north, and grid north. [p. 1201H-20]

_____
(Signature and Date)

115 LAND NAVIGATION FUNDAMENTALS (CONT'D)

115.5 Identify the following type of terrain features found on a map: [pp. 1201H-9 thru 1201H-14]

a. Hill
b. Ridge
c. Saddle
d. Finger/spur
e. Draw
f. Depression

_____
(Signature and Date)

.6 Identify and explain the following as they relate to the lensatic compass: [pp. 1201H-23, 1201H-24]

a. Cover
b. Base
c. Rear sight

_____
(Signature and Date)

.7 Explain how to convert a magnetic azimuth to a grid azimuth. [pp. 1201H-26, 1201H-27]

_____
(Signature and Date)

.8 Discuss the technique used to orient a map using the following methods: [pp. 1201H-32, 1201H-33]

a. Compass
b. Terrain association

_____
(Signature and Date)

115.9 Discuss the technique for determining your position using the following methods: [pp. 1201H-33, 1201H-34]

a. Location by inspection
b. Location by one-point - resection
c. Location by two-point - resection

_____
(Signature and Date)

129 LOGISTIC COMBAT ELEMENT (LCE), LOGISTIC COMBAT ELEMENT (LCE) FUNDAMENTALS

References:
[a] MCRP 5-12D, Organization of Marine Corps Forces
[b] MCWP 4-1, Logistic Operations
[c] Marine Corps Bulletin 5400ZSEP 2005
[d] MARADMIN 576/06 Logistics Combat Element Reorganization Update and POA&M

129.1 Define Logistics Combat Element (LCE).

_____
(Signature and Date)

.2 Define Combat Service Support (CSS):

_____
(Signature and Date)

.3 Define the following terms:

a. LTI
b. TAM
c. T/E
d. T/O

_____
(Signature and Date)

.4 Define logistics.

_____
(Signature and Date)

.5 Discuss the three levels of logistic support:

a. Strategic
b. Operational
c. Tactical

_____
(Signature and Date)

.6 State the six functional areas of tactical logistics.

_____
(Signature and Date)

129 LOGISTIC COMBAT ELEMENT (LCE), LOGISTIC COMBAT ELEMENT (LCE) FUNDAMENTALS (CONT'D)

129.7 Discuss each of the seven principles of logistics support:

a. Responsiveness
b. Simplicity
c. Flexibility
d. Economy
f. Attainability
e. Sustainability
g. Survivability

_____
(Signature and Date)

.8 Define War Reserve Material (WRM)

_____
(Signature and Date)

.9 State the number of days logistics capability for some classes of supply that the following types of Marine Air/Ground Task Forces (MAGTF) are to deploy with in order to sustain themselves:

a. MEU
b. MEB
c. MEF

_____
(Signature and Date)

.10 Explain the concept of the Maritime Prepositioning Force (MPF)

_____
(Signature and Date)

130 LOGISTIC COMBAT ELEMENT (LCE), MARINE LOGISTICS GROUP (MLG) FUNDAMENTALS

References:
[a] MCRP 5-12 Organization of Marine Corps Forces
[b] MARADMIN 576/05 Logistics Combat Element Reorganization Update and POA&M

130.1 Define a Marine Logistics Group and the significant attributes

_____
(Signature and Date)

.2 Define the following terms:

a. Direct Support
b. General Support
c. Task Organization

_____
(Signature and Date)

.3 Define the mission of the MLG Command Element (CE)

_____
(Signature and Date)

.4 Discuss the six tasks of the MLG CE

_____
(Signature and Date)

131 LOGISTIC COMBAT ELEMENT (LCE), COMBAT LOGISTICS REGIMENT (CLR) FUNDAMENTALS

References:
[a] MCWP 4-11.8, Services in an Expeditionary Environment
[b]Marine Corps Bulletin 5400 020011ZSEP 2005
[c] MARADMIN 576/05 Logistics Combat Element (LCE) Reorganization Update and POA&M

131.1 Define the mission of MLG Combat Logistics Regiment (Forward)

_____
(Signature and Date)

.2 Define the eight tasks of CLR (FWD)

_____
(Signature and Date)

.3 Define the mission of the CLR (FWD) Headquarters Company

_____
(Signature and Date)

.4 Define the mission of the CLR (FWD) Communications Company

_____
(Signature and Date)

.5 Define the mission of the CLR (FWD) Military Police Company

_____
(Signature and Date)

.6 Define the mission of the CLR (FWD) Service Company

_____
(Signature and Date)

.7 Define the mission of the CLR (FWD) Landing Support Company

_____
(Signature and Date)

.8 Define the mission of the CLR (FWD) Food Services Company

_____
(Signature and Date)

131 LOGISTIC COMBAT ELEMENT (LCE), COMBAT LOGISTICS REGIMENT (CLR) FUNDAMENTAL (CONT'D)

131.9 Define the mission of the MLG General Support (GS) CLR

_____
(Signature and Date)

.10 Define the mission and organization of MLG Direct Support (DS) CLR

_____
(Signature and Date)

.11 Discuss the four tasks of MLG CLRs

_____
(Signature and Date)

.12 Define the mission of CLR H&S Company

_____
(Signature and Date)

132 LOGISTIC COMBAT ELEMENT (LCE), COMBAT LOGISTICS BATTALION (CLB) FUNDAMENTALS

References:
[a] Marine Corps Bulletin 5400 020011ZSEP 2005
[b] MARADMIN 576/05 Logistics Combat Element (LCE) Reorganization Update and POA&M

132.1 Define the mission of the of the Combat Logistics Battalion.

_____
(Signature and Date)

.2 Define the ten tasks of the CLB companies.

_____
(Signature and Date)

133 LOGISTIC COMBAT ELEMENT (LCE), MAINTENANCE BATTALION

References:
[a] MCRP 5-12 Organization of Marine Corps Forces
[b]MCWP 4-11.4, Maintenance Operations (PCN 14300001700)
[c] Marine Corps Bulletin 5400 020011ZSEP 2005
[b] MARADMIN 576/05 Logistics Combat Element (LCE) Reorganization Update and POA&M

133.1 Define the mission and organization of the Maintenance Battalion.

_____
(Signature and Date)

.2 Discuss the eight tasks of the Maintenance Battalion.

_____
(Signature and Date)

.3 Define the mission and organization of Maintenance Battalion H&S Company.

_____
(Signature and Date)

.4 Define the mission and organization of Maintenance Battalion Ordnance Company.

_____
(Signature and Date)

.5 Define the mission and organization of Maintenance Battalion Engineer Maintenance Company.

_____
(Signature and Date)

.6 Define the mission and organization of Maintenance Battalion Electronics Maintenance Company.

_____
(Signature and Date)

.7 Define the mission and organization of Maintenance Battalion Motor Transport Maintenance Company.

_____
(Signature and Date)

133 LOGISTIC COMBAT ELEMENT (LCE), MAINTENANCE BATTALION (CONT'D)

133.8 Define the mission and organization of Maintenance Battalion General Support Maintenance Company.

_____
(Signature and Date)

.9 Discuss each echelon/level of ground equipment maintenance:

a. Organizational maintenance
b. Intermediate maintenance
c. Depot maintenance

_____
(Signature and Date)

.10 Define the following maintenance terminologies:

a. Overhaul
b. Preventive maintenance
c. Rebuild
d. Repair
e. Unserviceable

_____
(Signature and Date)

134 LOGISTIC COMBAT ELEMENT (LCE), SUPPLY BATTALION

References:
[a] MCRP 5-12D Organization of Marine Corps Forces
[b] MCWP 4-1, Logistic Operations
[c] MCWP 4-11.1, Health Service Support Operations
[d] Marine Corps Bulletin 5400 020011ZSEP 2005
[e] MARADMIN 576/05 Logistics Combat Element (LCE) Reorganization Update and POA&M

134.1 Describe the mission and organization of the Supply Battalion.

_____
(Signature and Date)

.2 Discuss the 12 tasks of the Supply Battalion of the MLG.

_____
(Signature and Date)

.3 Name and define the 10 classes of supply.

_____
(Signature and Date)

.4 State the six functions of supply.

_____
(Signature and Date)

.5 Describe the mission and organization of the Supply Battalion H&S Company.

_____
(Signature and Date)

.6 Describe the mission and organization of the Supply Battalion Supply Company.

_____
(Signature and Date)

.7 Describe the mission and organization of the Supply Battalion Ammunition Company.

_____
(Signature and Date)

.8 Describe the mission and organization of the Supply Battalion Medical Logistics Company.

_____
(Signature and Date)

134 LOGISTIC COMBAT ELEMENT (LCE), SUPPLY BATTALION (CONT'D)

134.9 Define AMAL and ADAL.

_____
(Signature and Date)

.10 State the AMAL and ADAL descriptions.

_____
(Signature and Date)

135 LOGISTIC COMBAT ELEMENT (LCE), MEDICAL BATTALION

References:
[a] MCRP 5-12D Organization of Marine Corps Forces
[b] MCWP 4-11.1, Health Service Support Operations
[c] Marine Corps Bulletin 5400 020011ZSEP 2005
[d] MARADMIN 576/05 Logistics Combat Element (LCE) Reorganization Update and POA&M

135.1 Describe the mission and organization of the Medical Battalion

_____
(Signature and Date)

.2 Discuss the six tasks of the Medical Battalion

_____
(Signature and Date)

.3 Define the mission and organization of the Medical Battalion H&S Company

_____
(Signature and Date)

.4 Discuss the four tasks of the Medical Battalion H&S Company.

_____
(Signature and Date)

.5 Define the mission and organization of Medical Battalion Surgical Support Company

_____
(Signature and Date)

.6 Discuss the six tasks of the Surgical Support Company.

_____
(Signature and Date)

.7 Define the mission and organization of the Medical Battalion Shock-Trauma Platoon (STP)

_____
(Signature and Date)

135 LOGISTIC COMBAT ELEMENT (LCE), MEDICAL BATTALION (CONT'D)

135.8 Discuss four tasks of the Shock Trauma Platoon.

_____
(Signature and Date)

.9 Define the mission and organization of the Medical Battalion Forward Resuscitative Surgery System (FRSS).

_____
(Signature and Date)

135.10 Define the following terms:

BAS
BDC
CRTS
FMC
HSS
MAP
MTF
STP
TMIP

_____
(Signature and Date)

136 LOGISTIC COMBAT ELEMENT (LCE), ENGINEERING SUPPORT BATTALION (ESB)

References:
[a] MCRP 5-12D Organization of Marine Corps Forces
[b] MCWP 3-17, Engineering Operations
[c] Marine Corps Bulletin 5400 020011ZSEP 2005
[d] MARADMIN 576/05 Logistics Combat Element (LCE) Reorganization Update and POA&M

136.1 Define the mission and organization of the Engineering Support Battalion.

_____
(Signature and Date)

.2 Discuss the 15 tasks of the Engineering Support Battalion.

_____
(Signature and Date)

.3 Define the mission and organization of ESB H&S Company.

_____
(Signature and Date)

.4 Define the mission and organization of the ESB Engineer Support Company.

_____
(Signature and Date)

.5 Define the mission and organization of ESB Bridge Company.

_____
(Signature and Date)

.6 Define the mission and organization of ESB Bulk Fuel Company.

_____
(Signature and Date)

.7 Define the mission and organization of ESB Engineer Company.

_____
(Signature and Date)

.8 Define the mission and organization of the EOD Company.

_____
(Signature and Date)

137 LOGISTIC COMBAT ELEMENT (LCE), DENTAL BATTALION

References:
[a] MCRP 5-12D Organization of Marine Corps Forces
[b] MCWP 4-11.1, Health Service Support Operations
[c] Marine Corps Bulletin 5400 020011ZSEP 2005
[d] MARADMIN 576/05 Logistics Combat Element (LCE) Reorganization Update and POA&M

137.1 Define the mission and organization of the Dental Battalion.

_____
(Signature and Date)

.2 Discuss the four tasks of the Dental Battalion.

_____
(Signature and Date)

.3 Define the mission and organization of Dental Battalion H&S Company.

_____
(Signature and Date)

.4 Discuss two tasks of the Dental Battalion H&S Company.

_____
(Signature and Date)

.5 Define the mission and organization of the Dental Battalion Dental Company.

_____
(Signature and Date)

.6 Discuss two tasks of the Dental Battalion Dental Company.

_____
(Signature and Date)

300 INTRODUCTION TO WATCHSTATIONS

300.1 INTRODUCTION

The Watchstation section of your PQS is where you get a chance to demonstrate to your Qualifier that you can put the knowledge you have gained in the previous sections to use. It allows you to practice the tasks required for your watchstation and to handle abnormal conditions and emergencies. Before starting your assigned tasks, you must complete the prerequisites that pertain to the performance of that particular task. Satisfactory completion of all prerequisites is required prior to achievement of final watchstation qualification.

300.2 FORMAT

Each watchstation in this section contains:

A FINAL QUALIFICATION PAGE, which is used to obtain the required signatures for approval and recording of Final Qualification.

PREREQUISITES, which are items that must be certified completed before you can begin qualification for a particular watchstation. Prerequisites may include schools, watchstation qualifications from other PQS books, and fundamentals, systems, or watchstation qualifications from this book. Prior to signing off each prerequisite line item, the Qualifier must verify completion from existing records. Record the date of actual completion, not the sign-off date.

WATCHSTATION Performance, which is the practical factors portion of your qualification. The performance is broken down as follows:

Tasks (routine operating tasks that are performed frequently) Infrequent
Tasks
Abnormal Conditions
Emergencies
Training Watches

If there are multiple watchstations, a QUALIFICATION PROGRESS SUMMARY will appear at the end of the Standard.

300 INTRODUCTION TO WATCHSTATIONS (CONT'D)

300.3 OPERATING PROCEDURES

The PQS deliberately makes no attempt to specify the procedures to be used to complete a task or control or correct a casualty. The only proper sources of this information are the technical manuals, Engineering Operational Sequencing System (EOSS), Naval Air Training and Operating Procedures Standardization (NATOPS) or other policy-making documents prepared for a specific installation or a piece of equipment. Additionally, the level of accuracy required of a trainee may vary from school to school, ship to ship, and squadron to squadron based upon such factors as mission requirements. Thus, proficiency may be confirmed only through demonstrated performance at a level of competency sufficient to satisfy the Commanding Officer.

300.4 DISCUSSION ITEMS

Though actual performance of evolutions is always preferable to observation or discussion, some items listed in each watchstation may be too hazardous or time consuming to perform or simulate. Therefore, you may be required to discuss such items with your Qualifier.

300.5 NUMBERING

Each Final Qualification is assigned both a watchstation number and a NAVEDTRA Final Qualification number. The NAVEDTRA number is to be used for recording qualifications in service and training records.

300.6 HOW TO COMPLETE

After completing the required prerequisites applicable to a particular task, you may perform the task under the supervision of a qualified watchstander. If you satisfactorily perform the task and can explain each step, your Qualifier will sign you off for that task. After all line items have been completed, your Qualifier will verify Final Qualification by signing and dating the Final Qualification pages.

301 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST

NAME ----------RATE/RANK ----------

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors give away their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST (NAVEDTRA 43908-A).

RECOMMENDED ---------- ----------DATE ----------
Supervisor

RECOMMENDED ---------- ----------DATE ----------
Division Officer

RECOMMENDED ---------- ----------DATE_____
Department Head

QUALIFIED --- ----------DATE ----------
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY----------DATE ----------

301 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST

Estimated completion time: 12 months

301.1 PREREQUISITES:

For optimum training effectiveness, the following items should be completed prior to starting your assigned tasks, but shall be completed prior to final watchstation qualification.

301.1.1 FUNDAMENTALS FROM THIS PQS:

102 Marine Corps History, Rank Structure, and Courtesies

Completed ----------3% of Watchstation
(Qualifier and Date)

103 United States Marine Corps Mission and Organization

Completed ----------6% of Watchstation
(Qualifier and Date)

104 Administrative

Completed ----------3% of Watchstation
(Qualifier and Date)

105 Operational Risk Management and Occupational Safety

Completed ----------3% of Watchstation
(Qualifier and Date)

106 General Combat Leadership

Completed ----------3% of Watchstation
(Qualifier and Date)

107 First Aid and Field Sanitation

Completed ----------3% of Watchstation
(Qualifier and Date)

301 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST (CONT'D)

301.1.1 108 Security

Completed ---------- 3% of Watchstation
(Qualifier and Date)

109 Field Communication

Completed ---------- 3% of Watchstation
(Qualifier and Date)

110 Weapons

Completed ---------- 3% of Watchstation
(Qualifier and Date)

111 Tactical Measures

Completed ---------- 3% of Watchstation
(Qualifier and Date)

112 Marine Corps Operations

Completed ---------- 3% of Watchstation
(Qualifier and Date)

113 Chemical, Biological, Radiological and Nuclear(CBRN)

Completed ---------- 3% of Watchstation
(Qualifier and Date)

114 United States Marine Corps Drill and Ceremonies

Completed ---------- 3% of Watchstation
(Qualifier and Date)

115 Land Navigation

Completed ---------- 3% of Watchstation
(Qualifier and Date)

301 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST (CONT'D)

301.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. Satisfactorily perform this task.

Questions

301.2.1 Administrative tasks:

a. Draft an evaluation report

_____ A C F
(Signature and Date)

b. Draft a Standard Naval Letter

A C F

_____
(Signature and Date)

c. Draft a same page endorsement

A C F

_____
(Signature and Date)

A C F

d. Draft a new page endorsement

_____ A C F
(Signature and Date)

e. Draft a letterhead memorandum

_____
(Signature and Date)

301 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST (CONT'D)

301.2.2 First aid tasks:

Questions

a. Conduct a primary survey — A B F

_____
(Signature and Date)

b. Apply a pressure dressing — A B F

_____
(Signature and Date)

c. Control hemorrhage utilizing the pressure point method — A B F

_____
(Signature and Date)

d. Apply a tourniquet — A B F

_____
(Signature and Date)

e. Treat and dress a head wound — A B F

_____
(Signature and Date)

f. Treat and dress a facial wound — A B F

_____
(Signature and Date)

g. Treat and dress a chest wound — A B F

_____
(Signature and Date)

h. Treat and dress an abdominal wound — A B F

_____
(Signature and Date)

i. Splint an open fracture — A B F

_____
(Signature and Date)

301 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST (CONT'D)

		Questions A B F
301.2.2	k. Dress a thermal burn	
	_____ (Signature and Date)	
	l. Purify water under field conditions	A B F
	_____ (Signature and Date)	
	m. Conduct a fireman's carry	A B F
	_____ (Signature and Date)	
	n. Conduct a one-man support carry	A B F
	_____ (Signature and Date)	
	o. Conduct a one-man arms carry	A B F
	_____ (Signature and Date)	
	p. Conduct a saddleback carry	A B F
	_____ (Signature and Date)	
	q. Conduct a pack strap carry	A B F
	_____ (Signature and Date)	
	r. Conduct a pistol-belt carry	A B F
	_____ (Signature and Date)	
	s. Create an improvised litter to transport a casualty	A B F
	_____ (Signature and Date)	

301 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST (CONT'D)

Questions

301.2.3 Field communication tasks:

a. Assemble a SINCGARS radio in the man-pack configuration — A B F

_____
(Signature and Date)

b. Replace the battery in the SINCGARS radio — A B F

_____
(Signature and Date)

c. Install frequencies in the SINCGARS radio

_____
(Signature and Date)

d. Transmit and receive on a SINCGARS radio — A F

_____
(Signature and Date)

e. Conduct operator level maintenance on the SINCGARS radio — A B F

_____
(Signature and Date) .4

Weapons tasks:

a. Conduct a famfire with your Table of Organization (T/O) weapon — A B C E F

_____
(Signature and Date)

b. Fieldstrip, reassemble, and perform function check of the M9 — A B E F

_____
(Signature and Date)

c. Fieldstrip, reassemble, and perform function check of the M16A4 — A B E F

_____
(Signature and Date)

			Questions
301.2.4	d.	Fieldstrip, reassemble, and perform function check of the M249 squad automatic weapon	
		_____ (Signature and Date)	
	e.	Fieldstrip, reassemble, and perform function check of the M240G machine gun	A B E F A
		_____ (Signature and Date)	
	f.	Fieldstrip, reassemble, and perform function check of the M2 50 CAL machine gun	B E F A B
		_____ (Signature and Date)	
	g.	Fieldstrip, reassemble, and perform function check of the MK19 machine gun	E F A B E
		_____ (Signature and Date)	
.5 Tactical measures tasks:			F
	a.	Draft an intelligence information report (SALUTE)	A C F
		_____ (Signature and Date)	
	b.	Draft a five-paragraph Offensive Operations Order (SMEAC)	A C F
		_____ (Signature and Date)	
	c.	Demonstrate the hand-and-arm signal for a column	A D F
		_____ (Signature and Date)	
	d.	Demonstrate the hand-and-arm signal for an echelon left/right	A D F
		_____ (Signature and Date)	

301 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST (CONT'D)

Questions

301.2.5 e. Demonstrate the hand-and-arm signal for skirmishes left/right A D F

_____
(Signature and Date)

f. Demonstrate the hand-and-arm signal for a wedge formation A D F

_____
(Signature and Date)

g. Demonstrate the hand-and-arm signal for fire team A D F

_____
(Signature and Date)

h. Demonstrate the hand-and-arm signal for squad

_____
(Signature and Date)

A D F A

i. Demonstrate the hand-and-arm signal for platoon

_____
(Signature and Date)

D F

j. Demonstrate the hand-and-arm signal for close up

_____
(Signature and Date)

k. Demonstrate the hand-and-arm signal for open up/extended A D F

_____
(Signature and Date)

l. Demonstrate the hand-and-arm signal for halt/stop A D F

_____
(Signature and Date)

m. Demonstrate the hand-and-arm signal for dismount/take cover A D F

_____
(Signature and Date)

301 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST (CONT'D)

			Questions
301.2.5	n.	Demonstrate the hand-and-arm signal for a hasty ambush left/right	A D F
		_____ (Signature and Date)	
	o.	Inspect, assemble, and perform maintenance on individual combat equipment (782 gear) used for tactical operations	A F
		_____ (Signature and Date)	
	p.	Camouflage yourself and field equipment	A B F
		_____ (Signature and Date)	
	q.	Demonstrate the high crawl	A B F
		_____ (Signature and Date)	
	r.	Demonstrate the low crawl	A B F
		_____ (Signature and Date)	
	s.	Demonstrate the back crawl	A B F
		_____ (Signature and Date)	
	t.	Demonstrate the rush	A B F
		_____ (Signature and Date)	
	u.	Demonstrate the night walk	A B F
		_____ (Signature and Date)	
	v.	Demonstrate creeping	A B F
		_____ (Signature and Date)	

Questions

301.2.5 w. Cross a wall

_____
(Signature and Date)

x. Observe around a corner A B F

_____
(Signature and Date)

y. Cross a danger area A B F

_____
(Signature and Date)

z. Draft a CASEVAC request A B F

_____
(Signature and Date)

aa. Call in (via radio) a CASEVAC A C F

_____
(Signature and Date)

.6 Marine Corps operations tasks:

a. Identify, by visual recognition, an AH-1 Cobra

_____
(Signature and Date)

b. Identify, by visual recognition, a CH-46 Sea Knight F F

_____
(Signature and Date)

c. Identify, by visual recognition, a CH-53 Sea Stallion (or Super Stallion) F

_____
(Signature and Date)

d. Identify, by visual recognition, a UH-1 Huey F

_____
(Signature and Date)

301 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST (CONT'D)

		Questions
301.2.6	e. Identify, by visual recognition, an MV-22 Osprey	F
	_____ (Signature and Date)	
	f. Identify, by visual recognition, an EA-6 Prowler	F
	_____ (Signature and Date)	
	g. Identify, by visual recognition, an AV-8 Harrier II	F
	_____ (Signature and Date)	
	h. Identify, by visual recognition, a KC130 Hercules	F
	_____ (Signature and Date)	
	i. Identify, by visual recognition, an F-18 Hornet	F
	_____ (Signature and Date)	
	j. Identify, by visual recognition, an LHA	F
	_____ (Signature and Date)	
	k. Identify, by visual recognition, an LHD	F
	_____ (Signature and Date)	
	l. Identify, by visual recognition, an LPD	F
	_____ (Signature and Date)	
	m. Identify, by visual recognition, an LSD	F
	_____ (Signature and Date)	

Questions

301.2.6 n. Identify, by visual recognition, an LCAC

_____
(Signature and Date)

.7 Chemical, biological radiological and nuclear tasks:

a. Identify, by visual recognition, a T-AH (sealift) F

_____
(Signature and Date)

b. Identify, by visual recognition, a T-AK (sealift) F

_____
(Signature and Date)

c Identify, by visual recognition, the NATO NBC marker for chemical contamination F

_____ (Signature and Date)

d. Identify, by visual recognition, the NATO CBRN marker for chemical mines F

_____
(Signature and Date)

e. Identify, by visual recognition, the NATO CBRN marker for biological contamination F

_____ (Signature and Date)

f. Identify, by visual recognition, the NATO CBRN marker for nuclear contamination F

_____
(Signature and Date)

g. Don the gear required for each of the five basic Mission Oriented Protective Posture (MOPP) levels A B C D E F

_____
(Signature and Date)

301.2.7 h. Demonstrate MOPP exchange

_____
(Signature and Date)

..8 Land navigation tasks:

a. Utilizing a grid map and protractor, locate a specific location given an eight digit coordinate

_____
(Signature and Date)

b. Identify a hill on a grid map

_____
(Signature and Date)

c. Identify a ridge on a grid map

_____
(Signature and Date)

d. Identify a saddle on a grid map

_____
(Signature and Date)

e. Identify a finger/spur on a grid map

_____
(Signature and Date)

f. Identify a draw on a grid map

_____
(Signature and Date)

g. Identify a depression on a grid map

_____
(Signature and Date)

301 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST (CONT'D)

h. Utilize the lensatic compass to orient a grid map to the north F

_____
(Signature and Date)

301.2.7 i. Determine your position utilizing the location by inspection method

_____
(Signature and Date)

j. Determine your position utilizing the location by one point resection method

_____
(Signature and Date)

Determine your position utilizing the location by two point resection method

_____

(Signature and Date)

l. Measure the straight line and curved distance between two identified locations on a grid map A B F

_____
(Signature and Date)
COMPLETED .2 AREA COMPRISES 55% OF WATCHSTATION.

301.3 INFREQUENT TASKS – None to be discussed.

301.4 ABNORMAL CONDITIONS – None to be discussed.

301.5 EMERGENCIES – None to be discussed.

301.6 WATCHES – None.

301.7 EXAMINATIONS

301.7.1 EXAMINATIONS Pass a written examination

_____
(Signature and Date)

..2 EXAMINATIONS Pass an oral examination board

_____
(Signature and Date)

302 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST GROUND COMBAT ELEMENT (GCE)

NAME ---------- RATE/RANK ----------

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST GROUND COMBAT ELEMENT (GCE) (NAVEDTRA 43908-A).

RECOMMENDED ---------- DATE
Supervisor

RECOMMENDED ---------- DATE
Division Officer

RECOMMENDED ---------- DATE
Department Head

QUALIFIED ---------- DATE
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY ---------- DATE

302 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST GROUND COMBAT ELEMENT (GCE)

Estimated completion time: 6 months

NOTE: THIS WATCHSTATION IS TO BE COMPLETED BY MEMBERS OF THE FMF GCE.

302.1 PREREQUISITES

For optimum training effectiveness, the following items should be completed prior to starting your assigned tasks, but shall be completed prior to final watchstation qualification.

302.1.1 WATCHSTATIONS FROM THIS PQS:

301 Fleet Marine Force (FMF) Enlisted Warfare Specialist

Completed ----------
(Qualifier and Date)

.2 FUNDAMENTALS FROM THIS PQS:

116 Ground Combat Element (GCE), Infantry

Completed ----------12% of Watchstation
(Qualifier and Date)

117 Ground Combat Element (GCE), Marine Artillery

Completed ----------12% of Watchstation
(Qualifier and Date)

118 Ground Combat Element (GCE), Tank Battalion

Completed ----------12% of Watchstation
(Qualifier and Date)

119 Ground Combat Element (GCE), Assault Amphibian Battalion

Completed ----------12% of Watchstation
(Qualifier and Date)

120 Ground Combat Element (GCE), Combat Engineer Battalion

Completed ----------12% of Watchstation
(Qualifier and Date)

302 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST GROUND COMBAT ELEMENT (GCE) (CONT'D)

302.1.2 121 Ground Combat Element (GCE), Light Armored Reconnaissance (LAR) Battalion

Completed ----------12% of Watchstation
(Qualifier and Date)

122 Ground Combat Element (GCE), Amphibious Reconnaissance Battalion

Completed ----------12% of Watchstation
(Qualifier and Date)

302.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. Satisfactorily perform this task.

		Questions A B C D E F
302.2.1	Participate as a member of a patrol	

(Signature and Date)

..2	Identify, by visual recognition, an M198	F

(Signature and Date)

..3	Identify, by visual recognition, an M1A1	F

(Signature and Date)

..4	Identify, by visual recognition, an M88A1E1	F

(Signature and Date)

..5	Identify, by visual recognition, an M60A1	F

(Signature and Date)

302 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST GROUND COMBAT ELEMENT (GCE) (CONT'D)

302.2.6 Identify, by visual recognition, a TOW missile weapons system F

(Signature and Date)

.7 Identify, by visual recognition, an AAV F

(Signature and Date)

.8 Identify, by visual recognition, an LAV F

(Signature and Date)

. 9 State organizational structure of Marine Division F

(Signature and Date)

. 10 State organizational structure of Marine Division HQ BN F

(Signature and Date)

. 11 State organizational structure of Infantry Regiment F

(Signature and Date)

. 12 State organizational structure of HQ Co F

(Signature and Date)

. 13 State organizational structure of HQ Co, Infantry BN F

(Signature and Date)

. 14 State organizational structure of Weapons Co, Infantry BN F

(Signature and Date)

. 15 State organizational structure of Rifle Co, Infantry BN F

(Signature and Date)

. 16 State organizational structure of your Combat Element F

(Signature and Date)

COMPLETED .2 AREA COMPRISES 16% OF WATCHSTATION.

302.3 INFREQUENT TASKS – None to be discussed.

302.4 ABNORMAL CONDITIONS – None to be discussed.

302.5 EMERGENCIES – None to be discussed.

302.6 WATCHES – None.

302.7 EXAMINATIONS

ORAL AND/OR WRITTEN EXAMINATIONS OF THE MATERIAL CONTAINED IN THIS SECTION WILL OCCUR IN CONJUNCTION WITH THE TESTING REQUIRED FOR THE FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST CORE ELEMENTS SECTION 301 FOR MEMBERS OF FMF GCE.

302.7.1 EXAMINATIONS Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS Pass an oral examination board

_____
(Signature and Date)

303 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST AIR COMBAT ELEMENT (ACE)

NAME ---------- RATE/RANK----------

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A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST AIR COMBAT ELEMENT (ACE) (NAVEDTRA 43908-A).

RECOMMENDED ---------- DATE
Supervisor

RECOMMENDED ---------- DATE
Division Officer

RECOMMENDED ---------- DATE
Department Head

QUALIFIED---------- DATE
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY---------- DATE

303 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST AIR COMBAT ELEMENT (ACE)

Estimated completion time: 6 months

NOTE: THIS WATCHSTATION IS TO BE COMPLETED BY MEMBERS OF THE FMF ACE.

303.1 PREREQUISITES

FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.

303.1.1 WATCHSTATIONS FROM THIS PQS:

301 Fleet Marine Force (FMF) Enlisted Warfare Specialist

Completed ----------
(Qualifier and Date)

.2 Fundamentals From This PQS:

123 Air Combat Element (ACE), Marine Corps Aviation

Completed ----------10% of Watchstation
(Qualifier and Date)

124 Air Combat Element (ACE), Marine Wing Headquarters Squadron (MWHS)

Completed ----------10% of Watchstation
(Qualifier and Date)

125 Air Combat Element (ACE), Marine Air Control Group (MACG)

Completed ----------10% of Watchstation
(Qualifier and Date)

126 Air Combat Element (ACE), Marine Aircraft Group (MAG)

Completed ----------10% of Watchstation
(Qualifier and Date)

127 Air Combat Element (ACE), Marine Wing Support Group (MWSG)

Completed ----------10% of Watchstation
(Qualifier and Date)

128 Air Combat Element (ACE), Marine Corps Aviation Safety

Completed ----------10% of Watchstation
(Qualifier and Date)

303 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST AIR COMBAT ELEMENT (ACE) (CONT'D)

303.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. Satisfactorily perform this task.

		Questions
303.2.1	Observe air traffic control operations at a facility	A B C D E F
	_____ (Signature and Date)	
..2	Participate in a FOD walkdown	A B C D E F
	_____ (Signature and Date)	
.3	Observe preflight of an aircraft	A B C D E F
	_____ (Signature and Date)	
.4	Observe aircraft startup with an APU	A B C D E F
	_____ (Signature and Date)	
.5	Observe and demonstrate hand signals of aircraft startup	A B C D E F
	_____ (Signature and Date)	
.6	Observe demonstrate hand	A B C D E F
	_____ (Signature and Date)	
..7	Observe and demonstrate hand signals of aircraft shutdown	A B C D E F
	_____ (Signature and Date)	

303 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST AIR COMBAT ELEMENT (ACE) (CONT'D)

		Questions
303.2.8	Observe and demonstrate hand signals of aircraft takeoff	A B C D E F
	(Signature and Date)	
.9	Observe demonstrate hand landing	A B C D E F
	(Signature and Date)	
.10	Observe fueling of an aircraft	A B C D E F
	(Signature and Date)	
.11	State organizational structure of your combat element	
	(Signature and Date)	

COMPLETED .2 AREA COMPRISES 40% OF WATCHSTATION.

303.3 INFREQUENT TASKS – None to be discussed.

303.4 ABNORMAL CONDITIONS – None to be discussed.

303.5 EMERGENCIES – None to be discussed.

303.6 WATCHES – None.

303.7 EXAMINATIONS

ORAL AND/OR WRITTEN EXAMINATIONS OF THE MATERIAL CONTAINED IN THIS SECTION WILL OCCUR IN CONJUNCTION WITH THE TESTING REQUIRED FOR THE FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST CORE ELEMENTS SECTION 301 FOR MEMBERS OF THE FMF ACE.

303.7.1 EXAMINATIONS — Pass a written examination

(Signature and Date)

.2 EXAMINATIONS — Pass an oral examination board

(Signature and Date)

304 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST COMBAT LOGISTIC ELEMENT (LCE)

NAME----------RATE/RANK----------

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST COMBAT LOGISTIC ELEMENT (LCE) (NAVEDTRA 43908-A).

RECOMMENDED---------- DATE
Supervisor

RECOMMENDED---------- DATE
Division Officer

RECOMMENDED---------- DATE
Department Head

QUALIFIED---------- DATE
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY---------- DATE

303 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST COMBAT LOGISTIC ELEMENT (LCE)

Estimated completion time: 6 months

NOTE: THIS WATCHSTATION IS TO BE COMPLETED BY MEMBERS OF THE FMF CSSE.

304.1 PREREQUISITES

For optimum training effectiveness, the following items should be completed prior to starting your assigned tasks, but should be completed prior to final watchstation qualification.

304.1.1 WATCHSTATIONS FROM THIS PQS:

301 Fleet Marine Force (FMF) Enlisted Warfare Specialist

Completed ----------
(Qualifier and Date)

.2 Fundamentals From This PQS:

129 Logistic Combat Element (LCE)

Completed ----------10% of Watchstation
(Qualifier and Date)

130 Logistic Combat Element (LCE) Marine Logistic Group (MLG)

Completed ----------10% of Watchstation
(Qualifier and Date)

131 Logistic Combat Element (LCE), Combat Logistic Regiment (CLR)

Completed ----------10% of Watchstation
(Qualifier and Date)

132 Logistic Combat Element (LCE) Combat Logistic Battalion/CLC

Completed ----------10% of Watchstation
(Qualifier and Date)

133 Logistic Combat Element (LCE) Maintenance Battalion

Completed ----------10% of Watchstation
(Qualifier and Date)

304 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST COMBAT LOGISTIC ELEMENT (LCE) (CONT'D)

304.1.1 134 Logistic Combat Element (LCE) Supply Battalion

Completed ----------10% of Watchstation
(Qualifier and Date)

135 Logistic Combat Element (LCE) Medical Battalion

Completed ----------10% of Watchstation
(Qualifier and Date)

136 Logistic Combat Element (LCE) Engineer Support Battalion

Completed ----------10% of Watchstation
(Qualifier and Date)

137 Logistic Combat Element (LCE) Dental Battalion

Completed ----------10% of Watchstation
(Qualifier and Date)

304.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. Satisfactorily perform this task.

Questions

304.2.1 As a member of a team, set up a General Purpose (GP) tent — A B C D E F

_____
(Signature and Date)

.2 Conduct a Limited Technical Inspection (LTI) on deployment blocks associated with your rate/job — A B C F

_____
(Signature and Date)

.3 Observe the distribution of electrical utilities in a field setting — A B C D E F

_____
(Signature and Date)

		Questions
304.2.4	Observe the distribution of water utilities in a field setting	A B C D E F

_____
(Signature and Date)

.5	Observe the distribution of bulk fuel in a field setting	A B C D E F

_____
(Signature and Date)

6	State the organizational structure of your combat element	F

_____
(Signature and Date)

COMPLETED 2 AREA COMPRISES 20% OF WATCHSTATION.

304.3 INFREQUENT TASKS – None to be discussed.

304.4 ABNORMAL CONDITIONS – None to be discussed.

304.5 EMERGENCIES – None to be discussed.

304.6 WATCHES – None.

304.7 EXAMINATIONS

Oral and/or written examinations of the material contained in this section will occur in conjunction with the testing required for the Fleet Marine Force (FMF) Enlisted Warfare Specialist core elements section 301 for members of the FMF LCE.

304.7.1	EXAMINATIONS	Pass a written examination

_____
(Signature and Date)

.2	EXAMINATIONS	Pass an oral examination board

_____
(Signature and Date)

QUALIFICATION PROGRESS SUMMARY FOR
FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST

RATE/RANK_____ NAME_____

This qualification progress summary is used to track the progress of a trainee in the watchstations for this PQS and ensure awareness of remaining tasks. It should be kept by the individual or in the individual's training jacket and updated with an appropriate signature (Training Petty Officer, Division Officer, Senior Watch Officer, etc.) as watchstations are completed.

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301 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST

Completed ---------- Date----------
(Signature)

---

302 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST GROUND COMBAT ELEMENT (GCE)

Completed ----------Date----------
(Signature)

---

303 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST AIR COMBAT ELEMENT (ACE)

Completed ----------Date----------
(Signature)

---

304 FLEET MARINE FORCE (FMF) ENLISTED WARFARE SPECIALIST COMBAT LOGISTIC ELEMENT (LCE)

Completed ----------Date----------
(Signature)

LIST OF REFERENCES USED IN THIS PQS

10804UM-01, Enlisted Distribution Verification Report User's Manual
BUPERSINST 1610.10, Navy Performance Evaluation and Counseling System
FMFM 4-1, Combat Service Support Operations FMFM
6-5, Marine Rifle Squad (PCN 13900050000)
Headquarters Marine Corps, Department of Aviation Website (http://www.hqmc.usmc.mil/)
Joint Publication 3-07, Joint Doctrine for Military Operations Other Than War
Marine Corps Common Skills Handbook, Book 1A (PCN 50600000900)
Marine Corps Common Skills Handbook, Book 1B (PCN 50600000900)
Marine Corps Drill and Ceremonies Manual (PCN10001337900)
MCCP 1, Operation Maneuver From the Sea (PCN 14500000100)
MCI 03.32G, Reconnaissance Marine (http://www.doctrine.quantico.usmc.mil)
MCO 3500.27A, Operational Risk Management (ORM)
MCO P5100.8F, Marine Corps Occupational Safety and Health Program
MCRP 3-37A, NBC Field Handbook (PCN 14400004300)
MCRP 5-12D, Organization of Marine Corps Forces (PCN 14400005000)
MCRP 5-2A, Operational Terms and Graphics (PCN 14400000800)
MCWP 3-35.3, Military Operations on Urbanized Terrain (PCN 14300003500)
MCWP 4-1, Logistics Operations (PCN 14300005800)
MCWP 4-11, Tactical-Level Logistics (PCN 14300007200)
MCWP 4-11.1, Health Service Support Operations (PCN 14300004000)
MCWP 4-11.3, Transportation Operations (PCN 14400008300)
MCWP 4-11.4, Maintenance Operations (PCN 14300001700)
MCWP 4-11.7, MAGTF Supply Operations (PCN 14300000100)
NAVEDTRA 14014, Airman
NAVEDTRA 14020, Aviation Structural Mechanic E2
NAVEDTRA 14295, Hospital Corpsman
NAVPERS 15560C, Navy Military Personnel Manual
OPNAVINST 3710.7R, NATOPS General Flight and Operating Instructions
OPNAVINST 3750.6R, Naval Aviation Safety Program
OPNAVINST 4790.2H, Naval Aviation Maintenance Program, Vol. V
OPNAVINST 5100.19D, Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat
SECNAVINST 5216.5, Correspondence Manual
SECNAVINST 5510.36, DON Information Security Program Regulation
TM05538D/10012B-12/1, USMC Operator's Manual with Components List (Rifle, 5.56 MM, M16A2 W/E; Rifle, 5.56 MM, M16A4 W/E; Carbine, 5.56 MM, M4 W/E; Carbine 5.56 MM, M4A1 W/E) (PCN 18405538000)
TM 11-5820-890-10-1, SINCGARS Radio Operator's Manual (PCN 35159745100)
U.S. Naval Flight Surgeon’s Manual, 3rd Edition
US Navy Ships Website (http://www.fas.org/man/dod-101/sys/ship/)
USMC Fact Files (http://www.hqmc.usmc.mil/factfile.nsf/AVE?openview&count=3000)
USMC, Marine Corps University Career Course 0401
USMC, Marine Corps University Sergeant's Course (SCRS0808)
USMC, Marine Corps University Sergeant's Course (SCRS0810)
USMC, Marine Corps University Sergeant's Course 0503

LIST OF REFERENCES USED IN THIS PQS (CONT'D)

USMC, Marine Corps University Sergeant's Course 1001
USMC, Marine Corps University Sergeant's Course 1002
USMC, Marine Corps University Sergeant's Course 1003
USMC, Marine Corps University Sergeant's Course 1004
USMC, Marine Corps University Sergeant's Course 1005
USMC, Marine Corps University Sergeant's Course 1006
USMC, Marine Corps University Sergeant’s Course 1201

PERSONAL QUALIFICATION STANDARD
FEEDBACK FORM FOR NAVEDTRA 43908-A

From ----------Date ----------

V I A

_____
Department Head

Activity ----------

Mailing Address ----------

Email Address ----------DSN ----------

PQS Title ---------- NAVEDTRA ----------

Section Affected ----------

Page Number(s) ----------

For faster response, you may email your feedback to the PQS Development Group at: N741.pqs@cnet.navy.mil. Please include the above information so that we may better serve you.

Remarks/Recommendations (Use additional sheets if necessary):

(FOLD HERE)

DEPARTMENT OF THE NAVY

OFFICIAL BUSINESS

COMMANDING OFFICER
NETPDTC N741
6490 SAUFLEY FIELD ROAD
PENSACOLA FL 32509-5237

(FOLD HERE)