

NAVAL RESERVE OFFICER TRAINING CORPS
Military Science –1 (MS-1)

COURSE ORIENTATION

Training Regulation

A. Introduction:

The conduct of this training program is embodied under the provisions of RA 9163 and RA 7077 and the following regulations shall be implemented to all students enrolled in the Military Science Training to produce quality enlisted and officer reservists for the AFP Reserve Force.

B. Attendance:

1. A minimum attendance of nine (9) training days or eighty percent (80%) of the total number of ROTC training days per semester shall be required to pass the course.
2. Absence from instructions maybe excuse for sickness, injury or other exceptional circumstances.
3. A cadet/ cadette (basic/advance) who incurs an unexcused absence of more than three (3) training days or twenty percent (20%) of the total number of training during the semester shall no longer be made to continue the course during the school year.
4. Three (3) consecutive absences will automatically drop the student from the course.

C. Grading:

1. The school year which is divided into two (2) semesters must conform to the school calendar as practicable.
2. Cadets/ cadettes shall be given a final grade for every semester, such grade to be computed based on the following weights:
 - a. Attendance - - - - - 30 points
 - b. Military Aptitude - - - - - 30 points
 - c. Subject Proficiency - - - - - 40 points
3. Subject proficiency is forty percent (40%) apportioned to the different subjects of a course depending on the relative importance of the subject and the number of hours devoted to it. It is the sum of the weighted grades of all subjects.

The weighted grades of a subject are computed as follows:

$$\begin{aligned} SP &= \text{Raw Score} / \text{Total number of test item} \times 50 + 50 \\ &= SPG \times 40\% \\ &= SP \text{ Final Points} \end{aligned}$$

Provided, however, that a midshipman must obtain a minimum of twenty eight (28) points in subject proficiency and twenty four (24) points in attendance in order to pass the course for the semester/trimester.

4. Each cadet/ cadette shall be given one hundred (100) merits at the beginning of every semester. Additional merits may be awarded for attending special formations, parades or other activities outside of prescribed training hours. For every infraction of regulations, he shall be penalized by demerits as prescribed.

Ex. Military Aptitude: $100 \text{ Merits} - \text{Total Demerits} \times 30\%$

5. List of Demerits with Corresponding Penalties:

a. Class A (Punishable by discharge) Gross disrespect to superior officers, abuse of authority, illegal collection and destruction of military or school property.

- 1) Gross disrespect to superior officers
- 2) Assaults a superior officer under any pretext.
- 3) Abuse of authority or manhandles his subordinates
- 4) Cheating during graded examinations
- 5) Collects any fees or contributions from the members of the Midshipman Corps without expressed authority of the ROTC Commandant
- 6) Ignore or violate standing instructions
- 7) Deliberately mutilate, destroy, or render unserviceable any military or school property
- 8) Commits any act similar in nature and category to the aforementioned offenses

b. Class B (6-10 Demerits). Grave Misdemeanor

- 1) Talking to a superior officer in a begrudging and hostile manner
- 2) Disobeys legal orders from superiors.
- 3) Deliberately telling things proved to be false.
- 4) Making boisterous remarks or catcalls at any woman while in ranks or in any prescribed formation
- 5) Sleeping in classroom or in any place of instruction while such instructions is being conducted
- 6) Report late in any formation or prescribed place of assembly
- 7) Commits any act similar in nature and category to the aforementioned offenses

c. Class C (4-5 Demerits) Less Grave Misdemeanor

- 1) Slouching in ranks
- 2) Walking in uniform without headgear
- 3) Sleeves of uniform rolled up or caught in the act rolling the sleeves of his ROTC uniform
- 4) Spitting while in ranks or formation
- 5) Rolling of eyeballs when at parade rest or does any act that would be detrimental to the discipline while in ranks
- 6) Chew gums or tobacco when reporting to an officer
- 7) Carelessly lays aside his rifle
- 8) Wearing dirty uniform
- 9) Commits any act similar in nature and category to the Aforementioned Offenses

d. Class D (1-3 Demerits). Minor Misdemeanor and Omissions

- 1) No nameplate, insignias and other uniform paraphernalia
- 2) Shoes not shined and wrongly tied
- 3) Brass articles are not shined
- 4) Long hair
- 5) Dirty face and mustache
- 6) Missing buttons or unbuttoned pockets
- 7) Wearing uniform other than one prescribed
- 8) Malingering
- 9) Falling out from ranks without permission
- 10) Standing on one leg
- 11) Sitting while in ranks
- 12) Leaning or sitting on his rifle
- 13) Drops or lazily drags his rifles
- 14) Commits any act similar in nature and category to the aforementioned offenses

LEGAL BASIS

Lesson Objectives:

Upon completion of this topic, the student will:

- a. Explain R.A. 9163
- b. Enumerate the three (3) components of NSTP.
- c. State the objectives of NSTP
- d. State the branch of government that supervises the implementation of each component.

A. Introduction:

Republic Act 9163 is an act establishing the National Training Program (NSTP) for the tertiary level students, amending for the purpose Republic Act No. 7077, Presidential Decree No. 1706, and for other purposes.

Specific Provisions of the Fundamental Law Pertinent to R. A. 9163

1. Sec 2. R. A 9163 hereby affirms the prime duty of the government to serve and protect its citizens. In turn, it shall be the responsibility of all citizens to defend the security of the state and in the fulfillment thereof, the government may require each citizen to render personal, military or civil services.

2. The National Training Service Training Program (NSTP) forms part of the curricula of all baccalaureate degree courses and at of least two (2) year technical – vocational courses. The course shall be a requisite for graduation, consisting of the following service components.

- a. **Reserve Officer's Training Corps (ROTC)**, which is hereby made optional and voluntary upon the effectivity of this Act.
- b. **Literacy Training Services**; and
- c. **Civic Welfare Training Service**

3. Sec. 15(4) of Batas Pambansa Bilang 323 likewise provides that it is the duty and responsibility of students to participate actively in civic affairs and be involved in the promotion of the general welfare of the people particularly in the social, economic and cultural development of the community and in the attainment of a just, compassionate and orderly society.

B. Implementing Rules and Regulation of RA 9163:

Pursuant to Section 12 Republic Act No. 9163 otherwise known as the National Service Training Program (NSTP) Act of 2001, the Commission of Higher Education (CHED), Technical Education and Skills Development Authority (TESDA), and Department of National Defense (DND), in consultation with concerned government agencies, the Philippine Association of State Universities and Colleges (PASUC), Coordinating Council of Private Educational Association of the Philippines (COCOPEA), Non-government Organizations, hereby jointly issue, adopt and promulgate the following Implementing Rules and Regulations to implement the provisions of this Act.

1. Sec 1, Rule I, IRR to R. A. 9163 (Guiding Principle). While the prime duty of the government is to serve and protect its citizens, in turn, it shall be the responsibility of all citizens to defend the security of the state, and in the fulfillment thereof, the government may require each citizen to render personal military or civil service.

2. Sec 2. Rule I, IRR to R. A. 9163 (Role of the Youth)

a. In recognition of the vital role of the youth in nation building, the state shall promote civic consciousness among them and shall develop their physical, moral, spiritual, intellectual and social being. It shall inculcate the ideals of patriotism, nationalism, and shall advance their involvement in public and civic affairs.

b. As the most valuable resources of the nation, they shall be motivated, trained, organized and involved in military activities, literacy service, civic welfare programs and other similar endeavors in the service of the nation.

3. Sec. 4, Rule III, IRR to R. A. 9163 (Coverage)

a. All incoming freshmen students, male and female, starting School Year (SY) 2002 –2003, enrolled in any baccalaureate and in at least two (2) year Technical – Vocational or associate courses, are required to complete one (1) NSTP component of their choice as a graduation requirement.

b. All higher and technical-vocational educational institutions must offer at least one (1) of the NSTP components.

1). State Universities and Colleges (SUCs), shall offer the ROTC Program and at least one (1) other NSTP component.

2) The Philippine Military Academy (PMA), Philippine Merchant Marine Academy (PMMA), Philippine National Police Academy (PNPA), and other SUCs of similar nature, in view of the special character of these institutions, are exempted from the NSTP.

3) Private higher and technical-vocational education institutions with at least 350 midshipmen may offer the ROTC Program and consequently establish/maintain a Department of Military Science and Tactics (DMST), subject to the existing rules and regulations of the Armed Forces of the Philippines (AFP).

4. Sec. 6 Rule III, IRR to R. A. 9163 (Duration/ Equivalent Course Unit):

a. Each of the aforementioned NSTP components shall be undertaken for an academic period of two (2) semesters. It shall be credited for three (3) units per semester, for fifty four (54) to ninety (90) training hours per semester.

b. A one (1) summer program in lieu of the two (2) semester program may be designed, formulated and adopted by the DND, CHED and TESDA, subject to the capability of the school and the AFP to handle the same.

5. Sec. 11, Rule V, IRR to R. A. 9163 (Organization of NSTP Graduates):

a. Graduates of the CWTS and LTS components of the NSTP shall belong to the National Service Reserve Corps (NSRC) and could be tapped by the state for literacy and civic welfare activities, through the joint efforts of DND, CHED and TESDA, in coordination with DILG, DSWD and other concerned agencies/ associations.

b. The CHED, TESDA and DND, in consultation with other concerned government agencies, shall issue the necessary guidelines for the establishment, organization, maintenance and utilization of the National Reserve Corps.

c. **Graduates of the ROTC program shall form part of the Citizen Armed Force, pursuant to R. A. 7077, subject to the requirements of DND.**

6. Sec. 13, Rule VI, IRR to R. A. 9163 (Transitory Provisions):

a. Male students who are currently enrolled but have not taken any of the Military Service (MS), Civic Welfare Service (CWS) or Law Enforcement Service (LES) programs shall be covered by the NSTP law.

b. Male students who have completed two (2) semesters of the Expanded ROTC (E-ROTC) National Service Program) are deemed to have complied with the NSTP law.

c. Students who are not covered by Section 13 of this Rule and have taken only one (1) semester or Basic ROTC or E-ROTC/ NSP, shall be take one more semester of any NSTP components to qualify for graduation purposes.

d. Students who want to qualify for enlistment in the Reserve Force or attend the Advance ROTC program shall undertake a special program for this purpose.

THE AFP ORGANIZATION

Lesson Objectives:

Upon completion of this topic, the student will

- a. State the mission of the AFP and its branch of service.
- b. Enumerate the three (3) branches of service of the AFP.
- c. List the two (2) components of the AFP
- d. Illustrate the AFP organization.

A. Introduction:

The Armed Forces of the Philippines (AFP) recognizes the Constitution of the Republic as the legitimate expression of the people's will. It is mandated to serve and protect the people and secure the sovereignty of the state and the integrity of its national territory from internal and external threats. The AFP pledges allegiance to the Filipino people, adheres to the principle of supremacy of civilian authority over the military at all times and vows to uphold and defend the Constitution.

B. Brief History of the AFP:

The AFP identifies itself with the Filipino people's historical struggles for freedom and justice and their vigilance against any attempt to violate the country's integrity and sovereignty. In retrospect, it recognizes the role of our forefathers as freedom fighters and honors them for their democratic and nationalistic aspirations.

The AFP, as the embodiment of the cherished martial values and traditions of the Filipino people, traces its roots to certain historical events foremost of which is the Battle of Mactan on 27 April 1521 where Lapu-Lapu, the acknowledged father of the AFP, first demonstrated our love for freedom; the Dagohoy, Revolt in 1744, the Muslim resistance and other similar uprisings against Spanish colonialism manifesting our fight against foreign domination; the founding of the Katipunan on 07 July 1892 by Andres Bonifacio, considered as the father of the Philippine Army, who proclaimed Filipinos solidarity; the Tejeros Convention on 22 March 1897 which proclaimed officially our desire for complete independence and thereafter gave birth to the Philippine Army. Subsequently, the Philippine Navy was created on 20 May 1898.

On 12 June 1898, the Philippine Independence was declared at Kawit, Cavite, and for the first time, the Philippine Flag was unfurled by General Emilio Aguinaldo and our National Hymn was played. The Filipino-American hostilities between 1898 and 1899 further demonstrated the Filipino soldier's best in terms of honor, valor, loyalty, duty and solidarity despite the overwhelming superiority of the enemy forces. To hasten the Philippine campaign on peace and order, the Philippine Military Academy was organized on 25 October 1898.

On 21 December 1935, the National Defense Act was enacted officially to create the AFP. The Defense of Bataan and Corregidor from the outbreak of World War II until 09 April and 06 May 1942 respectively against the Japanese invasion forces, the active Philippine guerilla movement and the successful Anti-Huk campaign also best amplified the Filipino soldiers and love of country.

The Philippine Air Force was later established on 01 July 1947. Moreover, it is also noteworthy that the AFP had participated in international peace keeping efforts as its commitment to the United Nations such as the Philippine Expeditionary Force to Korea (PEFTOK) in the early 50's, the Philippine Air Force Contingent in Congo, Africa in the early 60's and the Philippine Civic Action Group (PHILCAG) in South Vietnam in the late 60's. After the EDSA event, the AFP has vigorously pursued a national reconciliation effort for peace and progress.

C. Mission of the AFP:

"To protect the people and secure the sovereignty of the state and the integrity of the national territory".

D. Chain of Command (Commander-In-Chief, DND & AFP)

By virtue of the national Defense Act enacted officially on 21 December 1935, the Armed Forces of the Philippines was created. The President is the Commander-In-Chief of the AFP. He/ She exercises strategic direction over the personnel and the resources of the military establishments through the Secretary of the Department of National Defense, who also represents his/ her in the executive function and in the supervision of the Defense Program of the country.

The Chief of Staff, AFP executes the command functions of the President in relation to strategy, tactics and operations. He is also the immediate adviser of the Secretary of National Defense Program as prescribed by the Secretary of National Defense. The Chief of Staff has command and control over all the elements of the AFP.

E. Organization and Capabilities of the AFP:

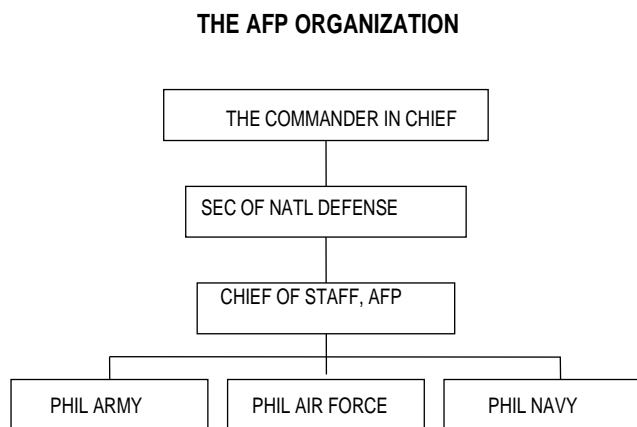
The AFP is duly created by law as an integral part of the Executive Branch of the Government. It is well-organized and disciplined body composed of a citizen armed force necessary for the defense and security of the state. It is headed by the President as the Commander-In-Chief who exercises control, supervision and authority through a Chain of Command headed by the Chief of Staff.

The organizational structure of the AFP provides for centralized direction and control of GHQ to ensure unity of efforts, and the operations of the Major Services and other separate units are decentralized to achieve maximum operational efficiency.

As provided for in the National Defense Act, as amended, the Armed Forces of the Philippines shall be composed of the Regular Force and Reserve Force components.

The Regular Force is the permanent military organization which is maintained in time of peace and war. In time of peace, the authorized active commissioned officer and enlisted personnel strength of the Regular Force is determined every year by the Annual General and Special Appropriation Act. This strength however, does not only included those officers and EP who are permanently commissioned or serving under voluntary enlistment in the Regular Force, but also those reserve officers and enlisted reservists assigned for duty with the different services of the Regular Force.

The Reserve Force is the military organization that will come up physical existence only upon mobilization as may be called upon by the Commander-In-Chief due to state of national emergency such as war or widespread disorder. Units of the Reserve Force are "paper" organizations which come to being to augment the Regular Force confronting the threat to the Nation. The Reserve Force organization includes the commissioned Reserved Officers and all citizens who have completed the prescribed trainee instruction as provided by the National Defense Act and who are assigned as reservists to the organization of the Reserve Force.



F. Major Service Commands:

For operational efficiency and effectiveness, the AFP is presently composed of three (3) Major Service Commands namely:

1. Philippine Army (PA) - conducts ground combat operations;
2. Philippine Air Force (PAF) - secures the Philippine air space; and
3. Philippine Navy (PN) - secures the Philippine territorial waters

Each service command considers the other services as brothers-in-arms and members of one big family. All AFP services maintain harmonious and mutually supportive relationship with each other and in other government agencies.

G. Major Services RESCOMs and AFPRESCOM:

Prior to the enactment of the AFP Reservist Act (Republic Act Number 7077) on 27 June 1991, reserve force development was already an existing phenomenon in the AFP as far back as 1939 when the then General of the Army, Douglas MacArthur was commissioned to the Commonwealth of the Philippines to organize its citizen army. The surfacing of a new organization that would coordinate and integrate the efforts of the pioneering citizen's army forces was met with resistance for decades.

The AFP Reservist Act or RA Nr. 7077 provided for the reorganization of the AFP Reserve Force into four (4) major components, namely: the Army Reserve, the Navy Reserve, the Air Force Reserve, and the AFP-Wide technical and Affiliated Reserve Command within one year after its enactment. The urgency of this mandate pushed General Headquarters, AFP to activate the AFP Reserve Command (AFPRESCOM) from the personnel and facilities of the defunct Metropolitan Citizen Military Training Command (MCMTC) on 01 April 1993.

1. AFPRESCOM - organized as an AFP-wide support and separate unit on 01 April 1993 pursuant to General Order No. 22 GHQ, AFP dated 02 March 1993 and Republic Act No. 7077, otherwise known as the Armed Forces of the Philippines Reservist Act. AFPRESCOM is mandated to provide direction for the development, administration, organization, training, maintenance and utilization of the Citizen Armed Forces as a base for the rapid expansion of the Armed Forces of the Philippines in times of emergency. In the performance of its functions, the Command is organized into two (2) major operational units, namely; the Affiliated Reserve Group (ARG) and the Technical Service Reserve Group (TSRG) which are tasked to train and develop affiliated reservists and technical service reservists, respectively. The training of these reservists is directly under the supervision and control of the Reservists Training Center (RTC).

2. Army Reserve Command (ARESCOM) - premised on a dedication to service, faced with the challenge of being in a constant state of readiness and responsiveness if it is to back up the regular army. Its enduring values of professionalism, integrity and responsibility to the nation through selfless service must be kept alive to meet the demands of the time.

3. Naval Reserve Command (NAVRESCOM) - tasked to oversee and administer all naval reservists in our country, in order to provide the navy not only a base for expansion in the event of war, invasion, rebellion, or disaster and calamity relief but also to assist in socio-economic development of the country. NAVRESCOM has managed to activate eight (8) Naval Reserve centers throughout the country namely;

- a. Naval Reserve Center Northern Luzon (NRCNL) - situated at Bunuan Gueset, Dagupan City and covers all areas north of NRNCR to Batanes Island.
- b. Naval Reserve Center National Capital Region (NRCNCR) - situated at BNS, Fort Bonifacio, Taguig City and covers all areas of National Capital Region.
- c. Naval Reserve Center Southern Luzon (NRCSL) - situated at Rawis, Legaspi City and covers areas from Batangas, Mindoro, Romblon and entire Bicol Region
- d. Naval Reserve Center West (NRCW) - Puerto Princesa, Palawan
- e. Naval Reserve Center Eastern Visayas (NRCEV) - situated at Cebu City and covers the entire Eastern Visayas.

- f. Naval Reserve Center Western Visayas (NRCWV) - situated at Iloilo and covers the whole Western Visayas.
- g. Naval Reserve Center Western Mindanao (NRCWM) - situated at Zamboanga City and covers areas from Cotabato, Zamboanga, Basilan, Jolo and Tawi-tawi.
- h. Naval Reserve Center Eastern Mindanao (NRCEM) - situated at Davao City and covers entire Davao to Gen Santos City.

These Centers served as its operating units in far flung areas to ensure that its task of reaching that vast naval reserve manpower is carried with ease and achieve desired goals.

4. Air Force Reserve Command (AFRESCOM) - is actively involved in the administration and utilization of the air reservist responding and acting quickly to rescue calls whenever and wherever disaster occurs.

MILITARY COURTESY AND DISCIPLINE

Lesson Objectives:

Upon completion of this lesson, the student will:

- a. Explain the importance of military courtesy and discipline in the Armed Forces of the Philippines.
- b. Define military courtesy and discipline.
- c. Enumerate the factors that create a climate of discipline.
- d. State when and how to salute, who are entitled to a salute, and when not to salute.
- e. Identify the different ranks and insignias used in the Armed Forces of the Philippines.

A. Introduction:

Many people think that discipline is nothing more than the enforcement of regulations and the corresponding punishment when one violates them. Others associate discipline with the state of subservience where subordinates blindly follow the orders of their superiors out of habit or fear. All of these are not true. As a matter of fact, discipline is that condition wherein men work and get well together for the accomplishment of a group mission. It is that climate of orderliness where individuals execute commands and follow regulations exactly as a result of intelligent and reasoned obedience.

Just like in the civilian world, the observance of military courtesy serves to smoothen the personal relationship and among men in the profession of arms and strengthen the bond between them. They must be thoroughly familiar with the different forms of military courtesy and must be able to confidently practice them.

B. Definition of Terms:

1. **Military Courtesy** - It is the written, officially prescribed code of deportment for members of the military establishments. In civilian life, courtesy is an expression of consideration for others. This implies the use of good manners and polished conduct in dealing with other people.

2. **Military Discipline** - This term maybe defined as the willingness to accept with conviction and without reservation the necessity for a common law that rules and coordinates the effort of a group. Obvious, a rather severe but basic type of discipline is suggested by this definition.

3. **Morale** - The term maybe defined as the mental state and spirit of an individual or unit.

C. Necessity for Discipline:

Military discipline is necessary to ensure orderly and effective group action, commonly known as teamwork. Teamwork is particularly important in military operations where its presence or lack of it may very well spell the difference between victory or defeat.

With discipline, a soldier learns a sense of obligation to himself and to his comrades; to his commander and the entire organizations. He also realizes that he is a member of a team, organized, trained and equipped for the purpose of engaging and defeating the enemies of our country. The ultimate objective of military discipline therefore is unit efficiency in battle – to ensure that a unit performs its role correctly; that it reaches its objectives, accomplishes its assigned mission and helps other units to accomplish their mission.

D. Creating a Climate of Discipline:

We find ready application of discipline in all aspects of military life. We often hear of "fire discipline", "water discipline", and "supply discipline". Favorable climate of discipline may be best created in unit by a leader thru the following:

1. **Training** - a soldier learns to work with other soldiers; learn to unify their actions into a single effort in order to accomplish the group mission and also develops the habit of prompt obedience to all orders.

2. **Judicious Use of Punishment and Reward** - the best kind of discipline is that which exacts obedience by appealing to reason and that which makes use of the so called "positive incentives" or reward.

3. **Instilling a Sense of Confidence and Responsibility** - a confident and responsible soldier realizes that he has an obligation not only to himself but to the other soldier in the organization, and that violation of the rules of discipline will not only reflect on him as an individual but will also discredit, if not cause irreparable damage to his unit.

E. Military Courtesy in the Service:

Military Courtesy is acts of politeness, civility and respects those personnel in the military organization accord to one another. Just like in the civilian world, military courtesy serves to smooth the personal relationship among men in the profession of arms. The following are some of the significant forms of courtesy in the AFP:

1. **Salute** – is the most important and most common form of all military courtesies. Men of arms have used some form of military salute as an exchange of greeting since the earliest times. In the Navy, saluting with the left hand is allowed when the right hand is occupied with something or not available for the execution of the same.

a. Who are entitled to the Salute:

1) Commissioned Officers (both male and female) of the AFP, the National Flag and National Anthem.

2) High ranking civilian officials or foreign dignitaries during military honors rendered for them.

3) Officers of the Coast Guard and Geodetic Survey and the Public Service when they are serving with the AFP.

b. **When to Salute:**

1) **Aboard ship.** When boarding a navy ship where the National Flag is flying, all persons in the naval service step upon reaching the upper platform of the accommodation ladder or shipboard end of the prow, face the national flag, and salute. After this, salute the Officer of the Deck (OOD). When leaving the ship, salute first the OOD and then the national flag. All officers, captains of ships, and officers senior to themselves salutes each other on every occasion of meeting, passing near, or when were being addressed.

2) **In Boats.**

a) Men seated in boats where there are no officers, petty officer or acting petty officer in charge, rises and salute all officers passing near. When there is an officer, petty officer or acting petty officers in charge of the boat, he alone renders the salute.

b) Officers seated in boats rise in rendering and returning salutes when a senior enters or leaves the boat or when acknowledging a gun salute.

c) Coxswain in charge of boats rise and salute all officers entering or leaving the boat. All members of the crew when the boat is not underway and not carrying an officer aboard stand and salute when an officer comes alongside, leaves the side, or passes near them. If the boat awning are spread, the men sit at attention and render the hand salute without rising.

3) *When Ashore.* Same general rules of saluting apply as on board navy ship. Salute the Captain and all officers senior to you on all occasions salute other officers on first meeting during the day. The salute also rendered indoors during ceremonies honoring the flag and in court martial.

4) *In a group.* If officers and enlisted men are standing together not in formation, and a senior approaches, the first to perceive him shouts "ATTENTION" and all faces him and salute. When in formation, cautions his unit to attention before executing the appropriate salute.

5) *Accompanying women.* When escorting women both officers and men will render the customary salute. When seated with women, junior officers if covered rise and salute when senior officers approach.

6) *Overtaking and Accompanying a Senior:*

1) Overtake and pass senior officer only upon his permission. When it become necessary to walk past a senior officer, pass his left side, and salute when you are abreast and ask, "BY YOUR LEAVE SIR?" When the officer returns the salute you can continue pass him.

2) When in company with a senior, you always walk on his left or put him on your right. This also applies aboard any vehicle.

7) *Reporting.* When reporting on deck or outdoors ashore, one is covered and salute accordingly. When reporting in an officer, he uncovers upon approaching the senior, salute and states his business.

8) *Seated.* An enlisted man being seated and without particular occupation rises upon the approach of an officer, faces him and salutes, if covered. If both remain in the same vicinity, the salute need not be repeated.

9) *Seniority unknown.* Officers will know the relative seniority of those with whom they are in frequent contact. The safest way and the best rule is to salute when in doubt.

10) *Sentries.* Sentries at gangway salute all officers going or coming over the side and when passing or being passed by officers close aboard in boats.

c. How to Salute:

1) When not walking render the salute in the position of a soldier at attention. When walking, continue and render the salute within a recognizable distance (5 paces).

2) Hand salute is rendered smartly and done in the following manner. The forearm should be inclined 45 degrees. The tip of the fore finger should be slightly touching above the eyebrow of the right eye, the thumb and fingers must be extended and joined. The upper arm is parallel to the deck with elbow forward. Hand and wrist in the straight line. The palm is slightly inward.

3) The salute is made whether headgear is worn or not.

4) Rifle salutes are used in place of the hand salute when carrying a rifle. They are used when executing present arms, when you give rifle salute at order arms and rifle salute at shoulder arms.

d. When NOT to Salute:

- 1) When troops are at work.
- 2) Indoors, except when reporting to an officer
- 3) When carrying articles with both hands, and being so occupied as to make saluting impracticable
- 4) When serving as a military prisoner

F. Identification of Ranks and Insignias in the AFP:

1. All officers in the AFP are commissioned into the service and are given ranks by the President of the Republic of the Philippines. They hold such rank for a certain time in grade until they are promoted to the next higher grade.

2. Enlisted personnel (EP) are likewise given ranks by their respective services as well as rates and ratings depending on the level of their occupational field on a certain job classification. For the PN, an EP is given a promotional examination (PROMEX) before he/she can be promoted to the next higher grade.

3. PN Rank Classification. The ranks, rates and ratings of officers and enlisted personnel in the Philippine Navy differ in name from that of the other branches of service of the AFP including the Philippine Marines. They

are almost a universal tradition for all navies of the world and the difference lies only on the various uniform insignias, badges, markings and devices.

4. **Rating** - is the term used in the Navy to identify an occupational specialty that is based on the aptitude, training, experience, knowledge and skills of an individual. Examples of ratings are: Quartermaster (QM), Boatswain mate (BM), Electronic Technician (ET), Engineman (EN), Damage Control man (DC), etc.

5. **Rate** - is the term used to identify the level of achievement and expertise within the individual's rating. Rate may also be called pay grade within a rating. a level of aptitude, training, experience, knowledge, skill and responsibility within the rating of occupation.

6. **Rank** - is the combined rate and rating of the individual. Examples of enlisted ranks are: Radioman, Third Class (RM3), Electrician's Mate, First Class (EM1), Seaman First, Hospital Corpsman (S1HM), Gunner's Mate Chief (GMC), etc.

7. Unrated or non-rated/ unclassified - a term used to identify an individual who has not yet been classified for a particular rating. His rank would carry an initial (UN). Examples are: ASN(UN), SN1(UN), PO3(UN), etc.

8. Striker - a term that applies to an individual in the pay grade E-1 to E-3.

9. Petty Officer - a term that applies to an individual in the pay grade E-4 to E-

10. Naval Enlisted Job Classification (NEJC) -a system of classifying jobs of enlisted personnel that identifies and describes their special and technical knowledge and skills including the duties and responsibilities to be undertaken by each within the various ratings.

ENLISTED PERSONNEL RANK/RATES AND INSIGNIAS					
PA/PAE/PMC RANK	ARMY INSIGNIA	AIR FORCE INSIGNIA	MARINES INSIGNIA	NAVY RATES	NAVY INSIGNIA
Private (PVT)				Apprentice Seaman (ASN)	
Private First Class (PFC)				Seaman 2nd Class (SN2)	
Corporal (CPL)				Seaman 1st Class (SN1)	
Sergeant (SGT)				Petty Officer 3rd Class (PO3)	
Staff Sergeant (SSGT)				Petty Officer 2nd Class (PO2)	
Technical Sergeant (TSGT)				Petty Officer 1st Class (PO1)	
Master Sergeant (MSGT)				Chief Petty Officer * (CPO)	

It determines where an individual will work and what an individual will do. Officers are graded according to rank, Enlisted Personnel according to pay grades, and are also spoken as having rates.

Rating - a rating pertains to occupation in the navy which requires basically related aptitudes, training, experienced, knowledge and skills. Each rating has its own special symbol worn by all men properly qualified.

INTERIOR GUARD DUTY

Lesson Objectives:

Upon completion of this lesson the student will:

- a. Explain Interior Guard System and its elements
- b. State the objectives of Interior Guard Duty in a Command
- c. Explain the functions of the members of Interior Guard Duty.
- d. Enumerate and memorize the eleven (11) General Orders.

A. General:

An interior duty guard system is installed by Commanders of all military installations to preserve order, protect property, and enforce military regulations. Security is part of the commander's responsibility; therefore, he prescribes the composition of the interior guard system. Separate units are responsible for posting interior guards in their area.

The elements of the interior guard system are classified according to their purposes. These include the main guard and special guards. The latter category consists of park, train, boat guards and others detailed for specific purposes. Generally, the interior guard consists of a system of patrols and fixed posts.

Normally, an interior guard system is composed of the following: one (1) Field Officer of the Day (FOD), one (1) Officer of the Day(OD); one or more Commanders of the Guard (COG), one or more Sergeants of the Guard (SOG), a relief commander for each relief; and sentinels of the guards. The number of sentinels needed for the routine daytime duty is ordinarily much smaller than the number required at night or on Sundays and Holidays.

B. Definition of Terms

1. *Countersign* - consists of a secret challenge and reply to aid the guards/sentinels in the scrutiny of persons who apply to pass the lines or it may be defined as a secret challenge and the secret password.

2. *Challenge* - the command, "HALT, WHO IS THERE?" given by a sentry is used to cause an unidentified person or party to halt and be identified.

3. *Password* - word or a distinctive sound used to answer a challenge identifies the person or party desiring to enter or pass and is always a secret.

4. *Interior Guard* - the guard detailed by a commander to preserve order, protect property and enforces regulations within the jurisdiction of the command.

5. *Relief* - those members of the guard who, under the supervision of and including a corporal of the guard, have the same watch; the procedure whereby posted member of the guard.

6. *Sentry* - an enlisted man assigned to duty as member of the guard, to keep watch, maintain order, protect person or property, or warn of any attack.

7. *Watch* - a period of time during which a member of a guard performs the prescribed duties, beginning from when he is posted and terminates when he is relieved by proper authority.

8. *Relieve* - to direct any member of the guard to cease performance duties.

9. *Post* - the place or area where a sentry is stationed or the place where a member of the guard other than the sentry is required to be when not performing duties elsewhere.

10. *Patrol Post* - a post within a sentry - a prescribed route within specified limits for the guard to patrol.

11. *Fixed Post* - a post within the limits of which a sentry is required to stay for the performance of his duty.

12. *Guardhouse* - a building, tent or other location designated as the headquarters of the guard.
13. *Detain* - the action of any person so authorized used to secure the custody of an illegal offender.

C. Functions and General Duties of Personnel:

1. Field Officer of the Day (FOD) - A field grade officer detailed, as FOD is the Commanding Officer's personal representative. His primary concern is the supervision in the proper performance of duty of the interior guards.
2. Officer of the Day (OD) - The OD is responsible for the proper performance of duty by the main guards. He is responsible in executing all orders of the commanding officer relating to interior guard.
3. Commander of the Guard (COG) - He is responsible for the instruction, discipline, and performance of the guards. Being senior in rank, the commander of the guard is responsible for proper action in case of emergency.
4. Sergeant of the Guard (SOG) - The SOG is the overall supervisor over the other NCO and sentinels of the guards. He takes over as commander of the guards in case no one else is detailed as such.
5. Relief Commander - The commander that gives instructions to the members of his relief as to their orders and duties, and makes certain that each sentinel understands them. He also familiarizes himself with the special duties of members of his relief.
6. Sentinel of the Guards - They must memorize, understand, and comply with the general orders for sentinels. In addition, they must understand and comply with the specific orders applicable to their particular posts, including the use of countersigns if they are in effect.

D. Eleven (11) General Orders of the Guard:

Sentinels of the guard are governed by both general and special orders. General orders apply to all sentinels, while special orders apply to particular posts and duties. These special orders may also contain instructions on the use of signs and countersigns.

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

MILITARY CORRESPONDENCE

Lesson Objectives:

Upon completion of this topic the student will:

- a. Define Military Correspondence and its purpose.
- b. State the six (6) Characteristics of Military Correspondence.
- c. Identify the different forms of military correspondence, their construction and elements.

A. Introduction:

Correspondence is defined as a written form of communication which has two purposes, to convey information and to foster goodwill with its intended reader. In this form of communication, the writer primarily intends to transmit information and in the process, he also tries to build harmonious relationship with his reader. The second purpose of correspondence is often obscured in military correspondence because of the "command tone" that it always carry. Nevertheless, the creation of a sense of goodwill is still necessary to ensure that the reader will promptly and favorably react to the correspondence.

B. Characteristics of Effective Correspondence:

For a military correspondence to be effective, it has to possess the following characteristics:

1. **Simplicity.** The correspondence must be organized in simple form and style. The words used must be plain, properly chosen and easily understood.
2. **Clarity.** Ideas must be presented clearly and must not be subject to misinterpretation.
3. **Conciseness.** This characteristic denotes the writing of short and brief correspondence.
4. **Coherence.** This means that all ideas in the correspondence must be presented in an orderly sequence. There must be a logical arrangement of essential information to facilitate understanding by the reader.
5. **Emphasis.** The correspondence must carry with it a certain force or intensity to give its special impression or importance. This is usually achieved by the use of well selected, exact and concrete words to impress the ideas or information on the mind of the reader.
6. **Completeness.** The correspondence must contain all the necessary details of the ideas and "possible avenues", so to speak.

C. Forms of Military Correspondence:

In the military service, time is always important hence, correspondence must be written in uniform format to insure efficient and prompt processing. Certain styles and organization have to be followed to preclude confusion and misunderstanding between the writer and his intended reader. Following are the most common forms of military correspondence:

1. Military Letter:

a. Military letter is a formal means of communication used by all units of the AFP and to foreign military establishments. (Prepared in 8 x 10 ½ paper)

Note: Correspondence addressed to Army entities including the Air Force, and GHQ, AFP will be prepared in military form.

b. Construction:

1) Style:

- a) Should be dignified and direct.

b) It should be phrased in a courteous way. In wording the letter, the feeling of the persons to whom the letter is addressed will be considered at all times.

- 2) Format - It has the same three elements as that of the civilian letter.
 - a) Heading
 - b) Body
 - c) Authentication (Closing)

c. Elements:

- 1) Heading - consists of the following:

a) Letterhead - Printed letterhead stationary is normally used on the first page. If letterhead stationary is not available, a typed letterhead may be substituted.

- b) Initials or Originators Code
- c) Office Symbol
- d) Subject line
- e) Thru (Channel line)
- f) To (Addressee line)

- 2) Body - consists of paragraphs and sub-paragraphs

- 3) Authentication - consists of:

- a) Command or Authority line
Example: BY COMMAND OF COMMODORE MILLAN:
BY ORDER OF CAPTAIN FAJARDO:
- b) Signature line
- c) Enclosures - aligned to signatory line

d. Placement of Margin:

1) Top, first page (without printed letterhead) typed letterhead, $\frac{3}{4}$ inch (5 spaces) from the top of the paper.

- 2) Top, second and succeeding paper, 1 $\frac{1}{4}$ inches (7 spaces downward)
- 3) Left Margin - 1.25 inches (15 spaces)
- 4) Right Margin - $\frac{3}{4}$ inch (9 spaces)
- 5) Bottom margin - 1 $\frac{1}{4}$ inches (7 spaces)

e. Spacing (between lines)

- 1) Letterhead - centered $\frac{3}{4}$ inch from the top edge.
- 2) Initials O in line with the second line of letterhead approximately two inches from the right margin.
- 3) Office Symbol - left side in line with date line, 2 spaces from last line of the letterhead
- 4) Dateline - right side, 2 spaces from last line of the letterhead (in line with Office Symbol)
- 5) Subject Line - 2 spaces from Office Symbol
- 6) Thru Line - 4 spaces from Subject Line
- 7) To Line - 4 spaces from Thru Line
- 8) First line of the body of the letter - 5 spaces from To Line and indented 5 spaces from the left margin.
- 9) Between paragraph and subparagraph - 2 spaces
- 10) Between lines - single space
- 11) Command of Authority line - 2 spaces from the last line of the body of the letter
- 12) Signature Line - 5 spaces from the command or authority line
- 13) Enclosures - opposite signature line at the left margin

Note: A letter of less than nine lines may be double spaced.

(Sample of a Military Letter Form)

GENERAL HEADQUARTERS
ARMED FORCES OF THE PHILIPPINES MVA:aq:554
Camp Murphy, Quezon City

AGM

12 February 1991

SUBJECT: Military Letter

THRU: Flag Officer In Command, PN

TO: Commander, NETC
Attn: AC of TS, T1
NSSC, San Antonio, Zambales

1. In making military letter, the initial of the officer dictating the letter (in capital letters), initial of the action clerk (in small letters), typist or clerk's initial in small letter, followed by the phone number of the office; or origin shall appear at the right side of the paper. Office symbol is typed in the upper left corner as shown on this sample.

2. Margins are 1 ¼ (15 inches – elite type) on the left side and ¾ inch (9 spaces) on the right side. The margin is kept as straight as possible. When no printed letterhead is available, the top margin of the typed letterhead is approximately ¾ inch (5) spaces from the top of the paper. On the second and succeeding pages, the top margin is approximately 1 ¼ inches (about 7 spaces).

3. Normally, the body of the letter will be single space with a double space between paragraphs, subparagraphs, sub-division of primary division or any further sub-division. A letter of less than nine lines maybe double spaced if neither reply nor further action is anticipated.

4. List of enclosures is typed in the lower corner in line with the typed name of person signing the communication.

BY COMMAND OF LIEUTENANT GENERAL CRUZ:

2 Incls

EPIMACIO V CRUZ
Colonel AGS
The Adjutant General

2. Naval Letter:

- a. Naval Letter - is used by all units within the Philippine Navy, and to foreign naval establishments as a formal means of communication.
- b. Style - the naval letter is prepared in a semi-block style that is without indentions. It has the same three elements like that of a civilian letter.
- c. Letterhead - like the military letter, printed letterhead stationary is also normally used for the first page. However, if letterhead stationary is not available, a typed letterhead may be substituted.
- d. In a naval letter, the office or identifying symbols include the initial of the officer signing the draft, action clerk, typist and telephone number. It shall appear on the right side of the paper in line with the heading's address and two (2) inches from the right side of the paper. The serial number is blocked below the office symbols while the date is blocked below the serial number of the communication. Placement of "From" line is typed seven (7) spaces below the last line of the letterhead. "To" is placed immediately below the word "From" line. If there is more than one "Via" addressee, each is numbered with an Arabic numeral enclosed in a parenthesis. The "Subj" line is typed two (2) spaces below either the "To" or "Via" line as the case maybe. The abbreviated "Subj" is used to introduce a topical statement of the subject of the correspondence. The "Ref" line is two (2) spaces below the last line of the "Subj" and is used when previously prepared material is cited. References are designated in small letters enclosed in parenthesis in chronological order and are fully identified as to origin, type, title and date. "Encl" line is two (2) spaces below the "Ref" line, if any. They are numbered with Arabic numerals enclosed in parenthesis and are used to introduce a listing of materials that are to be forwarded with the letter.
- e. The text of the letter begins two (2) spaces below the last line of the "Encl", "Ref", or "Subj" line, as the case maybe. The letter will be single spaced with a double space between paragraph, sub-paragraph, or sub-division or primary divisions or any further sub-divisions. A letter of less than nine lines maybe double-spaced, if neither reply nor further action is anticipated.

(Sample of a Naval Letter Form)

NAVAL RESERVE CENTER NATIONAL CAPITAL REGION
246th NROTCU, Adamson University
San Marcelino St., Ermita, Manila

18 February 2010

From: Commandant, 246th NROTCU

To: Commanding Officer, MSEG

Subj: Availability of one (1) Instructor

1. This unit will organize a silent drill platoon to compete for a fancy drill competition with other ROTC units AFP wide. The silent drill platoon will also perform during Foundation Day and in the 7th National Seafarers' Day (NSD) this September 2002. However, this unit lacks qualified drill instructor for this purpose.
2. In this connection, request the availability of one (1) rated drill instructor to assist us in this endeavor.
3. Representative from this unit will coordinate for the details.

RUEL GC NICOLAS
LT PN

3. **Civilian Letter:**

a. Civilian Letter - is used by naval establishment for correspondence addressed to persons with other governmental departments, and the Secretary of National Defense.

b. Non-Military/Naval letter follow the same general style with that of a civilian business letter, using salutation and complimentary clause. The use of military and/or naval phraseology which is associated with the command function should be avoided. For the sake of uniformity and in keeping with modern democratic trends in the preparation of official communication, formal letter should carry the complimentary clause "Very Truly Yours" instead of "Respectfully", or "Respectfully Yours". However, in letter to religious leaders of the Roman Catholic Church, the Protestant Church, Iglesia ni Cristo and other religious sect the formal complimentary clause shall be "Respectfully Yours". As usual, where the letter takes on a semi-official informal form, the salutation shall be "Dear Mr. ___," or "My Dear Mr" with the complimentary clause "Sincerely yours".

(General Style of Civilian Letter)

PHILIPPINE NAVY
HQS NAVAL RESERVE COMMAND
Cabildo St, Intramuros, Manila

January 24, 2010

Honorable Alfredo S Lim
Mayor, City of Manila

Dear Mayor Lim:

This is to acknowledge receipt of your letter of appreciation on the conduct of Coastal Clean-Up by the Naval ROTC units within Metro Manila.

In the name of officers and men of the Naval Reserve Command concerned, allow me to express our heartfelt gratitude on the recent action taken by that August body.

Conscious of the fact that more responsibilities lies ahead of us, we assure you that we will do our best to justify the reposed in us.

Truly yours,

RENATO F CASISON
CAPTAIN, PN(GSC)
The Adjutant General

MILITARY JUSTICE

Lesson Objectives:

Upon completion of this topic the student will:

- a. State the definition of military justice and its four (4) components.
- b. Enumerate the two (2) distinct division of military justice.
- c. Identify the corresponding Articles of War given an offense.
- d. Enumerate the persons subject to military law.
- e. State the types of courts-martial and their respective jurisdiction as to person, offense and punishment.

A. Introduction:

The military justice system is meant to enable commanders to dispose of personnel problems in their units in the most expeditious manner. Speedy disposition of cases preserves discipline, promotes justice and enhances the attainment of the Commander's mission.

In concept, the military justice system is designed to enforce discipline and administer justice in the military service, and it is composed of four (4) components:

1. **Investigation** - is the process of looking into the circumstances of a case for the purpose of verifying and establishing the facts. It also involves the gathering, handling, protection and preservation of evidence to prevent destruction, loss or tampering.
2. **Prosecution** - the accusation of a crime before a legal tribunal.
3. **Trial or adjudication** - a legal action before a judge and jury.
4. **Judgment or decision** - punishment given to the accused who committed such crime.

B. These components permeate two distinct division of the system, namely:

1. **Administrative cases** - are those that result in decisions not involving penal sanctions and may take such mild disciplinary or instructive forms as admonition, reprimand and the like. These are usually disposed of by all commanders from a detached unit to the highest command level. These can also be disposed of by other designated staff officers at certain command levels.

2. **Punitive cases** - are those that result in judgment of fine, hard labor, deprivation of liberty or combination of these whenever guilt of those involved are proven. These are usually higher command level matters.

The type of evidence and degree of proof required are also different for these two categories.

Punitive cases require guilt to be proven beyond reasonable doubt while administrative cases require only preponderance of evidence to gain positive adjudication.

C. Sources of Military Law:

Our study of military justice should encompass an understanding of military that we call the Articles of War. This set of laws, known as Commonwealth Act No. 408, was enacted by the Philippine National Assembly on 14 September 1938. Among others, the Articles of War defines the offenses punishable under the law and prescribes the corresponding punishment.

Rules governing the conduct of military personnel and providing for a method by which persons be punished are contained in the Articles of War, the Manual for who break them may Court-Martial, the Constitution of the Philippines and pertinent laws that brings us to the topic of military jurisdiction.

D. Military Jurisdiction:

Military jurisdiction emanates from several sources, among which are the constitution of the Philippines and International Law, some specific provisions of the Constitution granting some powers to Congress, and in the authority vested in the President of the Philippines as Commander-in-Chief of all Armed Forces. But how is military jurisdiction exercised and what are the agencies through which it is being carried out? Its exercises are carried out by the following agencies:

1. Court-Martial - General, Special and Summary
2. Commanding Officers in exercising their disciplinary powers under AW 105.
3. Court of Inquiry
4. Military Tribunals or Commission

Let us now consider the classes of individuals who automatically fall under the jurisdiction of Court-Martial. As a general rule, courts-martial have the exclusive jurisdiction over-all persons subject to military law who commit an offense penalized by the punitive articles of war.

E. Persons subject to military law:

1. All officers and enlisted personnel in the regular force of the AFP
2. All reservists from the date of their call to active duty and while on such active duty
3. All trainees undergoing military instructions
4. All cadets of the PMA and PAF Flying School, and Probationary Lieutenants on actual training
5. Retainers to camp and all persons accompanying or serving with the AFP in the field in time of war or when martial law is declared
6. All persons under sentence adjudged by a court-martial or military tribunal

It would be appropriate to state at this juncture that CAT and ROTC midshipmen are not "persons subject to military law" because they are not considered as "cadet" as defined by the Articles of War.

F. Selected Punitive Articles of War and Relationship Between Civil Military Courts:

As gleaned from historical records, the Articles of War were promulgated effective September 14, 1938 when the unicameral Philippine National Assembly enacted Commonwealth Act No. 408 which became the basic law that gave the guidance and operations of the country's Armed Forces, then known as the Army of the Philippines. Then as now, there are 120 Articles, most of which are lifted from US Uniform Code of Military Justice. It is for this reason that our articles of war had the same substance as the American Military Code of 1928 which was found applicable to Philippine conditions. Of the 120 Articles of War, 52 are considered as the punitive, because they specify what punishment is to be imposed for each military offense committed. Articles of War 54 to 105, inclusive, are the punitive articles. There are two (2) broad categories of crimes or offenses that are similarly within the contemplation of the Revised Penal Code of the Philippines two offenses that are strictly classified as purely military.

G. Punitive Articles:

1. Article 54 - Fraudulent Enlistment
2. Article 55 - Officer Making Unlawful Enlistment
3. Article 56 - False Muster
4. Article 57 - False Returns or Omission to Render Returns
5. Article 58 - Acts to Constitute Desertion
6. Article 59 - Punishment for Desertion
7. Article 60 - Advising or Aiding Another to Desert
8. Article 61 - Entertaining a Deserter
9. Article 62 - Absence Without Leave
10. Article 63 - Disrespect Toward the President, Vice President, Prime Minister, Chairman of the National Assembly or Minister of National Defense
11. Article 64 - Disrespect Toward Superior Officer

12. Article 65 - Assaulting or Willfully Disobeying Superior Officer
13. Article 66 - Insubordinate Conduct Toward Non-Commissioned officer
14. Article 67 - Mutiny or Sedition
15. Article 68 - Failure to Suppress Mutiny or Sedition
16. Article 69 - Quarrels, Frays and Disorders
17. Article 70 - Arrest or Confinement
18. Article 71 - Charges, Action Upon
19. Article 72 - Refusal or Receive and Keep Prisoners
20. Article 73 - Report of Prisoners Received
21. Article 74 - Releasing Prisoner of Without Proper Authority
22. Article 75 - Delivery of Offenders to Civil Authorities
23. Article 76 - Misbehavior Before the Enemy
24. Article 77 - Subordinate Compelling Commander to Surrender
25. Article 78 - Improper Use of Countersign
26. Article 79 - Forcing A Safeguard
27. Article 80 - Captured Property to be Secured for Public Service
28. Article 81 - Dealing in Captured or Abandoned Property
29. Article 82 - Relieving, Corresponding with or Aiding the Enemy
30. Article 83 - Spies
31. Article 84 - Military Property, Willful or Negligent Loss
32. Article 85 - Waste or Unlawful Disposition of Military Property Issued to Soldiers
33. Article 86 - Drunk on Duty
34. Article 87 - Misbehavior of Sentinel
35. Article 88 - Personal Interest in Sale of Provisions
36. Article 88A - Unlawfully Influencing Action of Court
37. Article 89 - Intimidating of Persons Bringing Provisions
38. Article 90 - Good Order to be Maintained and Wrong Redressed

Courts-martial and other military tribunals generally exist to assist commanders in the administration of military justice. Specifically they are established to enforce discipline in the military establishment and to serve as deterrents to military crimes and offenses. And, by the very nature of the conduct of trial, these courts-martial and other military tribunals hasten the administration of military justice. Let us look into the jurisdiction as to person, offense and punishment of each of the three (3) types of courts-martial to substantiate the contention just cited. Courts Martial are classified as follows:

H. General Courts Martial:

Consist of any number of members not less than five (5) and by whom may be appointed by the following: the President, Chief of Staff of the AFP and when empowered by the President, the Commanding Officers of major commands or task forces, division regional commands, the Superintendent of the Philippine Military Academy, Commanding Officers of separate brigades or body of troops.

Appointing authority shall detail as member of the general court martial a member of the bar, who may be an officer of the Judge Advocate General to be qualified for such appointment. A general court martial has a jurisdiction over all commissioned officers and other persons subject to military law who commit an offense capital in nature and whose possible sentence or punishment includes death, dismissal or dishonorable discharge from the service, total forfeiture of pay and allowances, or confinement at hard labor.

In the PN, a general court martial can impose the following: deprivation of liberty on shore, solitary confinement not exceeding thirty days, and solitary confinement on diminished rations not exceeding thirty days. Thus, we can see that since officers are triable by a general court martial, this thought alone construes a more tedious legal process to serve the ends of justice. This is compounded by the nature of the offense and the probable punishment to be meted out.

I. Special Courts Martial:

Consist of any number of members not less than three (3). The following may appoint special court martial: Commanding Officers of major commands, task forces, regional commands or divisions and when empowered by the President, Commanding Officer of a garrison, camp, brigade, regiment, detached battalion or other detached command or commissioned vessel. However, when subject Commanding Officer is the accuser or prosecutor, the court shall be appointed by superior authority.

A special court martial on one hand, has the exclusive jurisdiction to try all other persons subject to military law, except the officers, for offenses not capital in nature and whose probable sentence includes confinement not exceeding six (6) months, forfeiture of 2/3 pay per month not to exceed six (6) months per months, restriction to limits, hard labor without confinement not exceeding three (3) months, and reprimand, admonition and demotion in rank. The proceedings so conducted are not as tedious as those for a general court martial.

J. Summary Courts Martial:

An entirely different case would be the trial by a summary court martial where its proceedings are much faster than those of the other types of courts martial. Since it has at least one member who sits as president, trial judge advocate (TJA), and defense council at the same time, and since its jurisdiction as to person, offense, and punishment is limited, a summary court martial can dispose of a certain case in the most expeditious manner.

It shall have the power to try any person subject to military law, except an officer, a midshipman, a flying midshipman or probationary second lieutenant, for any crime or offense not capital but punishable by these articles. However, no non-commissioned officer shall be tried in a summary court-martial without the authority of the officer competent to bring him to trial in a special court-martial. It can impose judgment as follows: confinement for one month, restriction to limits for three (3) months and forfeiture or detention of 2/3 pay for one month.

K. Military Commissions or Tribunals:

The commission or tribunal plays the same role as court-martial. During martial law, which was in effect throughout the country from 1972 to 1981, these commissions or tribunals tried cases referred to them in the same expeditious way. Even civilians who committed offenses not triable by courts martial fell under the jurisdiction of these special bodies whose proceedings were in accordance with procedural law. Mention must be made here that that a Chinese national who was accused of drug pushing and distribution was found guilty by a military commission and meted out the death penalty thru musketry. These bodies had helped in the faster dispensation of justice which could have taken years to dispose of under normal condition.

HUMAN RIGHTS

Lesson Objectives:

Upon completion of this lesson the student will:

- a. Define Human Rights and its Basic Principles.
- b. State the Classification of Human Rights according to source, recipient, struggle and recognition, and derogability.
- c. State the provision of human rights under Article III, Bill of Rights

A. Human Rights:

Human Rights are the supreme, inherent and inalienable rights to life, to dignity and to self-development. It is the essence of these rights that makes man human.

B. Basic Principles in Human Rights:

Man has the basic rights to life, dignity and self-development. Society has the basic right to survive, self-determination and right to develop as a society. The government is created by the society or by the people, for the people, and of the people. The Philippines adopts the generally accepted principles of international law as part of the law of the land and adheres to the policy of peace, equality, justice, freedom, cooperation, and amity with all nations.

C. Classifications of Rights:

Rights can be classified according to the following:

1. According to source:

a. *Natural rights* are God given rights, acknowledged by everybody to be morally good. They are unwritten but they prevail as norms of the society.

Example, the right to life, dignity and self-development.

b. *Constitutional rights* are those rights guaranteed by the Constitution.

c. *Statutory rights* are those enacted by Congress. Put together, constitutional rights and statutory rights are sometimes referred to as legal rights.

2. According to recipient:

a. *Individual rights* are those rights being accorded to individuals.

b. *Collective rights* are rights of the society, those that can be enjoyed only in company with others.

Example, right to peaceably assemble, right to peace, right to development.

3. According to the aspects of life:

a. *Civil rights* are those that the law will enforce at the instance of private individuals for the purpose of securing to them the enjoyment of their means of happiness, example, right to a name, right to form a family, right to security of persons, papers and effects, right against unreasonable searches and seizures.

b. *Political rights* are those rights which enable us to participate in affairs of the government – either directly or indirectly. Example, right to vote, right to information on matters of public concern, right to initiative and referendum.

c. *Economic and social rights* are those which the law confers upon the people to enable them to achieve social and economic development, thereby ensuring them their well-being, happiness and financial security, like right to property, education, promotion of social justice.

d. *Cultural rights* are those rights that ensure the well-being of the individual and foster the preservation, enrichment, and dynamic evolution of national culture based on the principle of unity in diversity in a climate of free artistic and intellectual expression.

4. According to struggle and recognition:

a. First generation, the first kind of rights that people clamored and fought for these are the *civil and political rights*.

b. Second generation of rights are the *economic, social and cultural rights*.

c. Third generation of rights are *collective rights*.

5. According to its derogability:

a. *Non-derogable or absolute rights* can't be suspended or taken away even in extreme emergency, like the rights to life and dignity. Derogable or relative rights can be suspended or taken and limited depending on circumstances. Example, right to freely move may be limited through the imposition of curfews. However, three conditions should be present before a right can be limited/curtailed namely:

- 1) It is only publicly announced or legislated, it is not by official's whim only;
- 2) There is a state of emergency which requires the urgent preservation of the public moral, public safety and public good and;
- 3) There must be a time limit

D. Article III. Bill of Rights:

Constitutional Guarantees to Human Rights

Sec. 1 No person shall be deprived of life, liberty, or property without due process of law, nor shall any person be denied the equal protection of the laws.

Sec. 2 The right of the people to be secure in their persons, houses, papers, and effects against unreasonable searches and seizures of whatever nature and for any purpose shall be inviolable, and no search warrant or warrant of arrest shall issue except upon probable cause to be determined personally by the judge after examination under oath or affirmation of the complainant and the witnesses he may produce, and particularly describing the place to be searched and the persons or things to be seized.

Sec. 3 (1) The privacy of communication and correspondence shall be inviolable except upon lawful order of the court, or when public safety or order requires otherwise as prescribed by law.

(2) Any evidence obtained in violation of this or the preceding section shall be inadmissible for any purpose in any proceedings.

Sec. 4 No law shall be passed abridging the freedom of speech, of expression, or of the press, or the right of the people peaceably to assemble and petition the government for redress of grievances.

Sec. 5 No law shall be made respecting an establishment of religion, or prohibiting the free exercise thereof. The free exercise and enjoyment of religious profession and worship, without discrimination or preference, shall forever be allowed. No religious test shall be required for the exercise of civil or political rights.

Sec. 6 The liberty of abode and of changing the same within the limits prescribed by law shall not be impaired except upon lawful order of the court. Neither shall the right to travel be impaired except in the interest of national security, public safety, or public health, as may be provided by law.

Sec. 7 The right of the people to information on matters of public concern shall be recognized. Access to official records, and to documents, and papers pertaining to official acts, transactions, or decisions, as well as to government research data used as basis for policy development, shall be afforded the citizen, subject to such limitations as may be provided by law.

Sec. 8 The right of the people, including those employed in the public and private sectors, to form unions, associations, or societies for purposes not contrary to law shall not be abridged.

Sec. 9 Private property shall not be taken for public use without just compensation.

Sec. 10 No law impairing the obligation of contracts shall be passed.

Sec. 11 Free access to the courts and quasi-judicial bodies and adequate legal assistance shall not be denied to any person by reason of poverty.

Sec. 12 (1) Any person under investigation for the commission of an offense shall have the right to be informed of his right to remain silent and to have competent and independent counsel preferably of his own choice. If the person cannot afford the services of counsel, he must be provided with one. These rights cannot be waived except in writing and in the presence of counsel.

(2) No torture, force, violence, threat, intimidation, or any other means which vitiate the free will shall be used against him. Secret detention places, solitary, incommunicado, or other similar forms of detention are prohibited.

(3) Any confession or admission obtained in violation of this or Section 17 hereof shall be inadmissible in evidence against him. The law shall provide for penal and civil sanctions for violations of this section as well as compensation to and rehabilitation of victims torture or similar practices, and their families.

Sec. 13 All persons, except those charged with offenses punishable by reclusion perpetua when evidence of guilt is strong, shall, before conviction, be bailable by sureties, or be released on recognizance as maybe provided by law. The right to bail shall not be impaired even when the privilege of the writ of habeas corpus is suspended. Excessive bail shall not be required.

Sec. 14 (1) No person shall be held to answer for a criminal offense without due process of law.

(2) In all criminal prosecutions, the accused shall be presumed innocent until the contrary is proved, and shall enjoy the right so be heard by himself and counsel, to be informed of the nature and cause of the accusation against him, to have a speedy, impartial, and public trial, to meet the witnesses face to face, and to have compulsory process to secure the attendance of witnesses and the production of evidence in his behalf. However, after arraignment, trial may proceed notwithstanding the absence of the accused provided that he has been duly notified and his failure to appear is unjustifiable.

Sec. 15 The privilege of the writ of habeas corpus shall not be suspended except in case of invasion or rebellion when the public safety requires it.

Sec. 16 All persons shall have the right to a speedy disposition of their cases before all judicial, quasi-judicial, or administrative bodies.

Sec. 17 No person shall be compelled to be a witness against himself.

Sec. 18 (1) No person shall be detained solely be reason of his political beliefs and aspirations.

(2) No involuntary servitude in any form shall exist except as a punishment for a crime whereof the party shall have been duly convicted.

Sec. 19 Excessive fines shall not be imposed, nor cruel, degrading or in human punishment inflicted. Neither shall death penalty be imposed, unless, for compelling reasons involving heinous crimes, the Congress hereafter provides for it. Any death penalty already imposed shall be reduced to reclusion perpetua.

Sec. 20 No person shall be imprisoned for debt or non-payment of a poll tax.

Sec. 21 No person shall be twice put in jeopardy of punishment for the same offense. If an act is punished by law and an ordinance, conviction or acquittal under either shall constitute a bar to another prosecution for the same act.

Sec. 22 No ex post facto law or bill of attainder shall be enacted.

TERRORISM AND COUNTER-TERRORISM

Lesson Objectives:

Upon completion of this topic the student will:

- a. Define terrorism and counter-terrorism.
- b. Enumerate the different goals of terrorism.
- c. Enumerate known terrorist activities.
- d. Distinguish broad and specific goals of terrorism.
- e. Identify the three (3) types of strategy to counter terrorism.

A. Introduction:

The key to defeating terrorists is awareness, education and intelligence in order to deny, deter, delay and detect terrorist acts. Rapid coordination between agencies, military units, local police and foreign agencies concerned are essential in denying terrorist, targets and refuge.

B. Definitions:

1. Terrorism - is the unlawful use of force or violence against individuals or property to coerce or intimidate governments or societies often to achieve political, religious or ideological objectives.
2. Terrorist Incident - is a violent act dangerous to human life in violation of the criminal laws of the Philippines to coerce or intimidate government or societies to achieve political, religious or ideological objectives.
3. Terrorist - an individual who uses violence, terror and intimidation to achieve a result.

C. Goals of Terrorism

1. *Broad Goal.* To project uncertainty and instability in economic, social and political arenas.
2. *Specific Goals:*
 - a. Short-term terrorist goals:
 - 1) Gaining recognition
 - 2) Reducing government credibility or showing government incompetence.
 - 3) Obtaining funds and equipment
 - 4) Disrupting communications
 - 5) Demonstrating power
 - 6) Delaying political process
 - 7) Eliminating opposition leaders
 - 8) Reducing the government economy
 - 9) Influencing elections
 - 10) Demoralizing and discrediting the security force
 - 11) Intimidating a particular group
 - 12) Causing a government to overact
 - 13) Elevate social anxiety
 - b. Long-term goals:
 - 1) Topple government
 - 2) Influence top-level decisions
 - 3) Gain legitimate recognition for their cause
3. *Terrorist Activities:*
 - a. Bombings/Explosive
 - b. Arson
 - c. Skyjacking/Hijacking

- d. Seajacking/Marjacking
- e. Ambush
- f. Kidnapping
- g. Hostage-taking
- h. Robbery and Extortion
- i. Assassination
- j. International Narcotic Support
- k. Thefts

4. *Types of Terrorism according to location of incident*

a. Domestic Terrorism – involves groups or individuals who are based and operate within the territorial jurisdiction of the Philippine Island and are directed at elements of our government or population.

b. International Terrorism – involves groups or individuals who are foreign based or directed by countries or groups outside the Philippine territory or whose activities transcend national boundaries.

5. *Terrorist's Targets.*

a. Non-combatant target

- 1) Persons
 - diplomat as symbol of government
 - business executive as symbol of economic imperialism
 - foreign/political leaders
 - innocent civilian
- 2) Facilities
 - communication facilities/installation
 - power plants/lines

The exact location and interrelationship of such permanent objects as roads, buildings, trees, forests, rivers, bridges, railroads.

The description and position of movable and temporary objects as tables, chairs, dishes, vehicles, tools, etc.

The positions of people or vehicles in movement which are part of the incident and subject to immediate and continuous change after the incident, including the paths followed in their movements.

Complete descriptions of clues or leads left on the incident scene. Clues or leads may be removable or destructible items such as fingerprints, footprints, bloodstains, paper fragments, wearing apparel, cigar or cigarette butts, ashes, excrement, etc.

Negative Facts. The absence of any conditions, materials, or objects which might reasonably be expected on the scene in view of the nature and circumstances of the incident is termed as negative fact. The absence of fingerprints, sabotage devices, tool marks, ejected shells, blood (blood stains), etc., from the incident scene where their presence would be appropriate is a negative fact of value in analysis and solution of the case.

D. Strategy to Combat Terrorism:

1. Prediction

- a. Combating terrorism requires intensive knowledge of the goals, intentions and capabilities of the terrorists.
- b. Active Intelligence program exploiting military, civilian and foreign information.
- c. Inter-agencies' coordination and corporation
- d. EEI's regarding terrorists
 - 1) Organizational structure, size, composition
 - 2) Identify and locations of terrorists
 - 3) Modus Operandi
 - 4) International and national support sources and personalities

- 5) Motivations
- 6) Logistics
- 7) Training and Tactics
- 8) Intel capabilities
- 9) Probable targets

2. Prevention:

a. Physical Security – preventing unauthorized access to equipment facilities, materials and documents in offices, quarters and installations. Regular conduct of physical survey

b. Personnel Security – measures taken to reduce the vulnerability of an individual for attack;

1) Awareness and strict compliance of SOPs is going to high-risk places alone.

2) Proper education and training to personnel regarding terrorist counteractions to encourage vigilance and enhance further studies for more effective counteractions.

3) Total public cooperation – immediate reporting of sighting of suspicious persons and activities.

3. Deterrence:

a. Strict and hard line policies/laws against terrorism

b. Sanctions to be imposed to states sponsoring terrorism

c. Quick and effective tracking worldwide of terrorists through good inter-agencies cooperation and coordination

d. Non-acceptance of terrorism as an act to achieve a certain goal.

e. Media as a responsible tool to disseminate exact, complete and correct information to avoid panic to the public or else a very effective tool of terrorist to convey their cause.

NATURE OF INSURGENCY

A. Introduction:

Insurgency aims to seize political power by inciting the populace to overthrow the government. It is a conscious effort of an organized group to seize political power by inciting the population to overthrow the existing government through illegitimate and coercive means. The motivations of the insurgent group may vary depending on the issues popular to the target masses of a given country. It is for this reason that most insurgencies are cloaked as nationalistic and religious struggles.

B. Causes of Insurgency:

The insurgency problem is widely believed to be spawned by ills in the social and political order, wherein the government is unable to satisfy the expectations of the populace.

Some however believe that the Philippine insurgency is an "exported" struggle, a cultural or ideological imperialism wherein foreign communist countries impose communist philosophy upon our people. The ultimate objective of this type is the violent overthrow of the existing democratic government. Even if the government succeeds in solving the issues presented, the communists will always find other issues, which they could use to agitate the masses. Our government's strategy has always been focused on eliminating the root causes of insurgency among the vulnerable population and in defeating the insurgent organization.

The following are the commonly accepted factors that give rise to insurgency:

1. **Vulnerable Social and Political Environment.** Insurgents constantly strive to destabilize the government. The following social and political conditions that may exist in developing countries adversely affect their government's ability to satisfy the wants of their populace and make them fertile ground for any form of insurgencies to thrive.

- a. Population rate is much higher than economic growth.
- b. Low educational level and inadequate skills and technological know-how of the citizenry, resulting in high rate of unemployment.
- c. Inefficient, corrupt and unpopular government distrusted by the people.
- d. Lack of investment capital and control of nation's capital assets by foreign nations.
- e. Primitive and inadequate technology for agriculture and lack of raw materials for local industries
- f. Small or non-existent industrial base.
- g. Inequitable distribution of wealth, land and other means of production.
- h. Unwillingness of the political elite that rule the country to share or give up power.

2. Popular Cause:

A popular cause is the driving force or the fuel that sustains an insurgency movement. It is an important requisite for insurgency with which the masses could emotionally identify themselves. This cause is normally broad and vague enough such that each man can supply his own interpretation to serve his own wants and expectations in life. Abstract themes such as land reform, freedom of self-determination, equal opportunities, human rights and others, are often exploited by the insurgents to win adherents to their cause.

3. Underground Political Infrastructure:

The objective of this requisite for a successful insurgency is to provide leadership and direction for the struggle of the masses. This organization aims to establish a system of dual power, wherein a subversive shadow government competes with the duly constituted government for authority and control. Generally, an insurgent infrastructure is established in two parts:

- a. **Underground Political Organization.** The insurgent political organization is normally created down to the levels of municipalities and barangays, and serves to provide leadership and support base for the military guerrilla units.

b. **Military Guerilla Units.** This is the underground political infrastructure that consists of the armed group, which carries out the military objectives of the political organization in the early stage of insurgency. The rest of the organized masses will form the main bulk of the military guerrilla units during the part of the struggle.

C. Categories of Insurgency:

Insurgents groups aim to seize political power by inciting the local populace to overthrow the existing government thru illegitimate and coercive means. They normally adopt strategy or technique that suit the nature of their struggle and realized their objective of eventually overthrowing the government. Regardless of the distinct strategies they may pursue, insurgency movements generally fall under the following categories:

1. **Political Organized Insurgency.** In this category, an extensive and complex political structure is the first developed before any military operation against government forces are initiated. Generally, the main objective of a politically organized is to establish an effective shadow government to determine the authority of the existing regime.

2. **Military Organized Insurgency.** Characterized by small, decentralized armed insurgents groups serving as catalyst for mobilizing opposition against the government. The insurgents hope to focus on the disaffected population and destruction of the legitimacy of the regime through military action.

3. **Traditionally Organized Insurgency.** Utilizes the existing tribal or religious organizational structures. Insurgents do not follow a unique strategy to attain their objective, but may adopt any of the strategies of the other types. The recruitment of members is done mainly on the basis of ethnic exclusivity. In traditionally organized insurgencies, leadership conflicts are common and their leaders often lack sufficient motivation, experienced as insurgents and political discipline.

4. **Urban Insurgency.** The organizational structure for this category of insurgency is the cellular structures operating under conditions. Under this type, the insurgents threaten the legitimacy of the government thru the conduct of urban disruption operations.

D. Weapons of Insurgency:

The communist visionary Mao Tse Tung wrote that in order to manipulate the inherent conditions in the society to overthrow the existing social order, the insurgent movement should use the following weapons:

1. **The Party** - to provide the brain; It is the core of disciplined, dedicated and professional revolutionaries, which lead the revolutionary cause forward.

2. **The Army** - to provide the military force. It is always necessary for an armed struggle to take place for any form of insurgency movement to succeed. The insurgent army exists to ensure that the party will have absolute authority over the members and be able to impose their will over the populace.

3. **United Front** - to provide the shield to protect the party and the army against their enemies. The United Front is created to allow the insurgent leadership to expand its influence. It is the mass support base of the movement and the proverbial "sea" where the insurgent "fishes" thrive in Mao Tse Tung's popular dictum.

E. Phases of Insurgency:

Insurgency is a social stage- by- stage process. The growth of the insurgency movement involves initially the unnoticeable and graduated increase of the insurgent forces and their activities.

1. **Phase 1 – Strategic Defensive.** During this early stage of this insurgency, the Party, The Army and the United Front slowly grow from small and weak into a big and strong underground organization. This phase is mainly devoted to organizing, consolidating and preserving the incipient insurgent mechanism. It is during this stage that dedicated revolutionary cadres are recruited, social investigations are conducted, and intelligence are collected as the basis for formulation of revolutionary campaign plans and propaganda objectives.

2. Phase 2 – Strategic Stalemate. The insurgent movement at this phase goes through progressive expansion to solidify mass support and to bring continuous pressure on the government forces. It is now usually a period of terror, sabotage and active guerrilla war, as the balance of forces between the government and the guerrilla forces has become more or less even. As insurgent activities increase, hostilities generally escalate in strategic towns, cities and larger areas and the contest for popular support between the government and the insurgent forces has become more pronounced.

3. Phase 3 – Strategic Offensive. During this advanced stage of the insurgency, the balance of forces has tilted in favor of the insurgents who have gained moral supremacy and popular support over the government forces. The institution of government has greatly been weakened and has substantially been isolated from the support of the people. The government is now forced to go on strategic defensive as the insurgents become more active in their activities.

F. Counter-Insurgency Operations:

In studies of successful counter-insurgency operations all over the world, some common principles have been found to have been present or have been effectively employed by government forces. The techniques in applying these factors vary from one campaign to another, primarily due to the peculiarities in the nature of insurgency, the weather and terrain, as well as the economic, cultural and political considerations prevailing in a country. The following are the principles of a successful counter- insurgency operation:

1. Unity of Effort. The principle of unity of effort should be applied at all levels of command of the counter-insurgency forces. This should include the effectiveness utilization and coordination of all military, economic, political and psychological resources in a common effort to defeat the insurgency movement. Overall unity of effort requires the creation of a unified command of all operating forces in the field.

2. Total Isolation of Insurgent Area. Outside support from sympathetic countries and organizations in most cases, have largely been contributory to the insurgent's successes. Thus, it is an extreme operational necessity for counter- insurgency forces to be able to be completely isolate the areas where the insurgents operate.

3. Effective Intelligence. The most important problem faced by the commander of a counter- insurgency unit is how to locate the enemy. Under this principle, Commanders at all levels must exploit all possible sources of information, both civil and military, in order to have basis for effective counter – insurgency operations. One of the best sources of intelligence that could be exploited is the sympathetic population in the area.

4. Security. The factor of security is even more important in the conduct of counter- insurgency operations than in the conduct of conventional warfare. The guerrillas generally rely on the element of surprise when they strike against government forces. Commanders therefore, should always adopt strict security measures to protect his unit from espionage, observation, sabotage, harassment and other hostile insurgent actions.

5. Denial of Insurgent Sanctuaries. Under this principle, adequate measures should also be undertaken to deny the insurgents the opportunity to seek the refuge in sanctuaries inside the country or outside. As long as the guerrillas enjoy freedom of movements and the government forces, the effort to defeat them will be unsuccessful. Thus, all guerrilla bases and sanctuaries should immediately be destroyed.

6. Superior Mobility. In order to be successfully, counter insurgent force should possess marked superior mobility over guerrillas, to be able to be effectively seek, locate and destroy them. In order to be able to close in with the enemy achieve the element of surprise to destroy him, it is necessary for commanders to train their forces to effectively move swiftly and silently on foot in all terrain and weather conditions.

7. Qualitative and Numerical Superiorities. Generally, a marked numerical superiority is required to effectively defeat a guerilla force. Since actual presence of troops are necessary to negate the freedom of action of the insurgents. The degree of numerical superiority varies and primarily depends on the inherent fighting capability of the guerrillas and the amount of support they receive from external and internal sources to attain the required density of contingency troops in an area, civilian volunteers may be train as para-military forces. These "force

multipliers" should be properly organized, trained and equipped by a quality force composed of highly disciplined and specially trained troops.

8. Population and Resources Control. Commanders should undertake measures to effectively control the population and the other resources that are coming inside his area of operation. This is necessary to be able identify and segregate the insurgents from the other law-abiding local population and to control the passage of material support to them. An effective control measures is the adoption of a pass and identification system and other methods of keeping track of the activities and movements of individuals and resources in the insurgent controlled area.

9. Population Support. Insurgents continuously wage psychological warfare and are quick I identifying with the wants and popular aspiration of the people. Hence the government should adopt programs that would directly address the fundamentals causes of discontent of the masses and thereby make the propaganda line of the insurgents less attractive to them. Through discipline military forces, who may reach the remotest part of our country during operations, the government must convince the people that viable peace and development program actually exist and that it is sincerely concerned with their welfare. However, before such social, economic and political reform programs could be carried out, a reasonable semblance of law and order must first be established.

10. Pressure on Insurgents. Base on the principle of the offense, the main objective of all counter insurgency operation should be to promptly locate the guerrilla force, and from that point onward to maintain constant and relentless pressure on it .Also, when the enemy attempts to disengage, vigorous pursuit operations should be conducted with the clear-cut objectives of destroying the entire guerrilla force. Mere disperse when engaged with a superior force. prompt action against any discovered guerrilla organization build- up should immediately be undertaken. This immediately action can normally reverse a deteriorating situation since at this point, the movement is still weak at its incipient stage. An escalating insurgency becomes increasingly difficult to defeat.

11. Clear, Hold and Consolidate. Counter-insurgency operation should provide for the conduct of an effective clearing operation that will significantly eliminate insurgents in a given area. This principle requires the adoption of effective means on how to hold a given area once it has been cleared. The operation should also provide for the restoration of the local government, and the immediate bringing in of essential government services and functions, This will enable the population to return productive status faster and in more efficient manner.

G. Strategy for Counter-Insurgency:

1. Government Policy of National Reconciliation. Under this concept, the government adapts measures to reach out to dissidents of different persuasions to return to the folds of the law and be re- integrated in to the mainstream of the society. This policy is also aimed to encourage and assist them and to become law – abiding and productive citizens.

2. One-on-One Deployment. Counter – insurgency units are organized and deployed on a one- on –one basis to address a specific guerrilla unit operating in a single geographical area of responsibility. Under this concept, all participating units are placed under the operational control of a single military commander whose AOR encompasses the areas of a prioritized guerrilla front.

3. Harnessing People's Love for Peace. The government thru its agencies , as supported by the members of the armed forces m, should effectively organized all sectors of the society, to include the working class , peasantry, students, businessman, professionals, media and others , into a broad United Front to wage a peaceful People's War for Democracy'.

4. Conduct of War of Rapid Conclusion. In order to effectively end the insurgency, the AFP must move fast and decisively defeat the insurgent force in the shortest possible time before they attract more adherents and become fully strong. The movement is much easier to defeat at its incipient stage. If the conflict will be allowed to drag on, The AFP's limited resources will be dissipated and the resolved and morale of the operating troops will be weakened, as the insurgents steadily gain strength as they wage a "protracted war". "

5. Gradual Constriction Operation. Under this concept, the AFP progressively operates in a manner such that the areas surrounding the identical insurgent sanctuary or strong points are cleared of their influence. Here, The Barangay and village defense forces should be organized starting from the outskirts of the insurgent controlled areas, gradually moving towards the center of the broad guerrilla front. Thru the use of combined intelligence, combat and military operations, the AFP slowly moves into the affected areas neutralizes the insurgent political infrastructure and eventually destroy the main enemy force.

6. Priority on Security and Development. Lawlessness and poverty are among the causes of insurgency is to solved. The government should give high priority on its policy on providing an atmosphere of peace and security for the people, and in bringing in development in their communities. After the military forces have cleared the formerly insurgency- affected areas of winning back the loyalty of the people. The government agencies should now come to the area and pave the way for the bringing in the of the needed services for the people. The Department of Social Welfare and Development for example should now establish workable livelihood projects to help then people improved their quality of life thru self- help. On the other hand , the military unit in the area will should now organize and train the people to form their permanent local security force to maintain peace and order for the members of the community. This will allow them to continue improving their lives without being molested by the insurgents. Development will only come to a locality after peace and order have been restored and when the security of the people is assured.

7. Extensive Intelligence and Psychological Operations. This strategy involves the conduct of non-military actions of both military and civilian sectors of the government to determine the plans and detect the presence of insurgent forces in order to neutralized and eventually destroy the insurgency movement by undermining the political will of its leaders and the ideological; commitment of it's leaders.

H. Rules and Behavior during Counter-Insurgency Operations:

Here are some practical rules of behavior that you and your men should follow during conduct of counter-insurgency operation:

1. Respect the rights of the people be tolerant of their culture, custom and traditions.
2. Do not take anything from the people. Pay fair price from anything you buy from them, Return all the things you barrowed to the people who awn them. Pay fair compensation to the owner if things you barrowed are damaged.
3. Do not be burden to the people letting them "entertain" you at their expense when you visit their Barangays. Always pay for the meals you eat and drinks you take. Also when traveling, take care not to damage any shelter or crops of the people.
4. Ensure that tour drivers observe road courtesy and discipline. They should drive carefully when passing through populated areas. Pay a fair price for live stock that may be hit by you vehicles.
5. Do not drink alcoholic drinks in places exposed to the public, especially when in uniform. Never get drunk when invited in civilian social activities.
6. Be friendly and helpful to the local people in the area. Remember that you are a visitor in their Barangay and you are there to be their protector and to help them to solve their problems. Do not be arrogant an act in an overbearing manner with them. Do not intimidate, scold or hurt anyone.
7. Do not liberties with the women in the locality. This will cause extreme resentment among the people.
8. Always act in accordance with the local tradition, customs and tradition, custom and culture. Do not do anything that will interfere with the exercise of the people's rights or liberties. Take extra care not to cause suffering to the people and not to instill hatred in their hearts.

9. Pay particular respect to the women and to the old people, as well as the local leaders, such Barangay Captain, Tribal Leaders, Teachers, Priest, and others.
10. Actively participate in Barangay activities and try to help the people in their self help projects. Provide the people the needed leadership and technical assistance in the execution of their community projects.
11. Always treat detainees and suspected guerillas humanely.

BASIC SIGNAL COMMUNICATION

Lesson Objectives:

Upon completion of this lesson the student will:

- a. Identify the five (5) means of basic signal communication
- b. Demonstrate arm and hands signal.
- c. Demonstrate signals for combat formations and battle drills.
- d. Explain radio communication procedures.

A. Introduction:

Signals are used to transmit commands or information when radio and other means of communication are not available or during instances when silence must be maintained. The use of signals is particularly useful during conduct of patrols or during the thick of firefight where verbal commands are difficult to understand. The use of signals are generally embodied in a unit's Standing Operating Procedures (SOP) and all members are expected to know them by heart. Subordinate leaders are required to repeat the signals of their commanders to ensure prompt and correct execution of the orders by the men.

B. Five (5) Means of Communication:

1. Whistle:

The whistle is an excellent signal device used by small unit leaders. It has, however, some disadvantages. The sound of whistles from adjacent units may confuse the men and its affectivity as a means of communication may be adversely affected by normal noise that exists in the battle field. Nevertheless, the whistle may be an effective means of transmitting instant messages to a large group of men. Remember when you intend to use a whistle as a signal, be sure that it is pre-arranged and that all the men understand what every whistle sound means.

2. Semaphore:

Semaphore flag signaling is rarely used today except in the Navy where such method of communication is still being used as a back-up communication means between ships at sea.

3. Morse Code:

Morse Code is an internationally known communication code used as an alternate to voice-radio communication. Message transmission through the use of Morse Code is much slower than through voice-radio communication, but it is as reliable. Morse code messages may be relayed through dots and dashes on the telephone or through short and long flashes on signal lights.

A	. _	N	_ .	1	. _ _ _ _
B	_ ...	O	_ _ _	2	.. _ _ _
C	_ . _ .	P	. _ _	3	... _ _
D	_ ..	Q	_ _ .	4 _
E	.	R	. _ .	5
F	.. _ .	S	...	6	_
G	_ _	T	_	7	_ _ ...
H	...	U	.. _	8	_ _ _ .
I	..	V	... _	9	_ _ _ . .
J	. _ _ _	W	. _ _	0	_ _ _ _
K	_ . _	X	_ . . _	(Period)	. _ . . . _
L	. _ .	Y	_ . _ _	?	.. _ _ .
M	_ _	Z	_ _ .	(Comma)	_ _ . . _

4. **Special Signals:**

Special signals consist of all special methods and devices used to transmit commands or information. These may take the form of taps on the helmet or rifle stock to signal "halt", "danger", "move forward" or "assemble here". Necessity and common sense usually dictate the appropriate special signal to be used in communicating with the men. Nevertheless, these signals must be clearly understood and properly rehearsed by the unit before they are used.

Various pyrotechnic and smoke signals may also be effective to signal the time to attack, to withdraw or to commence performing a specific task, such as to cease or shift supporting fires. They may also be used to mark the limits of front lines and indicate targets. Before you make use of a special signal for your unit, be sure to check it with other leaders to ensure that they are not using the same signal which may have different set of meanings.

5. **Arms and Hand Signals:**

Arm and hand signal are often made a part of a unit's SOP and it may vary from one unit to another. This silent means of relaying commands to the men are usually used during patrols or infiltration missions when silence is extremely important. Following are the standard arm and hand signals. However, you may device your own for your unit, but be sure your men understand their meanings before you use them.

a. *Decrease Speed.* Extend your arm horizontally sideward with your palm to the front. Then wave your arm downward several times keeping your arm straight. Do not move your arm above the horizontal.

b. *Increase Speed or Double Time.* Carry your hand to your shoulder with your fist closed. Rapidly thrust your fist upward vertically to the full extent of your arm and back to your shoulder for several times.

c. *Change Direction or Column (Right or Left).* Extend your left or right arm horizontally to the side with palm facing to the front.

d. *Enemy in Sight.* Hold your rifle horizontally with the butt in your shoulder and the muzzle pointing in the direction of the enemy.

e. *Commence Firing.* Extend your arm in front of your body, hip high with your palm down. Move it through a wide horizontal arc several times.

f. *Fire Faster.* Execute rapidly the signal "Commence Firing". For the machine gunner, this signal means change to a higher rate of fire.

g. *Fire Slower.* Execute slowly the signal "Commence Firing". For the machine gunner, this signal means to slow-down rate of fire.

h. *Cease Firing.* Raise your hand in front of the forehead with your palm facing to the front. Then swing your hand and forearm up and down several times in front of your face.

i. *Assemble.* Raise your hand vertically to the full extent of your arm with your fingers extended and joined with palm facing to the front. Then wave in large horizontal circles with your arm and hand.

j. *Form into Column.* Raise either of your arm to the vertical position. Drop your arm to the rear, describing complete circles in a vertical plane, parallel to your body. This signal may be used to form troop or vehicular columns.

k. *Form into Echelon (Right or Left).* Face the unit being signaled and extend one arm 45 degrees above and your other arm 45 degrees below the horizontal with your palm facing to the front. Your lower arm shall indicate the direction of the echelon. Supplementary commands may be given to ensure prompt and proper execution.

l. *Form into Skirmishers (Fire Team)*. Raise your both arms laterally until they are horizontal. Keep your arms and hands extended with the palms down. If it is necessary to indicate a direction, move in the desired direction at the same time you execute the signal. This signal is also used to command a squad to form into a line formation.

m. *Form into Wedge*. Extend your both arms downward and to your side at an angle of 45 degrees below the horizontal with your palms facing to the front.

n. *Form into Vee*. Extend your arms at an angle of 45 degrees above the horizontal and form the letter "V" with your arms and torso.

o. *Platoon*. Extend both arms forward with your palms down towards the leader or the unit whom your signal is intended. Then describe large vertical circles with your hands.

p. *Squad*. Extend your hand and arm with your palm down, towards the squad leader of the squad you are addressing. Then distinctly move your hand up and down several times from the wrist, keeping your arm steady.

q. *Fire Team*. Bring your right arm diagonally across your chest.

r. *Close Up*. Start your signal with your both arms extended sideward and palms forward. Then bring your palms together in front of your body momentarily. When repetition of this signal is necessary, bring your arms back to the starting position by a movement along the front of your body.

s. *Open Up or Extend*. Start your signal with your arms extended in front of your body and palms together. Then bring arms to the horizontal position of your sides with palms facing forward. When repetition of this signal is necessary, return your arms along the front of your body as in the starting position. You may repeat the signal until you are understood.

t. *Disperse*. Extend your either arm vertically overhead. Wave the hand and arm to the front, left, right and rear with your palm facing towards the direction of each movement.

u. *Forward, Advance to the Right (Left)*. This signal is always used when starting from a halt. Face and move in the desired direction of the march and at the same time extend your arm horizontally to the rear. Then swing it overhead and forward in the direction of the movement until it is horizontal with your palms down.

v. *Halt*. Carry your hand to your shoulder with your palm facing to the front. Then thrust the hand upward vertically to the full extent of your arm and hold it in that position until the signal is understood.

w. *Freeze*. Make the signal for "halt" and clinch your hand into a fist.

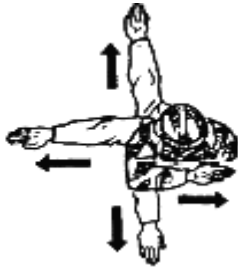
x. *Down and Take Cover*. Extend your arm sideward at an angle of 45 degrees above the horizontal with your palm down. Then lower your hand to your side. You may use both arms in giving this signal. Repeat the signal until understood.

y. *Hasty Ambush Right (Left)*. Raise your fist to your shoulder level and thrust it several times in the desired direction.

z. *Rally Point*. Touch your belt with one hand and point to desired spot on the ground you want to designate as your unit's rally point.

C. Signals for Combat Formations and Battle Drills:

Leaders of dismounted units use arm-and-hand signals to control the movement of individuals, teams, and squads. These signals are used by infantry and also by combat support and combat service support elements organized for infantry missions.



Disperse



Assemble/Rally



Follow Me, or Come Forward



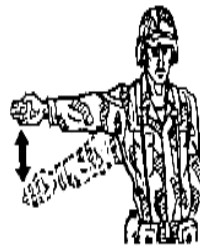
Double Time



Fix Bayonets



Enemy in Sight



TAKE COVER



Vee



WEDGE



Line



Coil



Echelon Left



Echelon Right

D. Patrolling Arm and Hand signals

Patrolling is conducted by many type units. Infantry units patrol in order to conduct combat operations. Other units patrol for reconnaissance and security. Successful patrols require clearly understood communication signals among members of a patrol



E. Familiarization of Different Radio Equipment, Capabilities and Limitations:

The radio is widely used in all the operating units of the Navy. It is flexible and quite transportable such that it can go where the individual soldier goes. It provides the fastest means of communication that is adaptable to the varying field conditions. The major disadvantage of the use of radio, however, is that it is the least secured means of communication. Since the radio operates on the principle of transmitting electromagnetic waves, the enemy with his own radio set and a little knowledge of the types of radio government forces use, could easily intercept our transmissions. It is on this regard that you should observe radio discipline at all times. You should therefore, always assume that the enemy is listening whenever you use the radio.

1. *Guidelines For Radio Transmission.* Follow these guidelines when making radio transmissions:
 - a. Always plan or write down your message before transmitting.
 - b. Always listen before starting to talk so as not to interrupt other conversations. When about to talk, press down the button on the side of the hand set and do not talk until the hissing sound ceases. Talk directly into the microphone.
 - c. Speak distinctly and enunciate each word in normal tone. If the receiving operator must write down your transmission, allow him time for copying.
 - d. Follow the standard voice-radio procedures when transmitting.
 - e. Release the push-to-talk button immediately after the completion of your transmission; otherwise you will not hear the other station.
 - f. Camouflage your radio set when carrying it on you back. Bend the whip antennae slightly downward and to the rear to make it inconspicuous to the enemy. Several radio men became casualties because they failed to take this measure.

2. Radio Telephone Procedures:

Radio Telephone procedures refer to the system of transmission through the use of voice and formalized language to simplify radio communications. Included in this system are a call signs authorized to be used by radio stations and short procedure words (prowords) and phrases that a radio operator uses to establish communication with another station. The rationale behind the use of prowords is to prevent misunderstanding between radio operators and repetition of transmissions. By using short phrases in transmission, the time is substantially cut down.

To preclude the possibility of committing errors in the transmission of messages thereby giving rise to confusion between radio operators, the phonetic alphabet, which is of universal applications is used. Since words have similar sounds, confusion may develop and this can be eliminated by the use of the phonetic alphabet. This brings us to the purposes behind the use of phonetic alphabet which are as follows:

- a. To prevent the radio operator from getting confused when confronted with words having similar sounds.
- b. To spell out words that is difficult to pronounce.

Call signs are used to identify each station within a radio net. This is one security aspect of radio communication that prevents the entry of an unauthorized entity into the net. The improper use of call signs may signify that a violation is already committed.

Procedure words or phrases that have been assigned meanings are used as substitutes for long sentences for the purpose of expediting message handling. This is one way of keeping voice transmission as short and clear as possible. For instance, the prowords "out" means "This is the end of my transmission to you and no answer is required or expected". This is also an appropriate prowords to be used when entering a radio net. The following are the most commonly used words and phrases in radio transmission and their corresponding meaning:

Prowords	Explanation/Meaning
OVER	My transmission is ended and I expect a response from you
OUT	My transmission is ended and I expect no response from you (I will turn off the radio set)
ROGER	I have received your last transmission satisfactorily
WILCO	I will comply to your instruction
QUERRY/ INTERROGATIVE	(These are prowords used before a question) Example:INTERROGATIVE MY SIGNAL–How do you receive my transmission?
SAY AGAIN	I did not understand your transmission. Request repeat your transmission
I SAY AGAIN	I am repeating the transmission or portion thereof as indicated
REPEAT ALL AFTER	Request repeat all your transmission after the word.
WAIT ONE	Request that you wait for about one minute.
BREAK . . BREAK	Emergency, stop your conversation and allow me to use this net for a very urgent transmission

3. The Phonetic Alphabet

When transmitting messages over the radio or telephone, certain words in the conversation may be misunderstood because of their similarity in sound to other words. To avoid misunderstanding by the receiving operator, the message sender should use the phonetic alphabet to spell out words which might be misunderstood. Following are the letters of the alphabet and their equivalent phonetics:

LETTER	PHONETIC
A	Alpha
B	Bravo
C	Charlie
D	Delta
E	Echo
F	Foxtrot
G	Golf
H	Hotel
I	India
J	Juliet

K	Kilo
L	Lima
M	Mike
N	November
O	Oscar
P	Papa
Q	Quebec
R	Romeo
S	Sierra
T	Tango
U	Uniform
V	Victor
W	Whiskey
X	X-ray
Y	Yankee
Z	Zebra

4. Numeral Pronunciation

Pronunciation of numbers over the radio and the telephone should be exaggerated to avoid being misunderstood by the receiving party. Each digit of large numbers is pronounced separately except in the case of even "hundreds" and "thousands" Here are the numerals and their corresponding pronunciation:

NUMBER	PRONUNCIATION
0	Zero
1	Wun
2	Too
3	Thu-ree
4	Fo-wer
5	Fi-yiv
6	Six
7	Seven
8	Ate
9	Niner
10	Wun-Zero
18	Wun Ate
56	Fi-yiv Six
96	Niner Six
1234	Wun Thu-ree Fo-wer
800	Ate Hundred
805	Ate Zero Fi-yiv
17,000	Wun Seven Thousand
17,500	Wun Seven Thousand Fi-yiv Hundred

BASIC INTELLIGENCE

Lesson Objectives:

Upon completion of this topic the student will

- a. Define Intelligence and Counter-Intelligence.
- b. Enumerate the four (4) Phases of Intelligence Cycle.
- c. State the factors to be considered during planning phase
- d. Enumerate the tools of recording
- e. Differentiate the different criteria in evaluation rating

A. Introduction:

Military intelligence plays a very significant role in the conduct of war. However, intelligence is not only concerned with wars. It also plays an important role during times of peace because military planners must have to contend with the preparation of plans and policies for future contingencies based on sound intelligence.

As time went on, the crude means of producing intelligence were improved with the introduction of newer techniques and more sophisticated methods of intelligence operations. As a consequence thereof, espionage was resorted to between and among states as a necessary venture in the conduct of their affairs not only in time of war but also during the reign of peace.

Espionage, in this sense, is an attempt by one government to obtain, secretly or under false pretenses, information about another through means not available from normal channels. Espionage is universally accepted as a normal function of the state in the defense of its national interests. Thus, espionage is sanctioned by international law. On the other hand, a uniformed soldier in enemy territory who gathers information is not an espionage agent.

Now, for the purpose of this study, let us look into the importance of intelligence as visualized by Sun Tzu, a Chinese military philosopher and thinker. He said: "If you know the enemy and know yourself, you need not fear the result of a hundred battles. If you know yourself but not the enemy, for every victory gained you will also suffer a defeat. If you know neither the enemy nor yourself, you will succumb in every battle."

B. Definition of Terms:

1. **Intelligence** - knowledge acquired by the collection, evaluation, analysis, integration and interpretation of all available information concerning an enemy, whether actual or potential and on the areas of operation to include whether terrain together with the conclusion drawn there from. It is used as a basis for all operational plans and estimate. It includes deduction concerning current and future enemy capabilities, vulnerabilities and possible course of action that can effect the accomplishment of a mission. It also includes counter intelligence.

2. **Counter-Intelligence** - all active and passive measures taken to ensure the safeguarding of information, personnel and materials from espionage, subversion and sabotage by foreign nations or dissidents or disaffected groups or individuals which constitute a threat to national security.

3. **Intelligence Cycle** - intelligence work is continuous a process. It is a repetition of what has transpired or become known. There is neither a beginning nor an end. It is a never ending task. Therefore, there is no first nor last phase – hence a cycle.

C. Four (4) Phases of Intelligence:

The intelligence cycle is divided into four (4) phases, each of which is vital and equally important. These are the following:

1. Planning or Direction of the Collection Effort
2. Collection of Information
3. Processing or Production of Intelligence
4. Dissemination and Use of the Resulting Intelligence

All of these four (4) phases are oriented on the mission and may take place either simultaneously or one at a time, depending on the situation. All intelligence activities support the accomplishment of the mission.

D. Planning or Direction of the Collection Effort:

Planning the collection effort is a crucial phase in the production of intelligence for it is here that we determine the intelligence requirements to support the Commander's mission. It is here also that we determine which collection agencies are to exploit which source.

E. Five (5) Steps to consider in Planning:

1. Determining the Intelligence Requirements - Guidelines/Consideration
 - a. *Enemy Capabilities* - these refer to enemy strengths which would affect the accomplishment of the mission.
 - b. *Enemy vulnerabilities* - these refer to enemy weaknesses or that which render the enemy to damage, deception and defeat.
 - c. *Weather and Terrain* - weather information may be required to determine its effect on the enemy and the terrain. Terrain data includes cross-country traffic ability, obstacles, roads and rail conditions and susceptibility to flooding.
 - d. *Order of Battle* - when the enemy situation is vague, and for purposes of long range planning, order of battle factors may be the basis for intelligence requirements.
 - e. *Next Major Decision* - future operations are considered. If the intelligence does not plan ahead, the Commander, will find himself ready to continue the work /attack, but the information of intelligence needed.
 - f. *Preventing Surprise of the Command* - required in order to avoid tactical surprise. To do this, he studies the disposition of the enemy, the terrain, information of new enemy weapon, tactics and equipment and the requirements of his tentative plans. The conclusion as to what information is needed here creates more entries on the list of intelligence requirements.
 - g. *Information Needs of Higher or Adjacent Units* - Each level of command will normally be assigned collection mission by higher, lower and adjacent headquarters. These intelligence requirements announced by each echelons of command are properly repeated as intelligence requirements of subordinate units only when:
2. Determining the Intelligence Priorities. There are two requirement priorities namely:
 - a. Essential Elements of Information (EEIs)
 - 1) EEIs are the Commander's highest priority requirements and result from a lack of information or intelligence.
 - 2) EEIs are obtained items of information and or intelligence needed by the Commander at a particular time in making a decision with an acceptable degree of confidence.
 - 3) EEIs are items of information about the enemy and the area of operation that the Commander must have to arrive at a reasonably sound decision during a particular phase of an operation.
 - b. Other Intelligence Requirements (OIRs)

Those items of information needed by the Commander but are not his highest priority.

 - 1) *Collection Worksheet* - It is a means, either written or oral, whereby an Intelligence Officer takes the intelligence requirements as announced by the Commander, and by allowing a logical orderly process, analyze the intelligence requirements into indications and translate the indications into specific missions or request to collection agencies, together with the designation of time and place the information is to be reported.
 - 2) *Collection Agency* - it is an individual or unit which systematically exploits the source of information in order to gain the desired information.
3. Intelligence Specialists - individuals trained in the specialized aspects of intelligence. They are organic to the military organization.

Examples: OB Specialist; Interrogators; Photo interpreters
4. Troops - Soldiers and their Units Examples: Battalion; Division Corps; Field Army

5. Special Units - Units dealing in the collection of information on particular activities.

F. Collection of Information:

1. Definition - the systematic extraction of the information from source.
2. Primary Consideration:
 - a. Source of Information - they are the actual origin of the information. Normally they are not under the control of the collection agencies. They are further categorized into the following types:
 - 1) Persons - civilian enemy personnel, evaders and escapees.
 - 2) Things - captured documents or materials
 - 3) Detectable enemy activity - patrol activity, vehicle tracks, troops sighting, radio activity.
 - b. Collection Agencies - this topic has been discussed under planning collection effort.

F. Processing or Production of Info into Intelligence:

1. Definition - the part of the cycle whereby information is recorded, evaluated and interpreted, the end result of which becomes intelligence.
2. Three (3) Related Parts of Processing:
 - a. Recording - it is a mechanical process whereby all collected information recognized in a ready usable form. Recording reduces all available information, thus making subsequent interpretation easier and more accurate. Recording by itself does not produce intelligence. It merely facilitates the production of intelligence.
Tools used in Recording:
 - 1) Intelligence Journal
 - 2) Intelligence Worksheet
 - 3) Enemy Situation Map
 - 4) Intelligence Files
 - b. Evaluation - the examination of information to determine its pertinence or value in the production of intelligence, the reliability of its source or agency and, its credibility or accuracy.

G. Evaluation Rating:

When information is disseminated to other headquarters or units, it is often necessary for the intelligence officer to indicate his evaluation of the accuracy of the information to the recipients. It is obvious that a long and involved explanation of his evaluation would be inappropriate. For this reason, a simple and effective standard evaluation rating system has been developed. Using this system, the intelligence officer assigns a combined rating to the reliability of the source and agency which is indicated by a letter designation. Then, he assigns a separate rating to the probable accuracy of the information which is indicated by a numerical designation.

Reliability of Source and Agency

- A - Completely Reliable
- B - Usually Reliable
- C - Fairly Reliable
- D - Not Usually Reliable
- E - Unreliable
- F - Judge

Probable Accuracy

- 1 - Confirmed
- 2 - Probably True
- 3 - Possibly True
- 4 - Doubtfully Reliable
- 5 - Improbable
- 6 - Truth Cannot be Judge

H. Interpretation:

The process of determining the significance of information with respect to information and intelligence already at hand and the drawing of conclusions as to the probable meaning of the evaluated information. The intelligence analyst accomplishes interpretation through the use of its three (3) components namely:

1. Analysis, which is the examination of information with selected emphasis in the light of what has been previously known. Essentially, it means, taking apart an information to critically examine each component in view of its effect on a given situation.

2. Integration, which is the combining of selected data to form a pattern which will have meaning and establish a basis for deduction, or conclusion. The process of integration can be compared to the assembly of the pieces of a "jigsaw puzzle" into a picture which will allow the viewer an opportunity to see the images formed by their junctures.

3. Deduction, which is simply the formation of conclusion concerning the effect of the evaluated information on the current situation.

I. Dissemination and Use of Intelligence, Its Criteria and Methods:

1. Definition - the process of transmitting information and intelligence to higher, lower, and adjacent units for the possible use.

2. Criteria or Consideration in Dissemination:

a. *Timeliness* - for dissemination to be timely, information and intelligence:

b. *Propriety* - for information and intelligence to be disseminated properly, they must be:

1) Sent to the correct ultimate users.

2) Presented in a form that lends itself for immediate use

3) Distributed through the most effective means of communications appropriate to both time

and securing requirements.

4) Adequate and accurate.

3. Methods of Dissemination

a. By personal contacts, which include staff visits, telephone calls and conferences.

b. By messages which include spot report.

c. By Intelligence documents, which include intelligence estimates, intelligence summary, periodic intelligence reports, intelligence annex to an operation order, and tactical study of weather and terrain.

BASIC SURVIVAL

Lesson objectives:

Upon completion of this lesson, the student will be able to:

- a. State the acronym of SURVIVAL.
- b. Discuss the factors to be considered in selecting a camp site.
- c. Explain the methods and factors to be considered in obtaining food.
- d. Explain the methods of preparing traps, fire and preserving food.
- e. Discuss how to locate the source of water,

A. Survival Techniques:

Discussed here are some important pointers that you should remember when you find yourself and your men in a life-threatening situation. These pointers could be best remembered by the acronym: SURVIVAL.

1. **Size up the Situation.** Size up the situation by considering your own capability as an individual, your surroundings and the totality of the situation you are in, your equipment and available supplies.

2. **Undue Haste Makes Waste.** Remember that if you will not deliberately plan your moves you are bound to waste a lot of your energies and resources. Keep yourself calm, take stock of the resources available to you and plan how you are going to utilize them to survive. Do not be too eager to move.

3. **Remember where you are.** Carefully plan all your movements so that you will not get lost. Always remember where you are in relation to the enemy controlled areas and the location of friendly units and controlled areas. You should also know the location of local water sources.

4. **Vanquish Fear and Panic.** Take control of your fears and do not panic. You can reduce the adverse effects of fear by hoping for the best but expecting and preparing for the worst eventuality. Maintain your optimistic attitude and learn to accept the fact that the situation may further turn to worst.

5. **Improvise.** Be resourceful and try to make-do with available materials in the area to improve your living conditions. Learn to subsist and live with unpleasant conditions that you may encounter. Improvise a shelter using indigenous materials that are available in the area. Learn to use natural things around you to improve your living condition. Use your imagination.

6. **Value Living.** Never lose hope and remain a true fighter. Preserve your health and conserve your strength. Hunger, cold and fatigue lower the efficiency and stamina of an individual but your refusal to give into problems and obstacles that you face, will give you the mental and physical strength to endure. Think of your loved ones who are concerned and are praying for your safe return. Never forget your goal to *"get out alive"*.

7. **Act Like the Natives.** Learn the methods and techniques that are used to survive by the indigenous people living in the area. Watch their daily routine and learn how to gather, catch and prepare foodstuff that are abundant in the locality. Befriend them that they may help you survive in their natural environment. Know when, where, and how they get their food and where they get their water.

8. **Learn Basic Survival Skills.** Learn from the local residents in the area some basic survival skills on how to catch wild animals for food and how to build adequate shelter from available materials for your protection against the harsh elements. Live by your wits to constantly improve your chances of survival.

B. Jungle Survival:

1. **Jungle Survival Techniques.** With training and your *"will to survive"*, you will find you can overcome the obstacles you may face. Such positive attitude bears directly on how well you cope with serious stresses, anxiety,

pain, injury, illness, cold, heat, thirst, hunger, fatigue, sleep deprivation, boredom, loneliness and isolation. Here are some general pointers on how to survive in tropical jungle environment:

- a. Night normally comes in a jungle environment early and darkness sets very fast. Prepare for bed early while there is still light.
- b. Be ready for sudden drops of temperature especially during wet season. Avoid directly sleeping on the ground due to the insects and the chill
- c. Protect yourself against insects that abound in the jungle. Tuck in you trousers into your boots and keep your sleeves rolled down and buttoned. These will prevent ticks, leeches, scorpions, centipedes, spiders and other small insects from getting to your skin.
- d. Use your clothing to protect you against scratches, which when left unattended can later cause serious infection. Treat all wounds, no matter how small by washing them promptly with soap and water, applying available medicinal ointment and covering them with clean dressing.
- e. Do not be bothered by the strange and unknown sounds that you may hear in the jungle at night. The howls, screams and loud crashing sounds and other harmless wildlife.
- f. Avoid making camp on depressions and low areas, such as valleys or dry riverbeds. During sudden and prolonged rain, these areas may dangerously be flooded. Also do not camp below ravines and cliffs which may be eroded by the rain.

2. Obtaining Food. Food is necessary for survival since the nutrients they provide keep the body organs functions. When in a survival situation, you must know how to look for. Collect and prepare food. Here are some important pointers on how to obtain them:

a. Plant Food. There is a wide variety of edible plants, however, you must be knowledgeable in choosing which plants, or which of its parts are edible, so you will not be poisoned.

1) If possible, find out from the natives which of the plants thriving in the area are edible. Also try to learn from what are the medicinal herbs in the locality.

2) Watch which of the leaves, fruits, or any other parts of the native plants are being eaten by the local fauna. For example, most of the plants that monkeys and birds eat are edible. However, beware of poisonous plants. Never eat large quantities of strange plant food without first testing them in small quantities. Most roots of succulent plants are edible, but they must be cooked thoroughly.

3) Tasting or swallowing even a small portion of some can cause severe discomfort, extreme internal disorders, or death. Therefore, if you have the slightest doubt as to the edibility of a plant, apply the following procedures for the Universal Edibility Test:

a) Test only one part of a potential food plant at a time. Break the plant into its basic components, leaves, stems, roots, buds and flowers.

b) Smell the food for strong or acid odors. Keep in mind that smell alone does not indicate a plant is edible.

c) Do not eat for 8 hours before starting the test. During the time you are abstaining from eating test for contact poisoning by placing a piece of the plant you are testing on the inside of your elbow or wrist. Usually 15 minutes is enough time to allow for reaction.

d) During the test period, take nothing by mouth except purified water and the plant part being tested.

e) Select a small portion and prepare it the way you plan to eat it.

f) Before putting the prepared plant to put in your mouth, touch a small portion (a pinch) to the outer surface of the lip to test for burning or itching.

g) If after 3 minutes there is not reaction on your lip, place the plant part on your tongue, holding there for 15 minutes.

h) If there is not reaction, thoroughly chew a pinch and hold it in your mouth for 15 minutes. Do not swallow!

i) If no burning itching, numbing, stinging or other irritation occurs during the 15 minutes, swallow the food.

j) Wait 8 hours. If any ill effects occur during this period induced vomiting and drink a lot of water.

k) If no ill effects occur eat ½ cup of the same plant part prepared the same way. Wait another 8 hours. If no ill effects occur, the plant part as prepared is safe for eating.

- 4) Do not eat unknown plants that have the following characteristics:
 - a) Have a milky sap or a sap that turns black when exposed to air.
 - b) Look like mushrooms and fungi.
 - c) Resemble onion or garlic.
 - d) Have carrot-like leaves, roots or tubers.

b. Animal Food. Animal food contains the most food value per unit weight. Generally anything that swims, flies, crawls or creeps is a possible source of food. However, you must first catch, kill, butcher and often cook the animal before you can eat it. You must also learn how to properly preserve (by drying) and store them in order that they will not spoil. Here are some practical pointers on how to obtain animal food:

- 1) All four legged animals are normally edible. Cook as soon as possible after killing them.
- 2) All eggs and insect larvae are edible.
- 3) Most reptiles are edible, but learn to recognize poisonous toads. To be safe, consider that the edible part of a snake is that part left after cutting six inches from the head.

- 4) All seaweeds, crustaceans and mollusk are also generally edible. However, to be safe, always cook them if possible.

- 5) Almost all fish caught in rivers and seas are edible, you can catch fish by using a net across a small stream or by making fish traps and baskets. Improvise fishhooks and spears and use them for conventional fishing, spearing and digging. A caught fish spoil quickly especially on a hot day, so prepare fish for eating as soon after you catch them. A spoiled fish is dangerous to eat. Although cooking may destroy the toxin from bacterial decomposition, do not eat fish that has suspicious color, peculiar odor, slimy rather than moist, and when it has sharp and peppery taste.

- 6) To dry fish in the sun, hang them from branches or spread them on hot rocks. When the meat has dried splash it with seawater, if available. Do not keep any seafood unless it is well dried or salted.

3. Setting Traps and Snares. An unarmed survivor or an evader who would rather not use his rifle in order not to be discovered by the enemy, trapping or snaring wild game is a good way to obtain needed animal food. Several well-placed traps have the potential to catch much more game than a man with a rifle is likely to shoot. Here are some useful tips on how to construct and install traps for small games:

- a. To be effective with your trap or snare, you must be familiar with the species of animal you intend to catch and must be knowledgeable of the techniques in constructing a effective traps and snares.

- b. There are no catchall traps you can set for all animals. You can determine what animal species are in a given area by look for animal trails, their tracks, droppings, nesting sites and their feeding and watering areas.

- c. Position your traps and snare where there is a proof that animals pass through. You must determine if it is a "run" or a "trail". A trail will show signs of use by several species and will be rather distinct. A run is usually smaller and less distinct and will only contain signs of one species. You may construct a perfect snare, but it will not catch anything if haphazardly placed in the woods. Animals have bedding areas, waterholes, and feeding areas with trails leading from one to another. You must place snares and traps around these areas to be effective.

- d. For an evader in a hostile environment, trap and snare concealment is important. It is equally important, however, not to create a disturbance that will alarm the animal and cause it to avoid the trap.

- 1) If you must dig, remove all fresh dirt from the area. Most animals will instinctively avoid a pitfall-type trap.

- 2) Prepare the various parts of a trap or snare away from the site, carry them in, and set them up. Such actions make it easier to avoid disturbing the local vegetation. Thereby alerting the prey.

- 3) Do not use freshly cut, live vegetation to construct a trap or snare. Freshly cut vegetation will "bleed" sap that has an odor the prey will be able to smell. It is an alarm signal to the animal.

4) You must remove or mask the human scent on and around the trap you set. Although birds do not have a developed sense of smell, nearly all mammals depend on smell even more than on their sights. Even the slightest human scent on a trap will alarm the prey and cause it to avoid the area.

5) Removing the scent from a trap is difficult but masking it is relatively easy. Use the fluid from the fall and urine bladders of previous kills. Do not use human urine.

6) Mud, particularly from an area where there is plenty of rotting vegetation, is also good. Use it to coat your hands when handling the trap and to coat the trap when setting it. In nearly all parts of the world, animals know the smell of burned vegetation and smoke. It is only when a fire is actually burning that they become alarmed.

7) Traps or snares placed on an animal "trail" or "run" should use canalization. To build a channel, construct a funnel-shaped barrier extending from the sides of the trail toward the trap, with the narrowest part nearest the trap. Canalization should be inconspicuous to avoid alerting the prey.

8) As the animal gets to the trap, it cannot turn left or right and continues into the trap. Few wild animals will back up, preferring to face the direction of travel. Canalization does not have to be an impassable barrier. You only have to make it inconvenient for the animal to go over or through the barrier. For best effect, the canalization should reduce the trail's width to just slightly wider than the targeted animal's body.

4. Making Traps and Snares. A *snares* is a noose that will slip and strangle or hold any animal caught in it you can use inner core strands of parachute suspension lines, wire, bark of small hardwood saplings as well as hide strips from previously caught animals to make snares. A trap on the other hand is a contraption that is triggered by an action of prey, wherein a door or gate closes in position to trap in a confined space. Following are the procedures on how to make simple snares and traps, which you could use to catch small animals for food:

a) *Treadle Spring Snare*. A treadle snare is used to catch small animal or fowled on a trail. First, dig a shallow hole in the trail. Then drive a forked stick (fork down) into the ground on each side of the hole on the same side of the trail select two fairly straight sticks that span the two forks. Position these two sticks so that their ends engage the forks. Place several sticks over the hole in the trail by positioning one end over the lower horizontal stick and the other on the ground on the other side of the hole. Cover the hole with enough sticks to that the prey must step on at least one of them to set off the snare. Tie one end of a piece of cordage to a twitch-up or to a weight suspended over a tree limb. Bend the twitch-up or raise the suspended weight to determine where you will tie a 5 centimeter or so long trigger. Form a noose with the other end of the cordage. Route and spread the noose over the top of the sticks over the hole. Place the trigger stick against the horizontal sticks and route the cordage behind the sticks so that the tension of the power source will hold it in place. Adjust the bottom horizontal stick so that it will barely hold against the trigger. As the animal places its foot on a stick across the hole, the bottom horizontal stick moves down, releasing the trigger and allowing the noose to catch the animal by the foot. Because of the disturbance on the trail, an animal will be wary. You must therefore use canalization.

b) *Locking Loop Snare*. This locking type snare will tighten as the animal struggles to escape, thus preventing it from getting away. Use lightweight wire to make this snare, i.e., trip wire from vehicle or aircraft electrical system. To construct this snare, cut a piece of wire twice the length of the desired snare wire. Double the wire and attach the running ends to a securely placed object, such as the branch of a tree. Place a stick about 1/2 inch in diameter through the loop end of the wire; holding the wire taut, turn the stick in a winding motion so that the wire is twisted together. You should have four to five twists per inch. Detach the wire from the branch and then remove the loop from the stick; make a figure 8 in the 1/2 inch loop by twisting the loop over itself then fold the figure 8 so the small loops are almost over lapping; run the loose wire ends through these loops. This forms a stiff noose that is strong. Tie the loose end to the stick (for a drag noose square) or branch you are using to complete the snare. This is an excellent snare for catching relatively large animals.

c) *Drag Noose Snare*. This type of snare is easy to make and may be effective in catching medium size animals it also allows you to move away form the site where you constructed it. To make the drag noose snare, make a loop.

d) *Deadfall Trap*. Trapping small games can also be accomplished through the use of deadfall traps. To construct it, look for a considerably heavy log, slab of rock or anything that would kill a small game if it falls on it. Make the stick-triggering device and rest the deadfall on it. The moment that an animal feed on the bait attached on the bait stick, any movement will trigger the heavy weight to drop on it, and thus kill of incapacitate it.

5. Preserving Animal Food. If the situation and time allow, you should preserve the extra meat for later use. Here are simple procedures. Which you could follow to preserve meat:

- a. If the air is cold enough, you can freeze the meat after cutting it in thin strips. In warmer climates however, you will need to use a drying or smoking process to preserve meat.
- b. One night of heavy smoking will make meat edible for about 1 week. Two nights will make it remain edible for 2 to 4 weeks.
- c. To prepare meat for drying or smoking, cut it with the grain in quarter inch strips. To air dry the meat, hang it in the wind and hot sun out the reach of animals; cover it so that blow flies cannot land on it.
- d. To smoke meat, you will need an enclosed area – for instance, a teepee or a pit. You will also need wood from deciduous trees, preferably green.
- e. To make salt which is a very important in preserving meat and fish, boil salt water (if available) repeatedly until salt crystals form under the container. If there are no containers. If there are no containers, or when you have no way to boil it, simply leave under the sun a pool of sea water and allow to dry for several days. The sea water will eventually be concentrated enough that you may dip into it the thin strips of meat or fish before you dry them directly under the sun.

6. Locating Source of Water. Water is one of your most urgent needs in a survival situation. You can't live long without it, especially in hot areas where you lose so much through sweating. Even in cold areas, you need a minimum of 2 quarts of water a day to maintain efficiency. More than three-fourths of your body is composed of fluids. Your body loses fluid as a result of heat, cold, stress and exertion. The fluid your body loses must be replaced for you to function effectively. So, one of your first objectives is to obtain an adequate supply of water.

- a. Purify Contaminated Water. Purify all water before drinking, either by boiling for at least one minute or by adding 8 drops of 2 – ½% solution of iodine to a quart (canteen full) of water and letting it stand for 10 minutes before drinking.
- b. Collect Rain Water. Rain water collected directly in clean containers or on plants is generally safe to drink without purifying.
- c. Locate Sites for Wells. In a desert environment water has a tremendous physiological effect on soldiers. If a unit does not plan properly and cannot be re-supplied, their water supply could run out. There are four indicators or signs of water that you should look for in the desert. There are, animals trails, vegetation, birds and civilization. Adequate water supply is critical in a hot desert environment if a unit is to survive and maintain the soldier's physical condition necessary to accomplish the mission. Unit leaders must enforce water discipline and plan for water re-supply.
- d. Look for Water-rich Plants. Succulent plants abound in tropical forest. Find out from the natives (if they are friendly enough) what these plants are and how to extract water from them. Otherwise, you have to painstakingly collect water from dew and fog on leaves early in the morning drop by drop.
- e. Construct Survival Water Still. For the below ground still you will need a digging tool. You should select a site where you believe the soil will contain moisture (such as a dry stream bed or a spot where rain water has collected), where the soil is easy to dig, and where sunlight hits most of the day. Follow these simple procedures:
 - 1) Dig a bowl-shaped hole approximately 3 feet across and 2 feet deep. Then dig a sump in center of the hole. The depth and the perimeter of the sump will depend on the size of the container that you have to set in it. The bottom of the sump should allow the container to stand upright.
 - 2) Anchor the tubing to the bottom of the container by forming a loose overhand knot in the tubing.
 - 3) Place the container upright in the sump and then extend the unanchored end of the tubing up, over, and beyond the lip of the hole.
 - 4) Place plastic sheeting over the hole covering the edge with soil to hold it in place. Place a rock in the center of the plastic. Allow the plastic to lower into the hole until it is about 15 inches below ground level. The plastic now forms an inverted cone with the rock at its apex. Make sure that the apex of the cone is directly over your container. Also make sure the plastic cone does not touch the sides of the hole because the earth will absorb the condensed water.
 - 5) Put more soil on the edges of the plastic to hold it securely in place and to prevent loss of moisture. Plug the tube when not being used so that moisture will not evaporate.
 - 6) You can drink water without disturbing the still by using the tube as a straw. You may want to use plants in the hole as a moisture source. You may have to dig a bigger hole to form a slope on which to place the plants.

7. Building Shelters. You need a shelter to protect you from the sun, insects, wind, rain, hot or cold temperatures, and enemy observation. In some environmentally hostile areas, your need for shelter may even be more important than your need for food or even your need for water.

Selecting Shelter Location. First, you have to decide where your shelter site should be. The site should be safe from flooding, erosion, provides pleasant atmosphere to live in, and near your source of water. Then you also decide what type of shelter you need. Here are the factors that you should consider:

- a. The time and effort are needed to build the shelter.
- b. The shelter should adequately protect you from the elements.
- c. The tools and materials you need to build it must be available, otherwise you have to improvise them from materials in the area.

8. Building Fire. A fire can fulfill several needs. It can keep you warm, it can keep you dry: you can use it to cook food, to purify water, and to signal. It can also cause you problems when you are in enemy territory: it creates smoke, which can be smelled and seen from a long distance: it causes light which can be seen day or night and it leaves signs to your presence. Remember you should always weigh your need for a fire against your need to avoid enemy observation. When operating in remote areas you should always take a supply of matches in a waterproof case and always keep them on your person.

- a. Selection of Site Build Fire. When selecting a site to build a fire, you should consider the following:
 - 1) The area (terrain and climate) in which you are operating.
 - 2) The material and tools available.
 - 3) How much time you have.
 - 4) Why you need a fire.
 - 5) The nearness of the enemy.
- b. Preparing Site to Build Fire. To prepare a site for a fire, look for a dry spot that has the following:
 - 1) That is protected from the wind.
 - 2) That is suitably placed in relation to your shelter (if any).
 - 3) That will concentrate the heat in the direction you desire.
 - 4) Where a supply of wood or other fire burning material is available.
 - 5) If you are in a wooded or brush-covered area, clear brush away, and scrape the surface soil from the spot you selected. The cleared circle should be at least 3 feet in diameter so that there is little chance of the fire spreading.
- c. Ways of Building Fire. There are several efficient methods for quick fire making. These three easy methods are Tepee, Lean-to and Cross-ditch methods.
 - 1) Tepee Method. Arrange tinder and a few sticks of kindling in the shape of a cone. Fire the center. As the cone burns away, the outside logs will fall inward, feeding the heart of the fire. This type of fire burns well even with wet wood.
 - 2) Lean-to Method. Push a green stick into the ground at a 30 degree angle. Point the end of the stick in the direction of the wind. Place some tender (at least a handful) deep inside this lean-to stick. Light the tinder. As the kindling catches fire from the tinder, add more kindling.
 - 3) Cross-ditch Method. Scratch a cross about 1 foot in size in the ground. Dig the cross 3 inches deep. Put a large wad of tinder in the middle of the cross. Build a kindling pyramid above the tinder. The shallow ditch allows air to sweep under the fire to provide a draft.

BASIC MAP READING

Lesson Objective:

Upon completion of this lesson the student will:

- a. Identify the Marginal Information of a Map.
- b. Identify Contour Lines in a Map
- c. Enumerate the Importance of Map
- d. Label the Parts of a Compass
- e. Identify Military Symbols
- f. Identify Map Signs and Symbols
- g. Demonstrate How to Orient the Map.
- h. Locate Grid Squares in the Map

A. Introduction:

Maps and their substitutes are of particular value to the military establishment. It is frequently necessary to identify ridges, valleys routes of movement, and other characteristics of a section of terrain that can not be reconnoitered in advance. Plans for the future operations must be based on knowledge gained in part from maps their substitutes.

Therefore, as future member of the AFP, you must know how to use and read a map. It is mandatory for you to know the meaning and importance of a map. The primary objective of this lesson is to enable you to read a map. And apply the theories, principles and techniques that are considered essential in the total development of small unit leaders. One important fact to consider is that the finest map made in the world is practically useless unless the user knows how to read and use it.

Map - is a geographical representation of the earth surface drawn to a scale in a flat plane.

B. Importance of Map:

1. Used for strategic, tactical planning in all command.
2. Used to show the relative position on a certain given area.
3. Used to show accurate distance, location, best routes and key terrain features.
4. To avoid lost and keep alive.

C. Care of Map:

1. Proper folding by: Accordion Fold or Slit Fold
2. Carry Maps in a waterproof pocket and use acetate to cover the Map. Avoid drawing or improper marking to avoid confusion.

D. Security of Maps:

1. Maps must not fall into unauthorized hand.
2. When in danger, destroy the map.
3. Avoid indication of plans or area of interest in the map.

E. Categories and Uses of Military Maps:

The term Military Map includes all maps designed for use of Military authorities except aeronautics and hydrographic charts.

Scale - is expressed as a fraction and gives the ratio of map distance to ground distance.

1. Small scale - Maps at the scale of 1:600,000 and smaller are used for general planning for strategic studies at the high echelon.
2. Medium Scale - Maps at the larger than 1:600,000 but smaller than 1:75,000 are used for planning operations, including the movement and concentration of troops and supplies.
3. Large Scale - Maps at the scale of 1:75,000 and larger are used for tactical technical and administrative needs of field units.

F. Types of Maps:

1. Plainmetric Map - showing only the horizontal (flat) position of features.
2. Topographic Maps - a two dimensional Map which represents the horizontal (flat and vertical relief) positions of features represented.
3. Plastic Relief Map – a topographic map reprinted on plastic material and formed by heat and vacuum over a reproductive positive mold thus giving the same information as contained on topographic map.
4. Photo Map - a reproduction of photograph upon grid lines, marginal data, place, names and boundaries may be added.
5. Joint Operation Map – used for ground and air operations. The maps are published in a ground and air edition.
6. Pictomap – it is a map on which the photographic imaginary of a standard photomap has been converted into interpretable colors and symbols.
7. Photomosaic - an assembly of aerial photograph to form a complete picture.
8. Military City Map - a large scale of topographic Map of a city or town and the standard scale is 1:12,000.
9. Special Map - maps for special purposes such as traficability Maps, transformation maps and boundary maps.
10. Terrain Model - a three dimensional representation of an area Molded on plastic, rubber or another material symbolically.
11. Hydrographic Map – a nautical map used as navigational aid either above or below surface.

G. Marginal Information – are those printed notes outside the printed diagram of maps used as an instructional guide in reading maps.

1. Sheet Name – found at the upper center margin. A map is named after its outstanding cultural or geographic features.
2. Sheet Number – found in the upper right margin and used as reference number assigned to each map.
3. Series Name and Scale – found on the upper left margin. A map series usually comprises a group of smaller maps at some scale designed to cover a particular geographic area.
4. Series Number – appears in the upper right margin and lower left margin.
5. Edition Number – is found in the upper margin and in the lower margin, representing the age of the map.
6. Bar Scale – located in the center of the lower margin and in the lower margin use for determination of map distance to the corresponding ground distance with three different units of measures.
7. Credit Note – in lower left margin, primary purpose is to list the procedures and reference, the method of compilation for used by technicians.
- 8.. Index to Adjoining Sheet – in lower margin, it identifies the map sheet covering areas around the area covered by the map you are using.
9. Index to Boundaries Diagrams – in lower margin, this is a miniature map that shows the boundaries and special show line that occurs within the map area.
10. Projection Note – in lower margin, it indicate the method use to portray the map area.
11. Grid Note – in the center lower margin, it gives information pertaining to the grid system used, the initial guidelines and the number of digit omitted from grid values.
12. Grid Reference Box - usually located at the center of the lower margin. It contains information identifying the grid zone designation and 100,00 meters square identification.
13. Horizontal Datum Note - located at the center of the lower margin and defined as geodetic reference point.
14. Legend - at the lower left margin, illustrates identifies the topographic symbols used to depict some of the prominent features on the map.

15. Declination Diagram - located in the center lower margin and indicates the relationships of true north and magnetic north.
16. Protractor Scale – in upper margin, use for laying out a magnetic north line on the map.
17. User Note – located in the lower margin use for connections and errors on the map.
18. Unit Imprint - at the left side of the lower margin, it identifies the agency which printed the maps with its respective symbols.
19. Contour Interval Note - located in the center of the lower margin. It states the vertical distance between adjacent contour lines on the map. When supplementary contours are used the interval is indicated.
20. Coverage Diagram – normally in lower margin, it indicates the methods by which the map was made, dates of photography and other sources material.
21. Graphic Scale - a ruler used to convert map distance to ground distance without going through mathematical computations.
22. Contour Interval – the contour interval states the vertical distance between adjacent contour lines on the map. When supplementary contour are used the intervals is indicated.
23. Vertical Datum Note – it designates the basis for all vertical control stations, contours and elevation appearing in the map.

H. Map Symbol – it was a sign composed of a diagram number, letters, abbreviation, color or combination thereof, which is used to identify and distinguish a particular place of area.

1. Purpose:
 - a. To visualize an area of the earth surface with pertinent feature planning.
 - b. To represent the natural and manmade feature.

2. Classification:
 - a. Topographic Symbols – are standard drawing of map features and organized by their colors.
 - b. Topographic colors:
 - 1) Black – all manmade features, such as buildings, roads not shown in red, etc.
 - 2) Blue – all water features, such as lakes, rivers, swamps, streams, etc.
 - 3) Brown – all land forms, such contours, cuts, fills, etc.
 - 4) Green – all vegetation, such as forest, orchid, hide grass, jungles, etc.
 - 5) Red – main roads, built-up areas, and special info.
 - c. Topographic Symbols: (see legend and other symbols)

3. Military Symbols – a symbol used by the map user when he wants to show the disposition of troops and overlaying of military installation.
 - a. Military Colors:
 - 1) Blue – all friendly forces, installations, activities and firepower.
 - 2) Red – all enemy forces, installation and activities (double lines means enemy).
 - 3) Yellow – shows grassed or contaminated areas maybe the result of either friendly or enemy actions.
 - 4) Green – indicates friendly or enemy demolition, minefield and manmade obstacles.
 - 5) Spare Colors – use for classification and accompanied by legend.
 - b. Types of Military Symbols:
 - 1) Troops Unit Symbols – are shown by rectangle. (Basic symbols for military unit and activities).
 - 2) Branch Arm of Service and Type – Organization Symbol – used in conjunction either other symbols to signify a military unit activity or installation.
 - 3) Size of Unit – used to identify the size of a unit or installation.

I. Grids And Coordinates:

1. Grids - are parallel lines from east to west, north or south that forms a square used as a reference system to help the map reader locate areas quickly.
2. Coordinates - are the numbered grid lines on the map and are further subdivided to show specified location.
3. Geographic Coordinates – the location of any point of the earth surface maybe given by stating into its distance north or south of the equator (latitude) and east or west of prime meridian (longitude).
4. Polar Coordinates – on the map maybe determined or plotted from a known point by giving a distance along that direction.
5. Grid Coordinates - the military grid system divides the earth surface into many 100,000 meter squares. Each of these squares are further subdivided into 1,000 meter squares. The 1,000 meter squares is the basis of the military grid system which is used in reading military map.
6. Grid Square - can be located or identified by combining the number of the vertical grid line and horizontal grid line which intersect at the lower left corner of the square.

J. Characteristics of Grids:

1. Does not requires knowledge of the area
2. Applied to large areas
3. Does not requires land marks
4. Applies to all map scales

K. Locating Points within a Grid Squares:

1. 4 digits nearest to 1,000 meters
2. 6 digits nearest to 100 meters
3. 8 digits nearest to 10 meters
4. 10 digits nearest to 1 meter

Rule in determining grid coordinate – "read right up"

Grid Coordinate (GC) – Nearest to 10 meters (8digits)

GC – 17320170	GC – 19140252
GC – 02385578	GC – 89052564

Grid Coordinate (GC) – Nearest to 1 meter (10 digits)

GC – 1732301702	GC – 1914102520
GC – 0238855780	GC – 8905725642

L. Graphic (Bar) Scale – is the most accurate means of measuring distance on a map. It is the ruler printed on the map on which distances on the map may be measured as actual ground distance.

1. Graphic Scale is Divided into Two(2) Parts:
 - a. Primary Scale – distance from zero mark to the right.
 - b. Scale Extension – from the zero mark to the left. This is divided into ten (10) equal parts to enable more accurate measurements.
2. Methods of Expressing Direction:
 - a. Degrees = 360 Degrees (1) one Circle
 - b. Mils = 6,400 Mils (1) one Circle

- c. Grad = 400 Grads (1) one Circle
- d. 360 degrees = 6,400 mils
- e. 1 degree = 17.8 mils
- f. 90 degrees = 100 grads
- g. 1 degree = 60 minutes
- h. 1 minute = 60 seconds
- I. 1 click in compass = 3 degrees

3. Three (3) Basic Lines

- a. True North = always constant
- b. Magnetic North = when working with a compass
- c. Grid North = when working with a military map

M. Elevation And Relief:

1. Elevation – the height (vertical distance) of an object above or below a datum plane.
2. Datum Plane – a reference from which measurement maybe taken. This datum plane for most maps is average sea level.
3. Relief – the configuration (shape) of the ground.
4. Effects of the Elevation and Relief:
 - a. Employment and movement of troops.
 - b. Limit route and speed
 - c. Restrict a certain types of equipment
 - d. Affect attack and defense position
 - e. Affect observation, field of fire, cover, concealment and the selection of key terrain features.
5. Methods of Showing Elevation and Relief.
 - a. Hackures – are short lines used to indicate significant ground formations not normally revealed by contour lines.
 - b. Characteristics and uses:
 - 1) Usually printed in brown
 - 2) Don't represent exact location
 - 3) Show the relative slope in places where contour lines or other method fail to accurately show the relief.
 - 4) The shorter and closer together the lines are drawn, the steeper the slope they represent.
 - 5) Hackures radiating out from the center indicate a peak
 - c. Layer Tinting – shows relief by means of color.
 - 1) Blue – water level
 - 2) Green – orange and red for successively higher level
 - 3) Brown – high mountain region

Note: A legend is printed in the margin of layer-tinted maps to indicate the elevation ranges represented by each color.

N. Shading:

1. Characteristics and uses:
 - a. Use like layer tinting except that only one color is used.
 - b. Light shades for low level lands and darker shades for successively higher levels of terrain.
 - c. Shading does not give determination of elevation but gives the effect of the relief.
3. Spot Elevation – are points on a map where they are indicated by numbers.

4. Contour Lines – is an imaginary line on the surface of the earth at the same elevation above or below sea level.
5. Uses:
 - a. to indicate elevation
 - b. to show the relative configuration of the ground
 - c. to analyze terrain
6. Characteristics:
 - a. indicate vertical distance
 - b. small curving lines
 - c. has the same elevation
 - d. distance between them are the same and never met
 - e. brown color
7. Types of Contour:
 - a. Index Contour – every fifth contour line is an inches line and is indicated by heavier brown line.
 - b. Intermediate Contour – are the four lighter contour lines drawn between the index contours.
 - c. Supplementary Contour – represents half intervals between intermediate contours and is shown by brown lines.
 - d. Depression Contour – an area that is lower in elevation that all the surroundings terrain is indicated tick marks pointing down slope.
 - e. Approximate Contour - are broken lines of the same thickness and type as the contour replayed.
8. Using Contour Lines to Identify Ground Forms:
 - a. Hills – represented by series of concentric contour lines which gradually grow smaller, ending with a small closed contour line in the center.
 - b. Peaks of Hill Tops – a small closed, relatively circular contour at the center of the series of concentric contour line identifies a peak or hill top.
 - c. Ridges – a ridge is a series of connecting peak or hills indicated by a series of elongated contour lines.
 - d. Saddles – is a low point between two peaks along the crest of a ridges.
 - e. Spur – contour lines that form a series of successive rounded U shapes.
 - f. Cliff C – lines that form a series of successive V-shape, a stream course that neither has nor developed a valley floor.
 - g. Draw C – lines that form a series of successive V-shape, a stream course that neither has nor developed a valley floor.

O. Two (2) Types of Azimuth:

1. Forward Azimuth
2. Back Azimuth
 - a. Procedure on How to Get the Back Azimuth:
 - 1) When the Forward Azimuth is less than 180 degrees, add 180 degrees in order to get the Back Azimuth.

Forward Azimuth = 75 degrees

75 degrees
 + 180 degrees
 255 degrees is the Back Azimuth

- 2) When the Forward Azimuth is more than 180 degrees, less 180 degrees in order to get the Back Azimuth.

Forward Azimuth = 245 degrees

245 degrees
- 180 degrees
65 degrees is the Back Azimuth

3) When the Forward Azimuth is 180 degrees, either add 180 degrees or less 180 degrees to get the Back Azimuth.

Forward Azimuth = 180 degrees
180 degrees
+ 180 degrees
360 degrees Back Azimuth

Bearing – express a direction as an angle measured east or west from a north reference. Bearing cannot exceed 90 degrees or one quarter of a circle. One quarter of a circle is known as quadrant.

P. The Compass And Its Uses:

1. The Magnetic Compass is the most commonly used and simplest instrument for measuring direction and angles in the field. Two varieties of magnetic compass are standard for military use today, the lensatic compass and the artillery compass (M2). Since the latter is a special purpose compass, it will not be discussed on it. This is referred to as the Lensatic Compass.

2. Care and Uses of Compass:

- Handle the compass with care. The dial is set at a delicate balance and a shock could damage.
- Close and return the compass to its special container when not in use. In this way, it is not only protected from possible damage, but is readily available for use when needed.
- When the compass is used in the dark, an initial azimuth should be set, if possible, while light is still available. With this, initial azimuth set, any other azimuth can be established using this as a base.
- Compass reading should never be taken near visible masses of iron or electrical circuits. The following is the table of approximate safe distances to insure proper functioning of the compass.

1) High tension power lines	-55 meters
2) Field Gun, truck or tank	-18 meters
3) Telegraph and telephone wires or barbwire	-10 meters
4) Machine Gun	-1 meter
5) Helmet or Rifle	-2 meters

3. Parts Of Lensatic Compass

- | | |
|-----------------------------|--------------------|
| a. Luminous Dot | j. Eye Piece |
| b. Cover | k. Holding Ring |
| c. Front Sight (Hair Line) | l. 90 Degrees Dot |
| d. Dial | m. 180 Degrees Dot |
| e. Stationary Index | n. 270 Degrees Dot |
| f. Movable Brass Rim | o. Movable Crystal |
| g. Scale | p. Rim Holder |
| 1) Long Luminous Line | |
| 2) 45 Degrees Luminous Line | |
| h. Rear Sight | |
| i. Lens | |

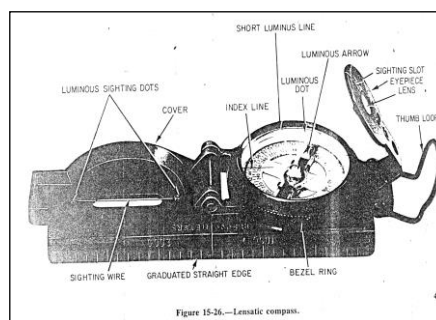
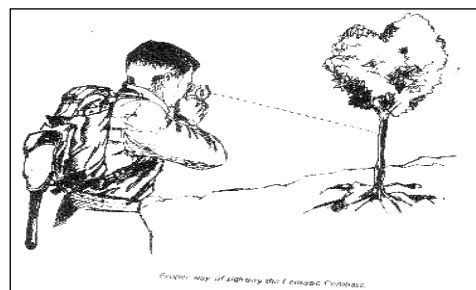


Figure 15-26.—Lensatic compass.



4. Proper way of sighting the lensatic compass.

Before a map can be used it must be oriented. A map is oriented when it is in a horizontal position with its north and south corresponding to north and south on the ground.

Q. Orientation of a Map:

How to Orient the Map:

1. By the use of the Lensatic Compass – the map is oriented with the aid of Lensatic Compass and the use of the declination diagram.

a. With the map in the horizontal position, the compass is placed parallel to a north-south grid lines with the cover side of the compass pointing toward the top of the map. This will place the black index line on the dial of the compass parallel to grid north. Since the needle on the compass point to magnetic north, we have a declination diagram on the face of the compass formed by the index line and compass needle.

b. Rotate map and compass until the directions of the declination diagram formed by the black index line and the compass needle match the direction shown on the declination diagram printed on the margin of the map. The map is then oriented.

2. By Inspection:

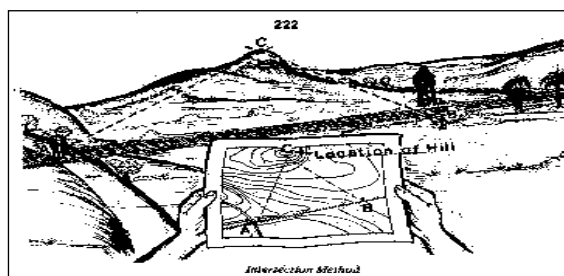
When compass is not available, map orientation requires a careful examination of the map and the ground to find linear features common to both, such as roads, railroad, fence, lines, power lines etc. By aligning the feature on the map with the same feature on the ground. The map is now oriented.

R. Intersection:

The location of an unknown point by successively occupying at least two but preferably three known positions and sighting point is called intersection. It is used to locate features that are not defined on the map or which not readily identifiable. The two methods:

Map and Compass Method:

1. Orient the map using the compass
2. Locate and mark your position on the map
3. Measure the magnetic azimuth to the unknown position, convert to grid azimuth.
4. Draw a line on the map from your position on this grid azimuth.
5. Move to a second known position on the map and again orient the map using the compass. Repeat c and d.

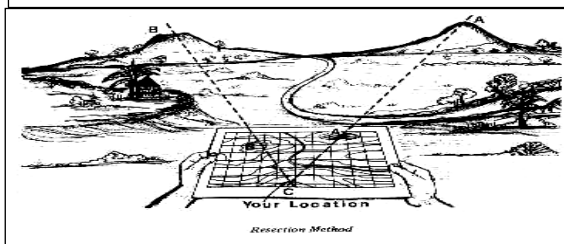


S. Resection:

The location of the user's position by sighting on two or three known features is called Resection. Resection can be done with or without compass.

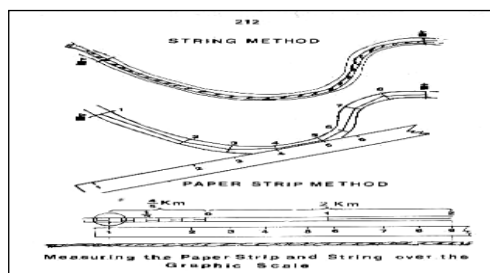
Map and Compass Method:

1. Orient the map using compass.
2. Locate two or three unknown positions on the ground and mark them on the map.
3. Measure the magnetic azimuth to a known position; convert to grid azimuth.
4. Change the grid azimuth to a back azimuth and draw a line on the map from the known position back toward your unknown position.
5. Repeat (3) and (4) above for a second known position.
6. For a check on your accuracy, repeat (3) and (4) above for a third known position.
7. The intersection of the lines is your position.



Straight Edge Method: (When no compass is available)

1. Orient the map on a flat surface by the inspection method.
2. Locate two or three known position on the ground and mark them on the map.
3. Lay straight edge on the map as a center of the straight edge at a known position pivot point and rotate the straight edge until the known position on the map is aligned with the known position on the ground.
4. Draw a line along the straight edge until the known position on the ground towards your position.
5. Repeat (3) above using a second known position and as a check on your accuracy repeat (3) above using a third known position.



T. Contour Line:

There are several ways of indicating elevation and relief on the maps. The most common way is by contour lines. A contour line is a line representing an imaginary line on the ground along which all points are at the same elevation.

Contour lines indicate a vertical distance above or below a datum plane starting at sea level. The vertical distance between adjacent contour lines is known as the contour interval and the amount of the contour interval is given in the marginal information. On most maps the contour lines are printed in brown. Starting at zero elevation, every fifth contour line is drawn in heavier line. These are known as index contours and some place along each index contour the line broken and its elevation is given.

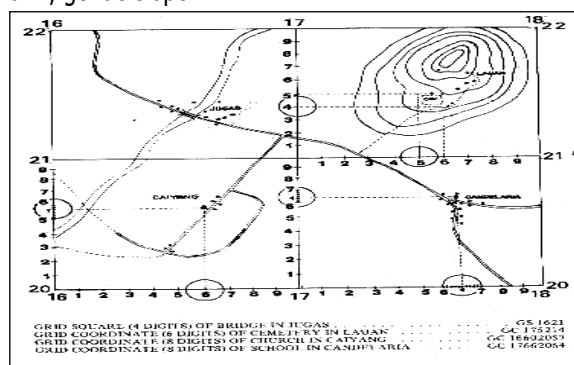
The contour lines falling between the index contours are called intermediate contours. They are drawn in a finer line than the index contour and usually do not have their elevation given.

How to Determine the Elevation Using the Contour Lines:

1. Finding the contour interval from the marginal information and noting both the amount and the unit of measure.
2. Finding the numbered contour line or given elevation nearest the point which the elevation is being sought.
3. Determining the direction of the slope from the numbered contour line to the desired point.
4. Counting the number of contour lines that must be crossed to go from numbered line to the desired point and noting the direction up or down. The number of lines crossed multiplied by the contour interval is the distance above or below the starting value.
 - a. If the desired point is contour line, its elevation is that of the contour.
 - b. To estimate the elevation of the top of an unmarked hill, add half the contour interval to the elevation of the highest contour line around the hill.

The Spacing of the Contour Lines Indicates the Nature of the Slope:

1. Contour lines evenly spaced and wide apart indicate a uniform, gentle slope.
2. Contour lines evenly spaced and closed together indicate a uniform, steep slope. The closer the contour lines to each other, the steeper the slope.
3. Contour line closely spaced at the top and widely spaced at the bottom indicates a concave slope. Considering relief only an observer at the top of a concave slope can observe the entire slope and the terrain at the bottom. Conversely, a unit attacking up such slope would no cover and concealment from observers or weapons at or hear the top, also the farther top the slope the more difficult is to climb.
4. Contour lines widely spaced at the top and closely



spaced at the bottom indicate a convex slope. An observer at the top of a convex slope has no observation of most of the slope or of the terrain at the bottom. Conversely, a unit attacking up such slope has such greater degree of cover and concealment than on a concave slope, also the farther up the slope the easier is the climb.

U. Major Relief Information:

1. Hill – a point or small area of high ground when you are located on a hilltop, the ground slopes down in all direction.

2. Valley – a stream course which has at least a limited extent of reasonably level ground bordered on the sides by higher ground. Contours indicating a valley are U-shaped and tend to parallel a major stress before crossing.

3. Ridge – a line on high grounds, with normally minor variation along it. The ridge is not simply a line of hills, all point of the ridge crest are appreciably higher than the ground on both sides of the ridges.

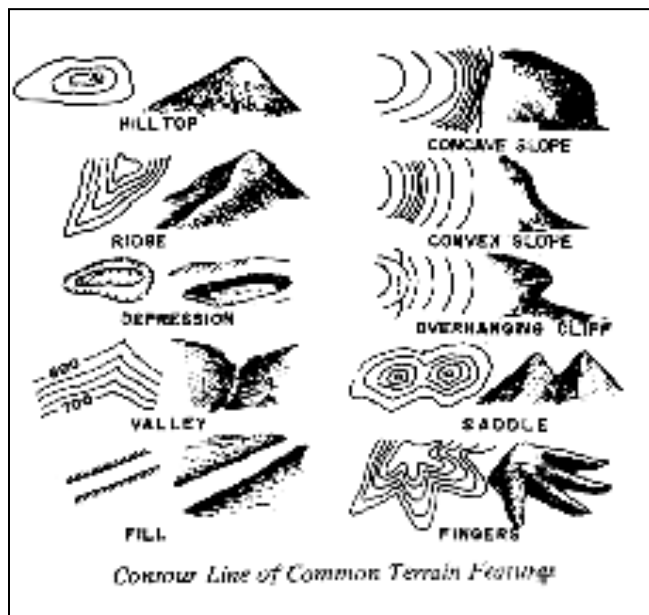
4. Spur – a usually short, continuously sloping line of higher ground normally jutting out from the side of a ridge. A spur is often formed by two roughly parallel streams cutting draws down the side of ridge.

5. Saddle – a dip or low point along the crest of a ridge. A saddle is not necessarily the lower ground between two hilltops, it may be simply a dip or break along and otherwise level ridge crest.

6. Depression – a low point or sinkhole, surrounded on all sides by higher grounds.

7. Cuts and Fills – man made features by which the bed of a road or a railroad is graded or leveled off by cutting through high areas and filling in low areas along the right-of-way.

8. Cliff – a vertical or near vertical slope. When a slope is so steep that it cannot be shown at the contour interval without the contour coalescing, it is shown by a ticked "carrying" contour or contours. The ticks always point towards lower ground.



CIVIL MILITARY OPERATIONS

Lesson Objectives:

Upon completion of this lesson the student will:

- a. Define Civil Military Operations
- b. Enumerate the AFP programs to attain objectives of CMO..
- c. Differentiate the components of CMO programs
- d. State the objectives of civil defense

A. Definition:

Civil Military Operations (CMO) – encompasses those economic, psycho-political and psycho-social activities undertaken by the AFP independent of in coordination with civil government agencies (CGA), local government units (LGU) and non-government organizations (NGO) prior to during or subsequent to combat operations and/or natural or man-made disasters and calamities.

B. CMO objectives are pursued through six (6) interrelated AFP programs generally categorized into:

AFP Personnel-Oriented Programs:

1. Military Values Education (MILVED)
2. Livelihood Enhancement (LIVELIHOOD)

Community-Oriented Programs:

3. Community Relations (COMREL)
4. Civic Action (CIVAC)
5. Public Information (PUBLIC INFO)

Enemy-Oriented Programs

6. Psychological Operations (PSYOP)

C. CMO Components:

1. Military Values Education (MILVED) – the dynamic process of learning internalizing, upholding and practicing universal truths, moral principles and time-honored intrinsic military values and ethics essential to the pursuit of AFP goals and objectives.

2. Military Livelihood Enhancement Program (LIVELIHOOD) – designed to provide necessary assistance to the soldier and his dependents to embark on productive ventures that enable him to cope with harsh economic realities while in the active service and during retirement.

3. Military Civic Action (CIVAC) – the use of AFP resources in predominantly non-military projects and activities useful to the people and supportive of combat operations in such fields as socio-economic: health and sanitation; agri-industrial; education and the like.

4. Military Community Relations (COMREL) – the active participation of AFP personnel, individual or collectively as an AFP unit, in people – oriented rallies like: anti-drug abuse, anti-smut and other campaign against immoral activities. It also includes open-houses, static displays of military hardware, and use of camp facilities/utilities for people oriented projects.

5. Military Public Information (PUBLIC INFO) – is the dissemination of military information through all forms of communication media to include inter-personal, face-to-face communication to the internal audience and

more specifically to the public-at-large with the view of informing them about what the AFP has done, is doing and plans to do to bring about peace and security.

Objectives: To disseminate information through the press, broadcast and interpersonal, face-to-face communication that will broaden public understanding of the AFP'S mission and generate public support for the AFP in particular and the government in general, as well as to broaden public understanding of the various treats to national security, their objectives, strategies and techniques to grab political power.

D. Disaster Relief and Rescue Operation

Why We Have Civil Defense:

The Filipino has always endured the hardships of a hostile environment. He has continually sought survival against typhoons, floods, earthquakes, epidemics, fires and other calamities. Further, the technological advances of the modern world have ushered in more lethal weaponry, environmental pollution, huge aerial and maritime disasters and flash holocausts. Fires and typhoons are the most frequent, but more serious results are likely from earthquakes and volcanic eruptions. The July 16 earthquake in 1990 gave us a vivid example of the destruction wrought by said calamity on lives and properties. Experts tell us calamity will happen anywhere and anytime. Destructive capacity can be enormous and the problem is made more difficult by absence of warning. Earthquakes can also cause flood, fire, and if the epicenter is offshore, even seismic (tidal) waves. The possible dangers from these natural hazards cannot be ignored and neither can man-made accidents of disaster proportions. If a situation is reached or is developing whereby the Police, Fire and Ambulance Services or the normal emergency services of the Local Government are inadequate, it is a case for emergency measures and to meet such occurrences, planned arrangements must be available. This is why and when we need Civil Defense is this preparation in advance of measures necessary for our protection when disaster strikes.

Its purpose is to:

1. Prevent loss of life by rescue and removal of people to places of safety.
2. Prevent needless suffering of people.
3. Protect property; and
4. Minimize damages during disasters and calamities.

Civil Defense is therefore involved in the safety and welfare of people as well as in the saving or protection of property.

The Concept

In any serious disaster, the local people must in the first instance, fend themselves with resources immediately available to them until sufficient other help is available. The concept therefore is one of SELF-HELP and

E. Mutual Assistance:

It is expected that each political and administrative subdivision of the country shall utilize all available resources in the immediate area before asking for assistance from neighboring entities or higher authority. Individual volunteers, voluntary organizations and the general public in the disaster area shall augment its resources.

Discussions of Rules and Responsibilities of Existing Government Agencies to Assist Types of Disaster During Emergencies

The Secretary of National Defense heads the NDCC with the heads of 18 departments/agencies as members. These include the Chief of Staff, Armed Forces of the Philippines, Secretary-General, Philippine National Red Cross,

Director-General, Philippine Information Agency, Executive Secretary and the Administrator, Office of Civil Defense who is the Executive Officer of the Council.

It is through the NDCC member-agencies that disaster preparedness; prevention, mitigation and response carry out its corresponding tasks and responsibilities under the NDCC system. The NDCC, unlike the other department coordinating bodies, does not have its own regular budget to disburse. It operates through the member-agencies and its local networks, which are the regional and local disaster coordinating councils.

The members of the Council are the following:

Secretary, DND	Chairman
Secretary, DPWH	Member
Secretary, DOTC	Member
Secretary, DSWD	Member
Secretary, DA	Member
Secretary, DECS	Member
Secretary, DOF	Member
Secretary, DOLE	Member
Secretary, DTI	Member
Secretary, DENR	Member
Secretary, DILG	Member
Secretary, DBM	Member
Secretary, DOJ	Member
Secretary, DOH	Member
Director, PIA	Member
Presidential Executive Secretary	Member
Chief of Staff, AFP	Member
Secretary-General, PNRC	Member
Administrator, OCD	Member and Executive Officer

INDIVIDUAL COMBAT TRAINING

Lesson Objectives:

Upon completion of this lesson the student will:

- a. State the Factors to be considered in Combat Movement
- b. Enumerate the Problems in Night Movement.
- c. Demonstrate low crawl, high crawl and creeping
- d. Illustrate the Basic Combat Formation.

A. Individual Movement:

Factors to be Considered in Movement:

1. Terrain:
 - a. Suitable for fast movement
 - b. Provide adequate security.
2. Security:
 - a. Use available cover and concealment
 - b. Provide good observation
 - c. Knowledge of the use of camouflage and concealment.

B. Techniques and Aids to Day Movement:

1. Take advantage of anything that provides concealment in the movement.
 - a. Fogs
 - b. Haze
 - c. Rain
 - d. Smoke
 - e. Darkness
 - f. Darkness
2. Tall grasses give good concealment when properly used.
3. Move only when the wind blows.
4. Avoid moving in a straight line through out.
5. Change direction from time to time.
6. Be alert on movement of any kind.
7. Flight of birds of any kind
8. Absence of bird and animals.
9. Unusual rustle of leaves and twigs.
10. Take advantage of destruction.
11. When land moves.
12. Exploding shells
13. Flying airplanes
14. Avoid leaving foot prints.
15. Select spots
16. Avoid loose rocks or stones
17. Avoid wet surface.
18. Know how to cross streams.
19. Keep arms and ammunitions dry
20. Improvise craft to float equipment if possible remove boots and - clothing.
21. When crawling plowed fields
22. Avoid string dust
23. Take route over the hardest surface
24. Follow the furrows
25. Avoid loading yourself with unnecessary equipment.

C. Individual Movement:

1. Day Movement.

a. High crawl and creeping – is used when cover and concealment is available and speed is needed to close up with the objectives. Body is kept free of the ground with weight resting on firearms and lower legs. Cradle rifle in your arms to keep muzzle out of dirt. Move forward by alternately advancing the elbows and knees.

b. Low Crawl - is used when cover and concealment are few and speed is not needed. Body and chest is flat to the ground. Drag rifle along toe of the butt with fingers over muzzle to keep it out from dirt. Push arms forward and cock left leg forward. Pull yourself forward with arms and push with left leg.

c. Rushing - fastest movement executed from a prone to the next dropping position when crossing an open terrain.

d. Prone to Rushing - Keep body as flat as possible to the ground. Slightly raise head and select a new good position and concealed to cover position. Slowly lower your head back down your arms into the body and cock right leg forward. With one movement raise body by straightening the arms. Spring to your feet stepping off the left foot and rush to your new selected position, crouching low in a zigzag way.

e. Dropping - Just before you drop, plant both feet on the ground. Drop your knee and at the same time sliding arms from the small of the stock to the heel of the butt of the rifle. Fall forward, breaking fall with the butt of the rifle. Shift weight to your/right side and roll several; times going to your new position. Come immediately to firing position.

Application:

- a. Individual or by two rushes
- b. Team rushes
- c. Squad rushes

2. Movement at Night.

a. Walking at Night. Keep weight on one foot as you step. Feel the ground with your toe before stepping it down. Do it alternately in the same manner.

b. Hitting the Ground at Night - Crouch slowly and hold rifle under armpit and feel the ground with free hand. Support feet with free hand and opposite knees. Raise free leg and back and lower it silently to the ground. Roll quietly into back prone position.

c. Crawling at Night - Crawl on hand and knees. Lay rifle on the ground by your side. Keep on hand on the spot and bring forward knees until it meet the hand. With hands feel the ground for the knees. Clear again next spot for other knees do the same way and alternately and silently.

Problems during Night Movement:

1. Night Vision – Adopt eyes in seeing at night , by enlarging the pupil of the eye in order to let in more light keep out off lights around you and do not look straight to the light.

2. Appearance and Sizes - Darkness changes the appearance and sizes of an object. Trees look smaller because tips and twigs of branches can not be seen-Airplane caught by the beam of search light looks longer. Night glasses make it possible to see objects that are too small.

Light is quickly visible at night. Ordinary condition candle light could be seen for several miles and visible for ten miles under ideal condition for darkness.

3. Sound - depends mostly upon ears to get into the enemy and exercise care to keep enemy from hearing you. When shouting stop frequently to listen. Remove helmets so that sounds are not distorted. By practicing, you can learn to listen for long period in perfect silence. Sound are transmitted a great distance in wet weather and at night. If you hold ears close to the ground, you can hear better sounds as persons walking or noise of a vehicle.

4. Smell - Sense of smell may warn you of any enemy fire, cooking lines , gasoline and oil engines.

5. Touch - Learn to operate and adjust equipment by touch alone. Use to feel how to recognize object in the dark.

6. Concealment - At night it is provided by darkness unless there is moonlight. Movement is different from daytime movement in absolute silence. Determine in advance and move by bounds. run only in an emergency. Stop and listen frequently. Take advantage of the sounds which may distract the enemy. If you fall down do it silently.

D. Proper Ways to Cross the Obstacle:

Movement near their wire must be slow because of nearby traps and wires. Passing under wires on your back by feeling ahead and above. When cutting wire alone, cut a wire near a picket to avoid having a loose end and fly back. When with companion, one will hold the wire with both hands while the other cut in between the hands. Bend and roll back wire passage, wrap a cloth around the wire to muffle sound. Leave top wire intact to lessen chance of discovery.

To cross narrow trench, crawl silently up to the edge. Spring up from prone and jump across sinking quietly to the ground on another side.

To cross trench, climb silently and slowly and then climb out to the other side. Remain quiet for a moment and listen before further movement.

Demonstration and Practical Exercise on.

High Crawl and Creeping
Low Crawl

E. Cover and Concealment:

1. Cover - is the protection against enemy fire or hostile weapons. Types of cover:

a. Natural Cover - made by nature/ need no change.

Examples:

Ditches of canals
Depression
Embarkment
Boulders

b. Artificial Cover - Constructed from issued materials or made by man.

Examples:

Sandbags
Foxholes
Trenches

2. Concealment - is the protection against enemy observation but not enemy fire. Types of Concealment.

a. Natural Concealment - Made by nature/ need no change.

Examples:

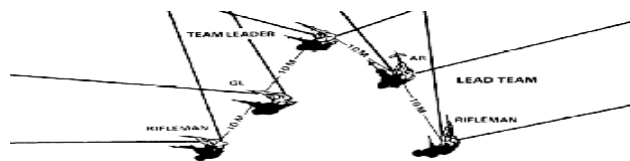
Bushes

- Grasses
 - Log pile
 - b. Artificial Concealment - constructed from issued materials or individual found in the vicinity.
3. Rules of Concealment
- a. Avoid unnecessary movement.(remain motion- less while observing).
 - b. Blend with the background. (Be sure that the background does not. Contrast with your uniform.
 - c. Take advantages of the shadow. (Stay in the shadow).
 - d. Break the regular outline of the object. (Copy the background near your vicinity.
 - e. Keep off the skyline. (You can observe from even a great distance).

BASIC COMBAT FORMATIONS

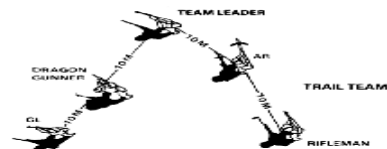
A. General:

You will usually move as a member of a team. Small teams, such as infantry fire teams normally move in a formation. Each soldier in the team has a set position in the formation, determined by the type weapon he carries. That position, however, may be changed by the team leader to meet the situation. The normal distance between soldiers is 10 meters.



B. Fire and Movement:

When a unit makes contact with the enemy, it normally starts firing at and moving toward the enemy. Sometimes the unit may move away from the enemy. That technique is called fire and movement. It is conducted both to close with and destroy the enemy, or to move away from the enemy so as to break contact with him.



The firing and moving take place at the same time. There is a fire element and a movement element. These elements may be single soldiers, buddy teams, fire teams, or squads. Regardless of the size of the elements, the action is still fire and movement.

The fire element covers the move of the movement element by firing at the enemy. This helps keep the enemy from firing back at the movement element. The movement element moves either to close with the enemy or to reach a better position from which to fire at him. The movement element should not move until the fire element is firing.

Depending on the distance to the enemy position and on the available cover, the fire element and the movement element switch roles as needed to keep moving.

Before the movement element moves beyond the supporting range of the fire element (the distance within which the weapons of the fire element can fire and support the movement element), it should take a position from which it can fire at the enemy. The movement element then becomes the next fire element and the fire element becomes the next movement element. If your team makes contact, your team leader should tell you to fire or to move. He should also tell you where to fire from, what to fire at, or where to move. When moving, use the low crawl, high crawl, or rush.

C. Fire Team Formations:

Formations are arrangements of elements and soldiers in relation to each other. Squads use formations for control flexibility and security.

Leaders choose formations based on their analysis of the factors of METT-T. Leaders are up front in formations. This allows the fire team leader to lead by example, "Follow me and do as I do." All soldiers in the team must be able to see their leader.

1. **Wedge.** The wedge is the basic formation for the fire team. The interval between soldiers in the wedge formation is normally 10 meters. The wedge expands and contracts depending on the terrain. When rough terrain, poor visibility, or other factors make control of the wedge difficult, fire teams modify the wedge. The normal interval is reduced so that all team members can still see their team leader and the team leaders can still their squad leader. The sides of the wedge can contract to the point where the wedge resembles a single file. When moving in less rugged terrain, where control is easier, soldiers expand or resume their original positions.

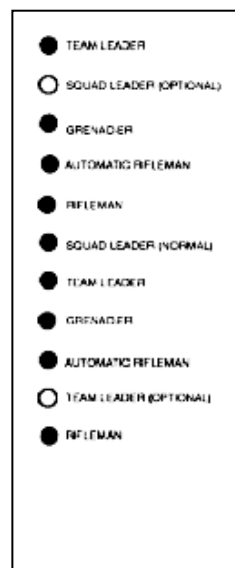
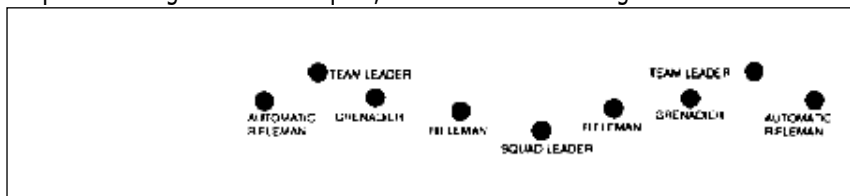
2. **File.** When the terrain precludes use of the wedge, fire teams use the file formation.

D. Squad Formations:

Squad formations describe the relationships between fire teams in the squad. They include the squad column and squad line.

1. **Squad Column.** The squad column is the squad's most common formation. It provides good dispersion laterally and in depth without sacrificing control, and facilitates maneuver. The lead fire team is the base fire team. When the squad moves independently or as the rear element of the platoon, the rifleman in the (rail fire team provides rear security

2. **Squad Line.** The squad line provides maximum firepower to the front. When a squad is acting as the base squad, the fire team on the right is the base fire team.



3. **Squad File.** When not traveling in a column or line, squads travel in file. The squad file has the same characteristics as the fire team file. If the squad leader desires to increase his control over the formation, exert greater morale presence by leading from the front, and be immediately available to make key decisions, he will move forward to the first or second position. Additional control over the rear of the formation can be provided by moving a team leader to the last position.

FIRST AID

Lesson Objective:

Upon completion of this lesson the student will be able to:

- a. State the Definition of First Aid and its objectives.
- b. Enumerate the Hurry Cases of First Aid
- c. Discuss the First Aid Rules.
- d. Explain the First Aid Treatment of the following cases
 - 1) Severe bleeding
 - 2) Burn injuries
 - 3) Fractures
 - 4) Heat injuries
 - 5) Shock
 - 6) Poisoning
 - 7) Snake Bites
- e. Demonstrate the Procedures in Splinting.
- f. Demonstrate the Procedure in Administering CPR

A. Definition:

First Aid – is an immediate and temporary care given to a victim of an accident or sudden illness before the services of a physician is obtained.

B. Objectives of First Aid:

1. To save life
2. To prevent further injury
3. To preserve vitality and resistance to infection

C. First Aid Rules:

1. Do not get excited. First, check for danger and then check for responsiveness. Determine whether the victim is conscious. If the victim is conscious, ask him what happened and what is wrong now. If the victim is unconscious, proceed to check the airway, breathing and circulation. Commence resuscitation as appropriate.

2. Do not move injured victim unless it is necessary. If necessary to move a casualty, seek assistance if possible and handle gently.

3. Keep the victim lying down with his head level with his feet while being examined.

4. Keep the victim warm and comfortable. Remove enough clothing to get a clear. To get a clear idea to get a clear idea to the extent of the injury.

5. Examine the victim gently. Treat the most urgent injuries first and then treat the other injuries to the best of your ability.

6. Avoid allowing the victim to see his own injury. Assure him that his condition is understood and that he will receive good care.

7. Do not try to give any solid or liquid substance by mouth to an unconscious victim nor to a victim who has sustained an injury.

8. Do not touch open wounds or burns with fingers or other objects except when sterile compresses or bandages are not available and it is absolutely necessary to stop bleeding.

9. Do not try to arouse an unconscious person.

10. Seek medical attention immediately.

D. "HURRY CASES" in First Aid:

Stoppage of Breathing – Critical time is four minutes to restore the victim to normal before brain damage take place.

Management of the Casualty: Clear the airway. Inflate the lungs with five quick breaths (proceed to CPR)

Severe Bleeding – Bleeding and hemorrhage mean the same thing, that blood is escaping from arteries, capillary vessels, or veins.

Types of Hemorrhage:

1. Arterial Bleeding – Blood from an open artery. The color of the blood is bright red. The blood spurts which are synchronized with the pulse.

2. Venous Bleeding – Blood from an open vein. The color of the blood is dark red. The blood escapes in a slow steady flow.

3. Capillary Hemorrhage – Blood from damage capillaries. The color of the blood is intermediate between bright and dark red. The blood only oozes from the wound. This is the common type of hemorrhage.

Controlling external bleeding:

Direct pressure

Digital pressure (pressure points)

Facial – Temporal

Carotid – Subclavian

Auxiliary – Brachial

Femoral

Compress and Bandage

Ligation – tying

Torsion – twisting

Elevate the injured part to lessen the flow of blood.

Indirect pressure – Tourniquet

E. Poisoning:

1. Swallowed – Antidote is to dilute with water or milk to lessen the concentration of the poison. Milk coats the lining of the intestines.

2. Inhaled – Proper ventilation at once (open air).

Contacted poison – Wash at once with soap and water. Bath soap is recommended.

3. Snake Bite. Immediately expose the wound then remove clothing, remove shoes, remove casualty's jewelry and place it in casualty's pocket.

Determine the nature of bite

1. Non-poisonous. Four to six rows of teeth - No fang marks on victim.

2. Poisonous. Two rows of teeth -Two fangs which create puncture wound.

Signs and Symptoms:

Less than one hour

- Headache - Vomiting
- Transient faintness, confusion, unconscious

One to three hours after.

- Dropping eyelids - Double vision (Diplopia)
- Difficulty in swallowing - Enlarged lymph glands
- Abdominal pain - Dark urine
- Rapid pulse - Hemorrhage

After three hours

- Paralysis in large muscles - Respiratory paralysis
- Circulatory failure

Treatment:

1. Non-poisonous. Cleanse/disinfect wound. Use soap and water or an antiseptic solution. Use iodine (if casualty is not allergic to it)

Caution: If the bite cannot be positively identified as poisonous or non-poisonous, treat as a poisonous bite.

2. Poisonous. Rest the casualty/have casualty lie down. Keep casualty still to delay venom absorption. Apply broad bandage. Keep bitten part below heart level. Immobilize the limb and bring transport to casualty

Don'ts:

1. Cut or incise wound
2. Apply tourniquet
3. Wash bitten area

Prevention:

Avoidance – know where the snake rests like near the logs or in heavy brush (vegetation) and or In Rocky Edges (reef)

F. Shock:

Shock – is a condition in which there is insufficient blood in the circulation to fill the blood vessels. As a result, the tissues do not receive enough oxygen to maintain life and there is extreme body weakness or physical collapse.

Main Causes of Shock:

1. Hemorrhage, also loss of water due to nausea and vomiting and loose bowel movement
2. Severe injuries, such as burns and fractures
3. Asphyxiation – lack of oxygen

Other factors that may cause or aggravate shock

1. Severe pain
2. Wound infection
3. Disease
4. Exposure
5. Fatigue
6. Hunger and thirst
7. Fear and worry
8. Unnecessary or rough handling

Signs and Symptoms of Shock

1. The casualty is pale
2. Skin is cold and clammy

3. Pulse is rapid and weak
4. Respiration is rapid, irregular and shallow
5. If the casualty is conscious, he may be listless and drowsy and complain of thirst and dryness in the mouth. The eyes may have a vacant, dull expression, and the pupils may be enlarged

Treatment for Shock

1. Control the bleeding
2. Give oral fluids providing there are no contradictions such as abdominal wounds or unconsciousness.
3. Keep the casualty comfortable and warm but do not overheat
4. Lay the patient on his back with his feet higher than his head except in cases of chest or head injuries

F. Fracture:

Fracture – is a break in the continuity of the bone

Kinds of Fracture:

1. Open (compound) fracture – Bone has broken through skin.
2. Closed (simple) fracture – Skin has not been penetrated on both ends.

Signs and Symptoms:

1. Deformity – present when injured limb lies in unnatural position or is angulated where there is no joint
2. Pain at the point of fracture
3. Crepitation (grating sound)
 - a. Felt and heard when bones rub together
 - b. Never move the injured extremity to determine crepitation
4. Discoloration (echymosis, bruising)
5. Loss of motion
6. Exposed bones
7. Swelling (endema)
8. Possible loss of pulse below fracture

G. Splinting:

Splinting – a device to immobilize an injured part of the body.

Reasons for Splinting

1. Relieve pain by minimized movement
2. Prevent further damage to injury site

General Principles of Splinting

1. Splint fracture where it lies – DO NOT reposition. If fracture is severely angulated, straighten it with a gentle pull so that limb can be incorporated into a splint.
2. Immobilize fracture site before moving casualty. Splint should immobilize joint above and below fracture site.
3. Pad splints before applying.
4. Dress all wounds and/or open fracture (exposed bones) prior to splinting.
5. Check for neurovascular function before, during and after application of splint.

H. Burns and Scalds:

Burn - is an injury that results from heat, chemical agent or radiation. It may vary in depth, size and severity.

Scalds - is a burn caused by a liquid.

Classification of Burns:

1. First Degree – The outer skin is reddened and welted or slightly swollen.

2. Second Degree - The under skin is affected and blisters are formed.
3. Third Degree - The skin is destroyed and tissues underneath are damaged.

Causative Agent

1. Thermal agent (heat)
2. Electricity
3. Radiation burns
4. Chemical agent (acids,alkali)

Treatment for first Degree Burn:

1. Immerse burnt area in cold water until the patient ceases to feel pain.
2. When it is possible to immerse the burned area, moist cold towels should be applied and renewed frequently.
3. Follow this application for dry dressing.
4. If desired a simple burn ointment may be applied

Treatment for second degree burn

1. Follow the steps prescribe in the first degree except do not apply any burn ointment.
2. Gently Blot area dry with sterile gauge or clean cloth.
3. Apply sterile gauze or clean as protective dressing.
4. Never break a blister.

Treatment for third Degree Burn

1. Do not remove adhered particles of charred clothing.
2. Cover burned area with sterile dressing or freshly laundered sheet.
3. Do not allow victim to walk.
4. If medical help is not available for one hour or more and victim is conscious, and not vomiting, give a weak solution of salt and soda.

I. Fainting:

Fainting is loss of consciousness caused by a temporary reduction of the blood supply to the brain.

Causes:

1. Emotional
2. Hunger
3. Fatigue

Signs and Symptoms:

- | | |
|--------------------|---------------|
| 1. Weakness | 4. Dizziness |
| 2. Pallor | 5. Cold Sweat |
| 3. Unconsciousness | |

Treatment:

Seat victim with knees far apart and hold head far down between knees for about five minutes. If victim loses consciousness, lay him down on his back with head turned to one side. After consciousness return keep victim quiet for about 15 minutes.

Unconsciousness - a person who does not respond to any spoken words or obeys a shouted command.

Observation to the unconscious

1. Check for the ABC
2. Check for hemorrhage
3. Check for fracture

4. Check and record vital signs
5. Check the size and reaction of the pupils to light
6. Dilated pupils – (possible cause) Shock, Cardiac arrest ,brain damage ,substance abuse (Amphetamines,Marijuana), disorder of central nervous system.
7. Constricted Pupils – Head injury, stroke, Substance abuse (narcotics)
8. Eyelid Response
9. Response to speech
10. Response to pain

J. Basic Life Support:

Methods of Administering Artificial Respiration (AR)

1. Mouth-To-Mouth Method
2. Chest-pressure Arm-Lift Method

Mouth-to-mouth Method (casualty with heartbeat)

1. Clear casualty's upper airway
2. Position the casualty on his back
3. Place him up and put a rolled blanket or similar object under his shoulders
4. Adjust the casualty's lower jaw to a jutting position using either of the two methods
 - a. Thumb-jaw lift
 - b. Two-hand jaw lift
5. Seal the airway opening (nose or mouth)
6. Administer AR as follows:
 - a. Take a deep breath, open your mouth wide, and make an airtight seal around the casualty's mouth or nose.
 - b. With your eyes focused on the casualty's chest, blow forcefully into his airway (mouth or nose)
 - c. Remove your mouth from the casualty's airway opening and listen for the return of air from his lungs.
 - d. After each exhalation of air from the casualty's lungs, blow another deep breath into his airway.

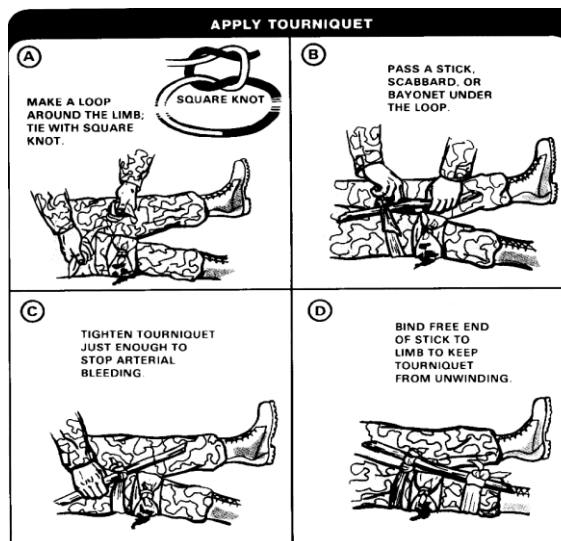
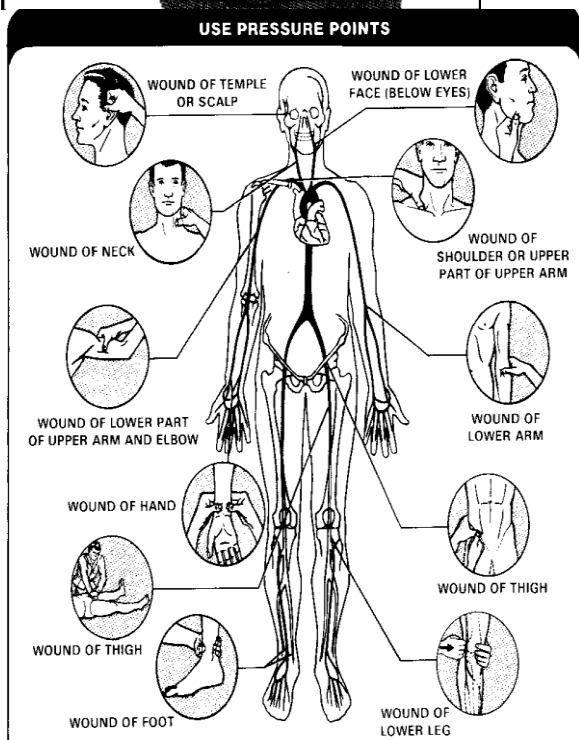
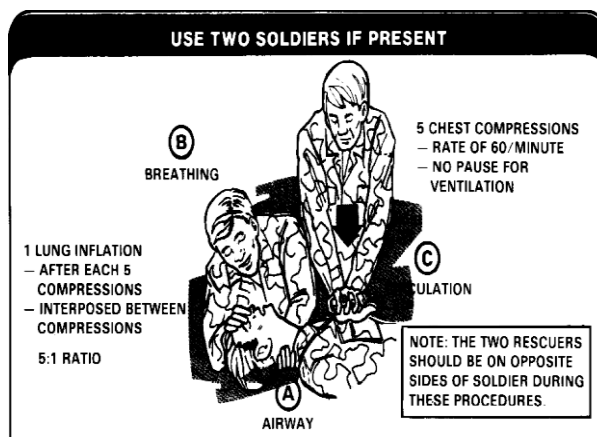
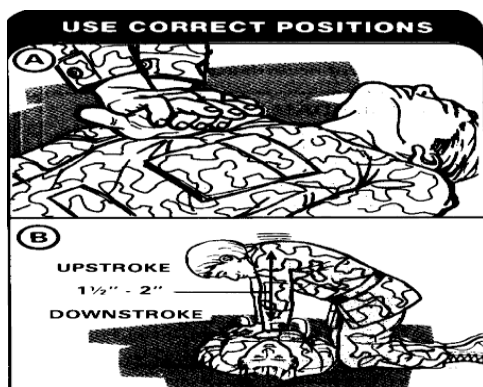
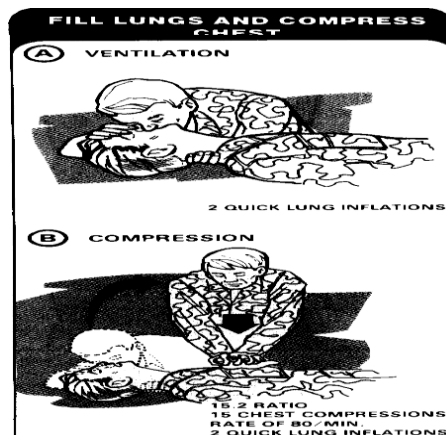
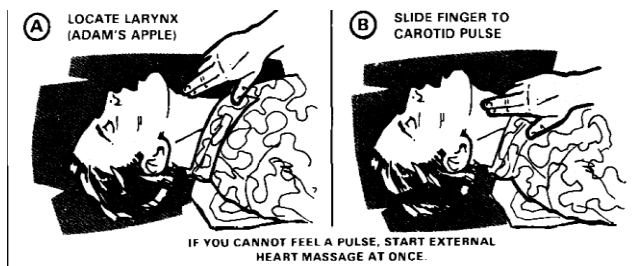
Chest-Pressure Arm-Lift Method:

1. Clear the casualty's upper airway (as described earlier)
2. Position the casualty on his back
3. Position the casualty's head in the same manner as for mouth-to-mouth resuscitation.
4. Position Yourself:
 - a. Stand at the casualty's head and face his feet
 - b. Kneel on one knee and place your opposite foot to the other side of his head and against his shoulder to steady it.
 - c. If you become uncomfortable after a period of time, quickly switch to the other knee
5. Administer as follows:
 - a. Grasping the casualty's hand and holding him over his lower ribs, rock forward and exert steady, uniform pressure almost directly downward until you meet firm resistance.
 - b. Lift his arm vertically upward above his head then stretch them backward as far as possible.
 - c. Replace his hands on his chest and repeat the cycle-press-lift-stretch-replace.
6. Continue AR until the casualty can breath satisfactorily for himself or until you are positive life is gone
7. When you become tired, relinquish your position to another person, if available, with no break in rhythm

Closed-chest heart-massage: (casualty with no heartbeat)

1. Prepare the casualty for mouth-to-mouth AR. The surface on which the casualty is placed must be solid.
2. Position yourself:
 - a. Kneel at a right angle to the casualty's chest so that you can use your weight to apply pressure on his breastbone.
 - b. Place the heel of your hand on the upper half of the breastbone and the heel of the upper hand on top of it.

3. Administer closed-chest heart-massage:
 - a. With your hand in position and your arms straight, lean forward to bring your shoulders directly above the casualty's breastbone; then press straight downward
4. Repeat the press-release cycle 60 to 80 times per minute
5. If you are performing alone, you will have to administer both mouth-to-mouth resuscitation and closed-chest heart-massage



THE M16 RIFLE

Lesson Objective:

Upon completion of this lesson the student will be able

- a. State the Characteristics of M14 Rifle and Label its Parts
- b. Demonstrate the Steps of Procedure in Assembly and Disassembly

A. Characteristics:

1. Air-cooled – natural ventilation
2. Gas Operated – weapons that uses the pressure of the expanding gases to move the bolt through a cylinder.
3. Magazine fed – box type
 - a. short – 20 rds
 - b. long – 30 rds
4. Shoulder and hip fired weapon – it is a weapon fired from the shoulder or hip.
5. Semi-automatic and automatic mode – the weapon by changing the setting of the selector lever can be made to fire either in automatic or semi-automatic mode

B. Gun Data:

1. Weights:

a. Rifle without magazine and sling	6.5 lbs
b. Empty magazine aluminum	.2 lbs
c. Full magazine (20 rds)	.7 lbs
d. Sling M1	.4 lbs
e. Firing weight (fully loaded with sling)	7.6 lbs
f. Bipod	6.0 lbs
g. Bayonet-knife M7	.6 lbs
h. Scabbard M8A1	.3 lbs
2. Lengths:

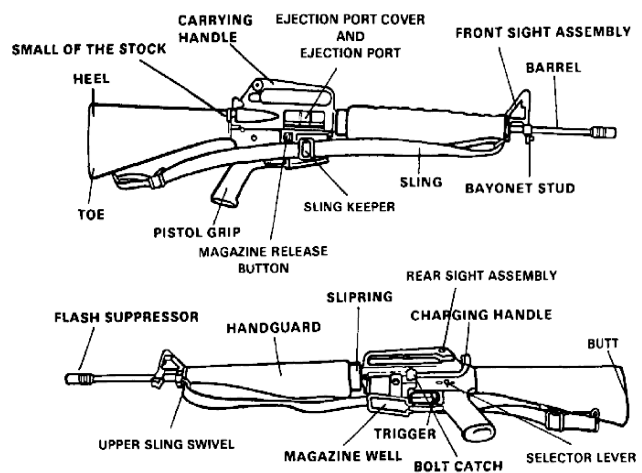
a. Rifle with Bayonet	44.25 in
b. Rifle overall with flash suppressor	39 in
c. Barrel	21 in
d. Barrel w/o suppressor	20 in
3. Sights:
 - a. Front adjustable, click type post. Each click is equal to 2.8 centimeters per 100 meters of range.
 - b. Rear-adjustable flif-type.
 - 1) Normal range setting is for 0 to 300 meters,
 - 2) Long range setting (L) 300 to 500 meters. Each notch of the windage drum equals 2.8 centimeters for every 100 meters of range. On weapons set for battle sight of 250 meters flif to long range aperture weapon is then zeroed to 290-375 meters.
 - c. Sign rapid 19.75 in |
4. Operation Characteristics

a. Cyclic rate of fire	700 – 8– rds per min
b. Muzzle velocity	3,250 fps
c. Maximum range	2,653 meters
d. Maximum effective range	460 meters
e. Maximum rate of fire:	
1) Semi-automatic	45 – 65 rds per min
2) Automatic	150 – 200 rpm
3) Sustained rate of fire	12 – 15 rpm

C. Disassembly/Assembly:

1. Disassembly

- a. Remove magazine
 - b. Open bolt & inspect chamber
 - c. Remove handguards
 - d. Disengage take down pin
 - e. Withdraw charging handle and bolt
- carrier
- f. Remove bolt carrier group
 - g. Remove retaining pin
 - h. Remove firing pin
 - i. Remove bolt cam pin
 - j. Remove bolt from bolt carrier
 - k. Remove extractor pin
 - l. Remove extractor
 - m. Remove sling
 - n. Remove charging handle
 - o. Disengage receiver pivot pin
 - p. Separate upper receiver and lower receiver groups
 - q. Press in buffer assembly, depress buffer retainer and then release buffer assembly.
 - r. Remove buffer assembly and spring



2. Assembly – is just the reverse of disassembly.

/U.S. RIFLE 7.62 MM (M-14)

A. Characteristics:

1. Air-cooled – natural ventilation
2. Gas Operated – weapons that use the pressure of the expanding gases to move the bolt through a gas cylinder.
3. Magazine fed
 - a. box type - short – 20 rds
 - b. long – 30 rds
4. Shoulder weapon
5. Provided with bayonet lug – for the attachment of bayonet or grenade launcher.
6. Provided with spindle valve – to control the use of gases to operate the rifle.

B. Gun Data:

1. Length of rifle (overall) w/ flash suppressor M-14 44.3 in
2. Weight of M14 with full magazine 9.5 lbs
 - a. w/o fully load magazine 8 lbs
 - b. w/ empty magazine 8.5 lbs
3. Weight of empty magazine .5 lbs
4. Weight of full magazine w/ ball ammunition 1.5 lbs
5. Muzzle velocity 2,800 fps
6. Cyclic rate of fire 750 rds/min
7. Maximum effective range (semi-auto w/o bi-pod) 460 meters
8. Maximum effective range (semi-auto w/ bi-pod) 700 meters
9. Maximum effective range (auto w/ bi-pod) 460 meters
10. Maximum range 3,725 meters
11. Sights:
 - a. Front – fixed
 - b. Rear – adjustable – 1 click of elevation or windage moves the strike of the bullet .7 centimeter at 25 meters or 2.8 cm or 1.1 inch at 100 meters.
12. Use seven types of ammunition:
 - a. Armor piercing AP – NATO M16
 - b. Ball – NATO M60
 - c. Tracer – NATO M62
 - d. Dummy – NATO M63
 - e. Blank – NATO M82
 - f. Incendiary – NATO M118
 - g. Grenade launcher ammo – NATO M64

C. Nomenclature:

1. Selector
2. Safety
 - a. Safe Position
 - b. Firing Position
3. Gas Spindle

4. Rear Sight Controls
 - a. Windage Knob
 - b. Pinion
5. Operating Rod Handle

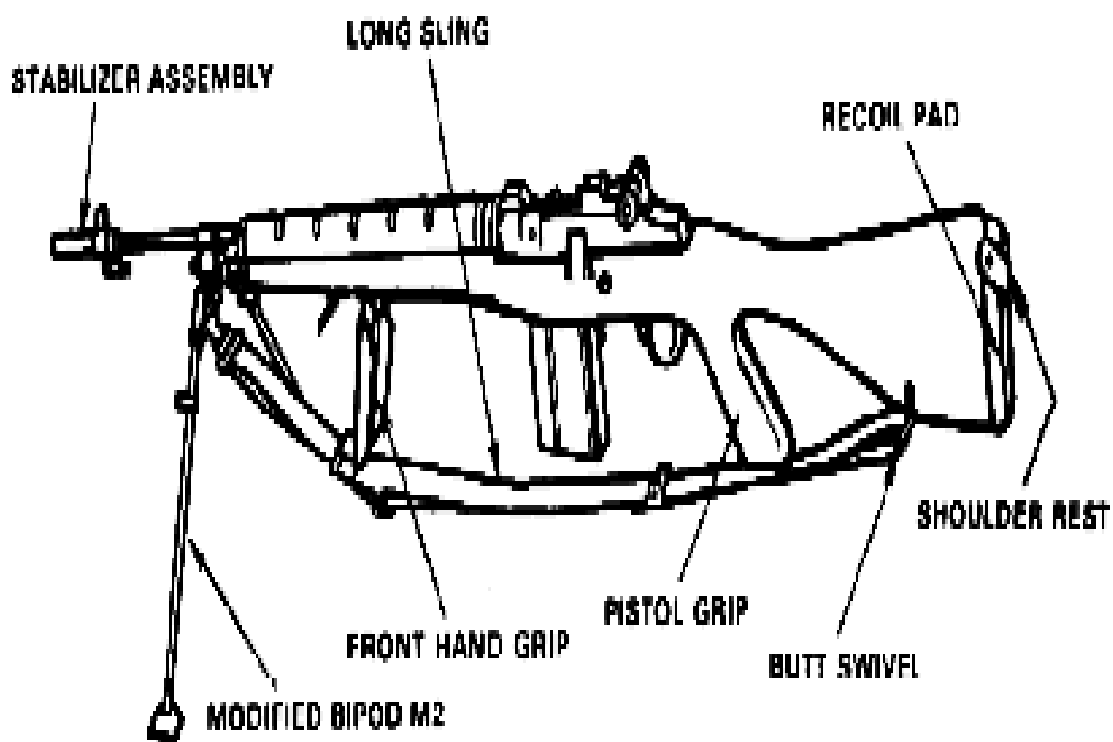
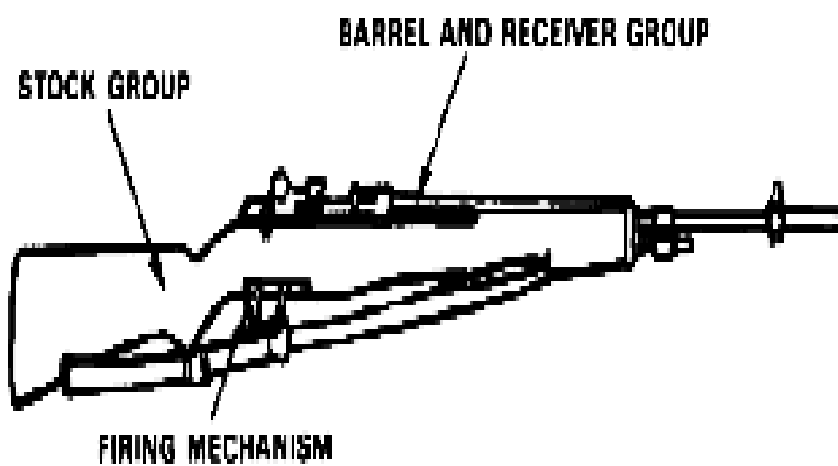
D. Disassembly:

1. Press in magazine latch and remove magazine.
2. Cock rifle and place safety in safe position.
3. Disengage rear end of trigger guard from firing mechanism
4. Swing trigger guard away from stock and pull straight away from stock to remove firing mechanism. Do not rotate trigger guard more than 90 degrees during this operation.
5. Grasp the receiver firmly with one hand and strike the butt with palm of the other, lifting the stock from barrel and receiver group.
6. Depress rear sight to lowest position, and turn the barrel and receiver group on its side with the right side upward.
7. If rifle has selector, press in and rotate until face marked with "A" is toward the rear of the right knob.
8. Push forward on rear of connector assembly with right thumb, until the front end can be lifted off the connector lock.
9. Rotate connector assembly about 35 degrees in a clockwise direction, or until the slot at the rear is aligned with the elongated stud on the sear release. Lower the front end of the connector assembly and lift it off the rear release.
10. Turn barrel and receiver group upside down on a padded surface.
11. Pull forward on operating rod spring, removing pressure on the connector lock pin. Pull the lock outward to remove the operating rod spring guide and operating rod spring.
12. Turn barrel and receiver group right side up.
13. Pull back on operating rod, aligning key on its lower surface with notch in receiver. Lift operating rod free and pull to rear, disengaging it from operating rod guide.
14. Remove the bolt by grasping the bolt roller that engages with the operating rod and slide it forward. Lift upward and outward with a slight rotating motion to the right to remove bolt from receiver.

E. Assembly:

1. Insert the bolt from receiver group by slight rotating motion to the right.
2. Insert operating rod from operating rod guide, aligning key on its lower surface with bolt engage from operating rod, then pull it forward.
3. Turn the barrel and receiver group upside down on padded surface.
4. Insert the operating rod spring with operating rod guide from the hole of operating rod.
5. Push it forward, to insert it from connector lock and push connector lock pin.
6. Insert the small hole to the rear end of connector from elongated stud, then turn it the connector assembly to the left, then push it forward until the connector lock, lock from operating rod.
7. Install stock group from receiver group.
8. Install trigger group from stock, until it engage from receiver group.
9. Push trigger guard downward, until it engage to the trigger mechanism.
10. Insert the magazine smoothly and firmly until it lock from the magazine latch.

M-14 - 7.62MM



HAND GRENADES

Lesson Objectives:

Upon completion of this topic the student will be able to:

- a. Illustrate and Label the parts of a grenade.
- b. Enumerate the types of grenades.
- c. Demonstrate the proper way of handling and throwing grenades.

A. Introduction:

From a historical point of view, the grenade as a weapon is known to have been made with the discovery of explosives. It is reported to have been used as early as the 15th century. During that time, the grenade was shaped like a French pomegranate.

In the middle of the 17th century, selected soldiers, then called "grenadiers", were using the grenade with fatal effects. But soon, it fell into disuse as improved versions of the rifle were introduced which consequently increased the range between front lines. Sometime later, particularly in the 20th century, attacking troops found the grenade to be an essential weapon. It was discovered to be effective in clearing enemy at short ranges. Grenades are of two (2) basic types – hand and launched. The hand grenade is thrown away, while the launched grenade is fired from a launcher.

Grenades are further classified as explosive, chemical, and practice. Explosive grenades, which produce fragmentation or blast, are primarily used for anti personnel, harassing, incendiary, smoke-screening, or signaling purposes. Practice grenades may be inert or have a small charge for marking practice throws.

Launched grenades are most likely to be either the anti-personnel explosive type, with fragmentation warhead, or high explosive anti-tank one. The latter's shaped charge warhead is very effective against armor.

Hand grenades are fitted with a delayed action fuse. For explosive grenades, the delay is about 4.5 seconds. The fuse of a chemical grenade, on the other hand, has a delayed action of 2 seconds and usually burns rather than explodes. Launched grenades have instant fuses.

B. Techniques/Procedures to be Employed:

Grip the hand grenade. The safest way to grip a hand grenade for throwing is to hold it so that the safety lever is held down by the thumb, while keeping the pull ring (and safety clip if present) free and facing the non-throwing hand.

Position body, and arm the hand grenade. You should always be in a comfortable and natural position. The two most important points in accurate throwing are body-target alignment and eye-target focus. Line up your body with target as though you were going to throw a football or baseball. Keep watching the target as you throw, and let your arm swing naturally to it. Follow through with your throwing motion and take cover. If possible, you or a buddy should watch where the grenade lands. Make sure you properly arm the grenade before you throw it. The safety pin and clip should be removed while behind cover.

Fragmentation grenade M67 with time delay fuse 213 is your best all around choice. It can be thrown a little over 40 meters by most soldiers and will kill or injure exposed soldiers within 15 meters when it explodes. With practice, you should be able to throw the grenade to within 5 meters of a selected point 35 meters away from you or inside a fighting position 2 meters wide at a range of 20 meters.

C. Offensive Grenades:

These are types that contain an explosive charge in a fiber body and are designed for concussion effect to stun the enemy in enclosed places so that the thrower can charge while the enemy is in a dazed condition.

D. Chemical Grenades:

These grenades contain chemical agents designed to produce a toxic, irritating effect, a casualty effect, a screening or signal smoke, an incendiary action, or a combination of these other effects.

E. Fuses of Grenades:

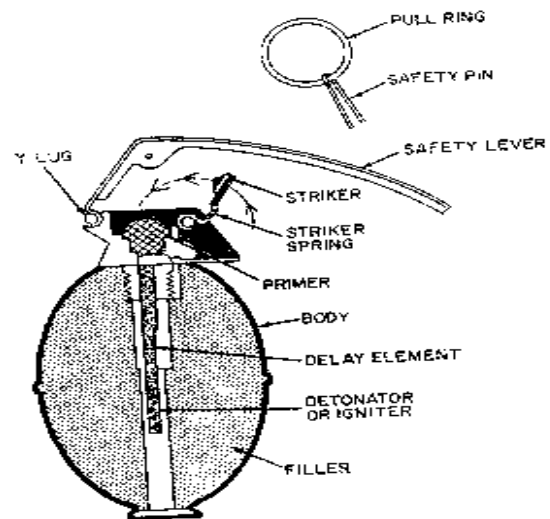
Fuses for hand grenades are classified as either detonating or igniting. A detonating fuse contains a small quantity of violent and comparatively sensitive explosive which sets off the more inert explosive charge in the body of the fragmentation grenade or which bursts the body and liberates the filler in the case of white phosphorous chemical grenades. On the other hand, an igniting fuse contains a small quantity of black powder, or a powder pellet which ignites the filler as though a lighted match were applied.

The fuse has a simple functioning system. Upon the removal of the safety pin and the release of the safety lever, the striker rotates, pushing off the safety lever, and continues its rotation until it strikes the primer. The impact of the striker sets off the primer, which in turn ignites the delay element. After the delay element burns through its length, it sets off either the detonator or igniter cap.

F. Safety Considerations:

The following constitute the precautionary measures in handling grenades:

1. Do not drop a grenade after the safety pin has been removed.
2. Do not use ball ammunition or ordinary blank cartridge to proper grenades.
3. Do not tamper with duds or non-exploding grenades.
4. Do not pull the safety pin until you are ready to throw the grenade.
5. If a grenade is accidentally dropped after the safety pin has been removed immediately pick up, throw it in the intended direction, should "grenade," and then seek nearby shelter, or drop to the ground with the helmet toward the grenade.



RIFLE MARKSMANSHIP

Lesson Objectives:

Upon completion of this lesson the student will be able to:

- a. Explain the principles of good marksmanship
- b. Demonstrate the different firing position.

A. Definition:

Marksmanship - is the skillful art of shooting with a rifle and hitting the target at a given or known distance. Essentially to be a qualified marksman, you must first be able to assume the correct firing positions, which will make you and your rifle a single steady unit. Secondly, you must know how to correctly align your rifle with the target and fire the weapon without disturbing this alignment.

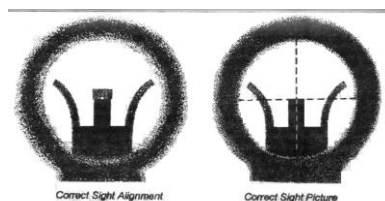
B. Fundamentals of Firing:

A soldier's development of good marksmanship skills is generally based on how well he masters the two principles of: proper aiming and keeping proper and steady hold of the rifle. Understand and master these basic principles of good rifle marksmanship:

1. **Proper Aiming.** In aiming, the firer must concern himself on how to correctly point his rifle so that his projectile will hit the target when he fires. To do this, he must have his rear sight, the blades of his front sight and the target or aiming points in their proper relationship as shown in the following figure. This is known as the proper sight picture.

The following are the basic elements of a correct sight picture:

a. **Sight Alignment.** To obtain correct sight alignment, the top center of the front sight blade must be exactly in the center of the rear sight aperture. If an imaginary horizontal line were drawn through the center of the rear sight aperture, the top of the front sight blade will appear to touch this line. If an imaginary vertical line were drawn through the center of the sight aperture, the line would pass through the center of the front sight blade. The firer can ensure that he has perfect sight alignment by concentrating his attention and focusing his eye on the front sight blade through the indistinct or blurry appearing rear sight aperture. By doing this, any error in sight alignment can easily be detected and corrected.



b. **Placement of Aiming Point.** An aiming point is the specific area on the target on which the firer is aligning his rifle sights. A correctly placed aiming point is exactly centered on and appears to touch the top of the sight blade. If the aiming point is correctly positioned, an imaginary vertical line drawn through the center of the point sight blade will appear to cut it in a half.

c. **Sight Picture.** The correct sight picture is obtained when the sight are properly aligned and the aiming point is in the correct relationship to the front sight blade.

2. **Keeping Proper and Steady Hold.** By assuming proper hold of the rifle, the firer is able to steadily hold the weapon, when he aligns the sights and when he fires the weapon.

Following are the eight factors that may affect your proper holding of a rifle in a steady position:

a. **Left Hand Grip.** The grip on the rifle should be relaxed but at the same time exerting a slight rearward pressure. The rifle must be held at a point, which suits the natural contour of the firer's body and the location of the target. The left elbow should be placed directly under the rifle such that bones and not the muscles of the arm support the rifle.

b. **Rifle Butt in the Pocket of the Shoulder.** The firer must place the rifle butt into the pocket of flesh, which is formed in his right shoulder. The proper placement of the rifle butt lessens the effect of recoil, help steady the rifle and prevents the rifle butt from slipping on the shoulder during firing.

c. **Right Hand Grip.** The firer's right hand should grip the small of the stock firmly but not rigidly. A firm rearward pressure must also be exerted by the right hand to keep the rifle butt in proper position in the pocket of he shoulder and to keep it secured enough against the shoulder and to reduce the effects of recoil. The trigger finger should be positioned on the trigger so there is no contact between the finger and the side of the stock.

d. **Right Elbow Placement.** Proper placement of the right elbow provides balance to the firer's position. When correctly positioned, the right elbow form a pocket of flesh in the shoulder upon which the rifle butt is comfortably rested.

e. **Constant Stock Weld.** It is the point of firm contact between the firer's cheek and the stock. Proper stock weld is obtained by lowering the cheek to the small tock. This enables the head and weapon to recoil as one unit, thereby allowing the rapid recovery between round. The stock weld also enables the eye to be positioned at the same distance behind the rear sight aperture each rifle is fired.

f. **Breathing.** If the firer continues his normal breathing while aiming and firing his rifle, the movement of his chest will cause corresponding movement on his weapon. To avoid this, you must learn to hold your breath for the few seconds required while aiming and firing the rifle. Initially, you should take a normal breath, release part of it and hold the remaining air in your lungs. You should not hold your breath for more than 10 seconds, otherwise your vision may blur and the strain on your lungs will cause muscular tension.

g. **Relaxation.** You should be able to relax properly in each firing position. Undue muscular strain or tension causes trembling of parts of the body, which in turn causes a corresponding movement of the rifle.

h. **Trigger Control.** Is the skillful manipulation of the trigger causing the rifle to fire without disturbing the alignment of the rifle with respect to the target.

C. Rifle Firing Positions:

In combat situations, a soldier should be able to assume the steadiest possible firing position, which can provide him observation of the target area and some cover and concealment. Due to the fast-changing situations in the battlefield, he must be able to fire his rifle effectively from different firing positions at deferent ranges.

Here are the proper procedures in assuming the different firing positions for the M16 rifle:

1. **The Prone Position.** Here are the steps in properly assuming the prone firing position.

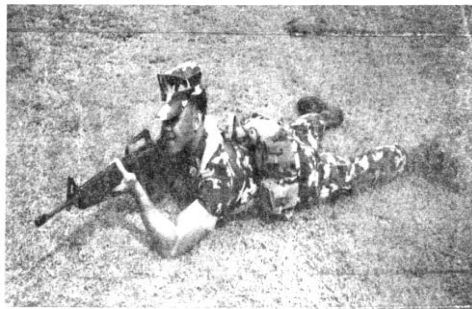
Step 1 – Stand at ready position facing your target with left foot slightly forward.



Step 2 – Drop to your knees as you hold your rifle securely.



Step 3 – Slowly drop to the ground. Hold the heel of the rifle stock with your hand and break fall with the toe of your rifle butt.



Step Five

Step 4 – Hit the ground with your left elbow as far right and forward as possible so that it will be directly under the rifle when your position is completed.

Step 5 – Place the butt of the rifle on your shoulder and press your cheek against the stock. As in other firing positions, you should maintain constant contact with your cheek and the stock, while firing. This is known as maintaining a constant "spot weld."

Step 6 – Keep your feet well apart for stability. Your shoulder elbow slanted on the ground.

Step 7– Keep your feet well apart for stability. Your shoulder must be level with the ground.

2. **Sitting Position.** Here are the steps in properly assuming the sitting firing position.

Step 1 – Stand at ready position with your left foot crossed over your right foot.

Step 2 – Slowly drop to the ground, breaking your fall with our right hand. Keep your feet in place.

Step 3 – your feet must be either crossed or placed slightly apart, which ever is more comfortable or offer more stable firing position.

Step 4 – Place your left elbow far down or inside of your left leg.

Step 5 – Place the rifle butt on your shoulder and press your cheek against the stock.

Step 6 – Place your right elbow on inside of your right leg. Grasp pistol grip with finger on the trigger. Your back should be bent well forward. The closer you keep your elbows to the ground, the steadier you will be.

3. **Kneeling Position.** Here are the steps in properly assuming the kneeling firing position:

Step 1 – Stand at ready position facing the target with your left slightly forward.

Step 2 – Drop to your right knee with your right leg parallel to the target. Your right foot should be at right angle to your leg, midway between the foot and the knee.

Step 3 – Sit back on your heel while holding your foot upright. You may also sit on the side of your right foot flat on the ground. This is a good position when properly used. You must sit well forward and maintain your balance.

Step 4 – Place your elbow on the flat of your knee, so it will be directly under the rifle when position is completed.

Step 5 – Place the rifle butt on your shoulder and press your cheek against the stock and maintain constant spot-weld.

Step 6 – Grasp the pistol grip, with right hand in the line with your shoulder and ball of your finger on the trigger.

4. **Standing Position.** Here are the steps in properly assuming the standing firing position:

Step 1 – Stand at ready position with your feet at a comfortable distance apart, to ensure perfect balance. Also, distribute your weight equally on your both feet.

Step 2 – Place the rifle butt on our shoulder while holding your left arm under the rifle in the most comfortable and balanced position. Your left hand should be grasping the upper hand guard, slightly forward at the balance of the rifle.

Step 3 – Grasp the pistol grip with the ball of our finger on the trigger. Keep your elbow in line or above your shoulder.

Step 4 – When in standing position, always keep your body erect.

D. Triangulation:

It is a method in pre-marksanship training wherein a shooter is taught of proper sight alignment of his rifle with respect to his target. This method is usually done during dry firing. A shooter must master this method to assure that he will hit his target with accuracy and precision.

Following are the basic steps in triangulation.

1. Paste a plain bond paper to a target frame at least 25 meters away from the firer.
2. Provide a movable marker to the assistant. Movable marker is a round shape cartons at least 3 inches in diameter with a pen hole at the center and a 12 inches long stick that will serve as holder.
3. The Firer assumes his good and steady prone position and aimed his rifle to the dead end center of the bond paper.
4. The assistant will position the round marker either to the left or right of the bond paper and upon order of the firer, he will move the marker slowly to the left or right, up or down depending on the firer's request.
5. When the moving marker reaches the center of the line of sight of the firer, he will then shout "MARK". At this point, the assistant will mark the white bond paper by a point of a ball pen or pencil at the pen hole of the marker. This will be the first mark of his line of sight.
6. After marking the fist line of sight, the firer will put his rifle down and repeat the above procedures twice to create a triangle in the bond paper.
7. Upon completing the above procedures, the assistant can now assess or determine whether the firer had obtained a correct sight alignment through the method of triangulation.

E. Coach and Pupil Technique:

During the conduct of familiarization and record firing the shooter and the assigned assistant create a coach and pupil relationship. The assigned assistant to individual firer during firing serves as the coach and provides him the most needed materials like magazines, ammunitions and target papers. The coach also serves as the firer's adviser whether he is hitting or not on his target. The coach also reminds the firer's about range safety.

MILITARY SCIENCE 2

PHILIPPINE NAVY HISTORY

Learning Outcomes:

After the class discussion, the students are expected to:

- a. Enumerate the mission and role of the Modern Philippine Navy
- b. Develop an appreciation on the short history of the Philippine Navy during its infancy stage

A. Four-fold Mission:

1. National Defense
2. Security Operations
3. Deterrence
4. National Development



B. The Navy's Roles:

The modern Navy has expanded its roles beyond the initial mandate to protect the country's shores. These roles include:

1. The Navy shall defend the territory from external aggression.
2. The Navy shall continue its role of securing the Philippine maritime areas from all forms of intrusions and encroachment, piracy and drug trafficking.
3. The Navy shall assist other government agencies in protecting our marine resources and environment.
4. The Navy shall continue to assist in the conduct of rescue and relief operations not only during accidents at sea but even during natural calamities in land such as earthquakes, volcanic eruptions and floods.
5. The Navy shall continue assisting in national socio-economic development.
6. The Navy, as it acquires new and more potent assets, will be an effective instrument of government in fulfilling various security-related international commitments.

C. History



The Philippines had long been a seafaring nation. Early Filipino inhabitants came from across the seas - from Ancient China, Borneo and Malay Peninsula. For centuries, seafaring natives living along the coastal areas of the country have sailed across the uncharted waters of the surrounding seas in their frail little boats. The Filipino seafarers engaged in a very active trade and made regular voyages to neighboring countries in Southeast Asia and the Far East. During the Spanish regime, Filipino sailors have also been utilized by the

Spaniards on their local expeditions and fights against their enemies.

As an island archipelago, the early Filipinos had realized that the Philippines is a maritime country. Its development and progress depended primarily on the sea and the sustaining trade and commerce not only with other countries but also with neighboring islands. The Filipino nationalist fighting against Spanish domination were fully aware of this as they underscored it as vital factor in their struggle for independence. The destruction of the Spanish Navy became a major component of their revolutionary undertaking.

D. The Philippine Revolutionary Navy of 1898:

The history of the Philippine Navy traces its early beginnings during the later part of the Philippine Revolution in 1898. General Emilio Aguinaldo, leader of the revolution, organized the Navy in June 23, 1898 as he proclaimed a Philippine revolutionary government. Captain Pascual Ledesma, a merchant marine ship captain, was appointed as the Director of the Navy assisted by another merchant, marine ship captain, Captain Angel Pabie. The Navy was

placed under the Department of War headed by General Mariano Trias responsible for naval operations in support of the land forces and the merchant marine.

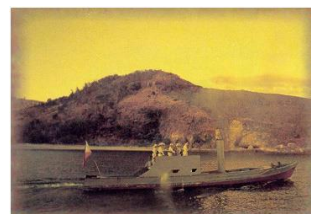
The Revolutionary Navy was initially composed of a small fleet of eight Spanish steam launches captured from the Spaniards. Their rich owners - Leon Apacible, Manuel Lopez and Gliceria Marella de Villavicencio, later donated five other vessels of greater tonnage, the TAALENO, BALAYAN, BULUSAN, TAAL and the PURISIMA CONCEPCION. The 900-ton inter-island steamer further reinforced the fleet, Compania de Filipinas (renamed Filipinas), steam launches purchased from China and other watercraft donated by wealthy patriots. Naval stations were later established in the ports of Aparri, Legaspi, Balayan, Calapan and San Roque, Cavite that served as ships' home bases.

The Navy of General Aguinaldo's revolutionary government bore the brunt of assisting ground operations and transporting Filipino troops and war materials to the different islands of the archipelago in support of the revolutionary cause.

When the revolution spread throughout southern, central and northern Luzon, TAALENO and DON FRANCISCO were the first naval boats used in the campaign. These boats led the first offensive along the Batangas line that contributed to the surrender of the Spaniards in Batangas. In one of its support operations, the naval ship, FILIPINAS, almost figured in an encounter with the German cruiser, Irene, which tried to protect the Spanish garrison in Subic. Successive victories of the revolutionaries in the North led further campaigns towards the south. Using Torrijos, Marinduque as a staging area for amphibious operations, the marines and reconnaissance divers trained by General Ananias Diokno were sent to liberate Bicol and the Visayas.

E. The Off Shore Patrol:

During the Philippine Commonwealth under President Manuel L Quezon, the Filipino Navy existed as adjunct to the United States Armed Forces. Filipinos served the US military service. With the creation of a separate Philippine armed force, a naval organization was formed as a seagoing arm of the Philippine Army. On 09 February 1939, the Off Shore Patrol (OSP) was organized with headquarters located at Muelle Del Codo, Port Area, and Manila. It was headed by 1LT JOSE V ANDRADA, a graduate of the US Naval Academy in Annapolis, Maryland.



Initially, the OSP was assigned with three US Navy Motor Torpedo Boats and christened as follows:

1. Luzon (Q-111) - 83-footer
2. Abra (Q-112) - 65-footer
3. Agusan (Q-113) - 65-footer

On 09 January 1941, the OSP Training School was organized with CAPT MARCELO S CASTELO OSP PA as its first Commandant. It offered courses in torpedoes, depth charges, communications, seamanship, engineering and operations of gasoline engines in consonance with the characteristics and capabilities of the Q-Boats. During World War II, however, Japanese planes bombed the OSP Headquarters on 23 December 1941. The Base Commander burned the base before Japanese troops entered Manila.

F. The Philippine Naval Patrol:

The Off Shore Patrol was reactivated on 01 October 1945, just after World War II. The OSP Training School was transferred to Cavite Naval Shipyard and renamed OSP Training Center; The OSP was further expanded and became a major unit of the Philippine Armed Forces. On 04 October 1947, the OSP was renamed Philippine Naval Patrol (PNP) during the time of President Manuel Roxas. On 05 January 1951, the PNP was further designated as the Philippine Navy

THE PN ORGANIZATION

Learning Outcomes:

After the class discussion, the learners are expected to:

- a. Enumerate the two major type commands of the Philippine Navy
- b. Identify the different support commands and special units of the Philippine Navy
- c. Distinguish the different operational commands and their areas of responsibility

A. Major Type Commands:

1. Philippine Fleet

Home of the sailors and fighting ships. As a type command, the Fleet has major units, namely: the Ready Force, Patrol Force, Service Force and Fleet Support Group and special units, Naval Air Group, Naval Special Operations Group and Fleet Training Group.



2. Philippine Marines

Rapid-deployment, amphibious strike force-small but highly mobile, hard-hitting and superbly trained.

Its mission is to provide combined arms units in the conduct of amphibious warfare and such other operations in order to accomplish the mission of the Philippine Navy.



B. Naval Support Units

1. **Naval Intelligence & Security Force (NISF)** - This unit conducts intelligence and counter-intelligence operations in support of naval operations. The NISF gathers and processes data into usable information for use by operating units of the Philippine Navy Coast Watch Stations. These stations are established at vital choke points in the country.

2. **Naval Logistics Center (NLC)** - began as the OSP supply center under the finance branch of the Philippine Army for supporting the few vessels turned over by the US Navy. In October 1947, the supply center was elevated to a regular division. This paved the way to the establishment in 1950 of the general supply depot. In 1967, the Naval Supply Center was placed under control of the Commander, Naval Shore Establishment, later called the Fleet Support Command and the Naval Support Command. Now, it is renamed the Naval Logistics Center.

3. **The Philippine Navy Finance Center (PNFC)** - provides prompt and timely financial services essential to administration and operation of the Philippine Navy. PNFC operates the PN payroll system and processes all financial claims.

4. **Manila and Cavite Naval Hospital (MNH and CNH)** -These medical facilities provide hospital and out-patient services to PN personnel and dependents.

5. **Naval Station Jose Francisco (NSJF)** - replicates the functions of Naval Base Cavite for Philippine Navy units located in Fort Bonifacio in Makati City.

6. Headquarters & Headquarters Service Group

C. Naval Support Commands:

1. **The Naval Sea Systems Command (NSSC)** - the biggest industrial complex of the AFP, located at Ft. San Felipe in Cavite City with responsibilities for the operation and maintenance of shipyards, command and control system, combat system and research and development of technology for the Navy.

2. **Naval Reserve Command (NAVRESCOM)** - tasked to organize train, equip and administer the Naval reservists (*which includes the Naval Reserve Corps Training Units midshipmen and midshipwomen*) in order to have a base for expansion of the regular force in the event of war, invasion, rebellion or disasters and calamities. The NAVRESCOM is presently based at Cabildo Street, Intramuros, Manila.

3. **Naval Education & Training Command. (NETC)** - provides basic and advanced training to PN Personnel.

4. **Naval Construction Brigade (NCBde)** - Tasked to conduct naval construction and combat engineering operations, this unit is more popularly known as the "SeaBees". It's a specialized unit which performs construction and rehabilitation of piers, harbors and beach facilities, harbor clearing and salvage works, construction of roads, bridges and other vital infrastructures.

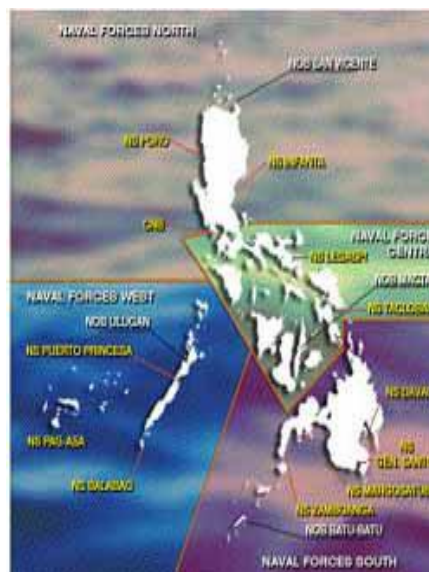
5. **Naval Base Cavite (NBC)** - provides support services to the Philippine Navy and other AFP tenant units in the base complex, such as refueling, re-watering, shore power connections, berthing, ferry services, tugboat assistance, sludge disposal services and housing.

6. **Naval Communication, Electronics Information Services Center (NCEISC)** - Provides communication services, operates and maintains other computer systems in order to develop a systematic and scientific approach to timely decision making process through an effective and efficient Electronic Data Processing – oriented system.

D. Naval Operational Commands:

Tasked to conduct naval operations in order to protect and defend the country's maritime areas within its Area of Responsibility. They have capabilities for conducting territorial defense operations, internal security operations and such other activities to support naval administration, logistics, service support and community development in their area of responsibility.

1. **NAVAL FORCES NORTH** - responsible for the naval defense and security in Northern Luzon
2. **NAVAL FORCES SOUTH** - responsible for the naval defense and security in Western Mindanao
3. **NAVAL FORCES WEST** - responsible for the naval defense and security in Western Philippines and Kalayaan Island Group.
4. **NAVAL FORCES CENTRAL** - responsible for the naval defense and security in the Visayas
5. **NAVAL FORCES SOUTHERN LUZON** - responsible for the naval defense and security in the Southern Luzon Area.
6. **NAVAL FORCES EASTERN MINDANAO** - responsible for the naval defense and security in the Eastern part of Mindanao.



E. Headquarters Philippine Navy (HPN):

1. **The Flag Officer In Command, PN (FOIC, PN)** - He is the highest Naval Officer in the Navy or the commanding General of the Navy. He executes the command functions in relation to naval strategy, tactics and operations and act as the immediate advisor to the chief of Staff, AFP. He is responsible for the planning development and execution of Naval Defense in the country.

2. The Vice Commander (Vice COM) - He is the Deputy Commander of the Navy. He assists the FOIC and performs his functions in his absence.

3. Chief of Naval Staff (CNS) - He exercises general supervision over the central staff and special and technical staff and perform other duties that the FOIC, PN may assign.

4. Personal Staff - They assist in personal or in specific functional areas, Personal staff officers whom the FOIC selects to serve as his aides and those individual staff offices whose activities he desires to coordinate and administer directly.

- NPIO – Naval Public Information Office
- CMCPO – Command Master Chief Petty Officer
- Flag Sec – Flag Secretary
- TNIG – The Naval Inspector General
- OESPA – Office for Ethical Standards & Public Accountability
- TNIA – The Naval Internal Auditor
- SJA – Staff Judge Advocate
- OSS – Office for Special Studies

5. Central Staff. They are the functional staff and assist and advise the FOIC pertaining to their area of expertise.

- N1 - for Personnel and Administrative
- N2 - for Intelligence
- N3 - for Operations
- N4 - for Logistics
- N5 - for Plans
- N6 - for Weapons, Communication, Electronics Information System (WCEIS)
- N7 - for Civil Military Operations and Environmental Affairs
- N8 - for Education & Training
- N9 - for Retirees and Reservist Affairs
- N10 - for Shipyards, Repair

F. Special and Technical Staff:

- 1. TNCH – The Naval Chief Chaplain
- 2. TNJA – The Naval Judge Advocate
- 3. TCSN – The Chief Surgeon Navy
- 4. TCNN – The Chief Nurse Navy
- 5. TNDS – The Naval Dental Surgeon Navy
- 6. TNCE – The Naval Chief Engineer
- 7. NMO – Naval Modernization Office
- 8. NRMO – Naval Resources Management Office
- 9. NMFO – Naval Management and Fiscal Office
- 10. TNA – The Naval Adjutant
- 11. TNSSO – The Naval Special Service Office
- 12. TNH – The Naval Historian
- 13. TNPM – The Naval Provost Marshal
- 14. PNREMO – PN Real Estate Management Office
- 15. NASO – Naval Accounting Office

THE PHILIPPINE FLEET

Learning Outcomes:

After the class discussion, the learners are expected to:

- a. Memorize the mission the Philippine Fleet
- b. Enumerate the different functions of the Fleet

A. Mission:

The Philippine Fleet's mission is to prepare and operate assigned forces for naval operations in order to support the PN accomplish its mission.

Its general objectives are to optimize operational readiness and combat effectiveness of equipment and personnel and effectively manage available resources through efficient internal administration.



B. The specific functions of the Fleet:

1. To provide assets that will conduct continuous naval patrol, sea control and amphibious operations in order to defend the sovereignty of the country, its territorial waters and EEZ from foreign aggression, intrusion and exploitation.
2. To assist in the conduct of national security operations and ensure safety and security of coastal areas.
3. To employ assets to assist in the conduct of disaster response, particularly maritime search and rescue and patrol, sealift and other type of operations as directed.

SHIP'S ORGANIZATION

Learning Outcomes:

After the class discussion, the students are expected to:

- a. Enumerate the four general departments of a typical PN ship
- b. Know the functions of the Commanding Officer and Executive Officer of a PN ship

A. General:

The function of a naval ship is primarily to fight or to provide support to naval combat operations. If a ship is to function well in combat, the crew must be organized in such a way that it can be effectively directed and controlled to accomplish its mission. Hence, the requirements for battle are the basis for organization of naval ships.

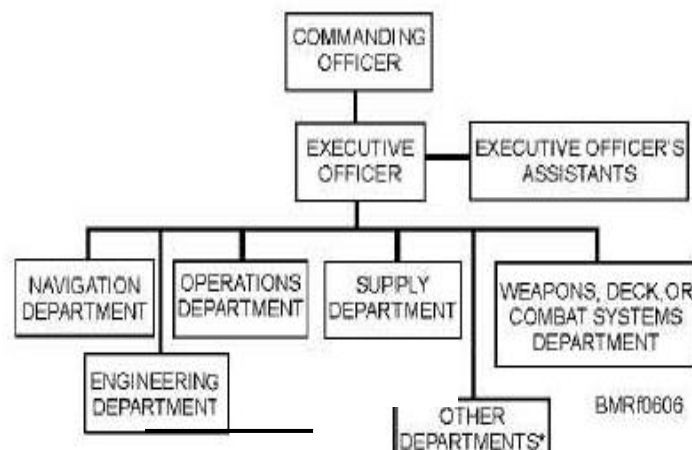
The ship's organization is essentially a war organization developed on the theory that ships operating in peacetime can be expanded quickly to a wartime operating condition if it becomes necessary. It consists of functional groupings, such as navigation, operations, engineering and damage control, weapons and supply, called departments, headed by key officers who are designated Department Heads. These key officers perform their administrative functions as well as carry out the requirements for battle as necessitated by the tactical situation.

B. Ship's Administrative Organization:

Basically, a PN ship is organized into four (4) departments namely:

1. **Operations**
2. **Engineering and Damage Control**
3. **Deck and Gunnery** and
4. **Mess and Supply.**

Large combatant or other type ships may have separate Weapons, Repair or Supply Departments and ships particularly hospital ships may have an organic or attached Medical Department. See Figure below for a typical shipboard administrative organization.



1. **Commanding Officer.** All commissioned ships of the Philippine Navy operates under the authority of a Commanding Officer (CO), a line officer who, by virtue of his training and experience, is assigned by the FOIC, PN with a responsibility to command the ship. No matter what his rank is, he is called "Captain." The CO is charge with the absolute responsibility for the safety, well-being and efficient operation of his command. He must exert every effort to maintain his command in a high state of operational readiness. His specific duties, responsibilities and authority are set forth in the AFP and PN regulations and the customs and traditions of the naval service. Within the limits as prescribed by laws and regulations, he may delegate authority to his subordinates, but such delegation in no way relieves him of his responsibility of command.

2. **Executive Officer** - The Executive Officer (EXO), often called "XO", is a line officer next in rank to the CO who is designated second in command of the ship. In the absence of the CO, he becomes the acting CO and he must be prepared to assume command. The EXO is the direct representative of the Commanding Officer and all orders issued by him shall have the same force and effect as though issued by the commanding officer.

He is primarily responsible for the administration of the ship and personnel, overall training, daily routine, and the maintenance of good order and discipline in the entire command. In the performance of his duties, he shall conform to and effectuate the policies and orders of the commanding officer and shall keep him informed of all significant matters pertaining to the command. The EXO reports directly to the Commanding Officer. The entire department heads report to him for all matters pertaining to the internal administration of the command.

3. **Chief Master-At-Arms (CMAA)** - The Chief Master-At-Arms enforces AFP and PN regulations, ship's regulations and other directives; assists the OOD in the execution of ship's routine including responsibility for crew turning out promptly at all hands evolutions and reveille, supervising the control of standing lights, maintaining silence after taps, handling of liberty parties leaving the ship or returning aboard and in the processing of all newly reported personnel; supervises extra duty men and men performing punishments, the rigging and unrigging for church, movies and other special functions and the preparation of delinquency reports; maintains a lucky bag; furnishes escorts for the CO, EXO and visitors as directed; renders 8 o'clock reports if not designated to BMW or DPOW; and, ensures the safety and welfare of prisoners at the brig, frequent inspections of the ship, that ship's regulations and instructions pertaining visitors are adhered to and the presence of masters-at-arms at all mess lines, pay lines, store lines, captain's masts and courts-martial, at scenes of emergencies and other official gathering of personnel.

4. **Heads of Departments.** The head of a department functions as the direct representative of the Commanding Officer in all matters that pertain to the department and as such, he shall conform to the policies and comply with the order of the commanding officer. He shall not disable the equipment for which he is responsible when such action may affect adversely the safety or operation of the command, without permission of the Commanding Officer.

C. The Different Heads of Department:

1. **Navigator** - The Navigator is the head of the Navigation Department who is normally the most senior of the watch officer. In ships without a Navigation Department, navigation becomes a function of the Executive Officer and as such, he is designated as the Navigator. The Navigator is responsible to the Commanding Officer for the safe navigation and piloting of the ship. He shall receive all orders relating to his navigational duties directly from the CO and shall make reports in connection therewith directly to him.

2. **Operations Officer** - The Operations Officer is the head of the Operations Department. The Operations Officer is responsible under the Commanding Officer for the collection, evaluation and dissemination of combat and operational information required for the assigned mission and tasks of the ship.

The following officers, if assigned or designated, whose duties are indicated, reports to the Operations Officer:

a. **Combat Information Center (CIC) Officer** - He is responsible for the collection and dissemination of combat and operational information; operation, care and maintenance of equipment CIC equipment except those assigned to other officers; training of CIC personnel; and, control of aircraft, when assigned.

b. **Communications Officer** - He is responsible for supervising the receipt, transmission and routing of ship's messages; operation and maintenance of visual and electronic communications equipment; proper handling and control of all registered publications; and, the maintenance of communications security which includes crypto, transmission and physical security.

3. **Engineering Officer** - The Engineering Officer is the head of the Engineering Department. This department includes the function of damage control and repair and may have officers assigned or designated to perform such functions.

The Engineering Officer is responsible to the Commanding Officer for the operation, care and maintenance of all propulsion and auxiliary equipment; the control of damage; and the accomplishment of repairs.

The following officers, if assigned or designated, whose duties are indicated, reports to the Engineering Officer:

a. **Damage Control Officer** - He is responsible for prevention and control of damage including control of stability, list and trim; placing the ship in proper condition of closure as ordered by the CO; coordination and supervision of compartment tests for tightness; maintenance of bills for control of stability; posting of correct compartment check-off list; training of ship's personnel in damage control including fire fighting, and emergency repairs; and, operation, care and maintenance of auxiliary machinery piping and drainage systems, shop repair facilities and the repair of hull and boats.

b. **Repair Officer** - He is responsible for planning, scheduling, accomplishing and inspecting works to ensure its timely and satisfactory completion; establishment of an adequate job order system; and, preparation of estimated funds required for work to be performed.

4. **Weapons Officer.** In large combatant ships where there is a preponderance of weapons systems, the Weapons Officer is the head of the Weapons Department. This department includes the functions of anti-submarine warfare (ASW), gunnery and deck seamanship and normally have officers assigned or designated to perform the functions. In smaller ships, however, there is only a Deck and Gunnery Department headed by a First Lieutenant and Gunnery Officer who perform the functions of deck seamanship and gunnery. If the ship is armed with ASW weapons, an ASW Officer is designated who reports to the Operations Officer for the employment of such weapons. The Weapons Officer is responsible to the Commanding Officer for the supervision and direction of the employment of the ordnance equipment and the equipment associated with seamanship.

The following officers, if assigned or designated, whose duties are indicated, report to the Weapons Officer or to the Commanding Officer in the case of the Deck and Gunnery Officer for ships with only a Deck and Gunnery Department or to the Operations Officer in the case of the ASW Officer for ships armed with ASW weapons:

a. **Gunnery Officer** - He is responsible for the conduct of gunfire; operation, care and maintenance of all guns including designation and fire control equipment and associated ordnance; and, training of gunnery personnel and gun crews.

b. **Deck Officer (First Lieutenant)** - He is responsible for the preservation and cleanliness of the exterior of the ship except that part assigned to another department; operation, care and maintenance of the ground tackle, mooring lines and related equipment, ship's boats, except boat machinery, and of the life rafts and other lifesaving equipment; towing gears and equipment, rigging, gangways, fueling and provisioning at sea gears and other deck appurtenances and equipment related to deck seamanship including those involved in loading and unloading operations; planning and execution of deck seamanship evolutions and operations including anchoring, mooring, fueling and replenishment at sea; supervising loading, unloading and stowage of cargo; and, supervising operation of paint, sail and boatswain's lockers as well as garbage disposal.

If no other officer is assigned or designated, the Deck and Gunnery Officer performs the following collateral duties:

- a. Cargo Officer
- b. Special Service Officer
- c. Athletic Officer








5. **Mess and Supply Officer.** The Mess and Supply Officer is the head of the Mess and Supply Department. In large ships, the Mess and Supply Department maybe organized separately and would have officers assigned to perform each function. The Mess and Supply Officer is responsible to the Commanding Officer for procuring, receiving, storing, issuing, shipping, transferring, accounting and while in his custody, maintaining all stores, provisions and equipment of the command.









PN Enlisted Rating Structure

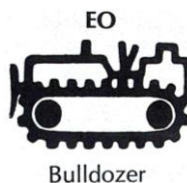
Learning Outcomes:

After the class discussion, the students are expected to:

- a. Distinguish the different rating of the PN Enlisted Personnel
- b. Know by heart the different functions of these ratings

<p>BM</p>  <p>Crossed anchors</p>	<p>BM - Boatswain's Mate</p> <p>BM's train and supervise personnel in all activities relating to marlinspike, deck and boat seamanship, and the maintenance of the ship's external structure and deck equipment. They act as petty officers in charge of small craft and may perform duties as master-at arms, serve in or take charge of gun crews and damage control parties.</p>
<p>GM</p>  <p>Crossed cannons</p>	<p>GM - Gunner's Mate</p> <p>Navy GMs operate, maintain and repair all gunnery equipment, guided-missile launching systems, rocket launchers, guns, gun mounts, turrets, projectors and associated equipment. They make detailed casualty analyses and repairs of electrical, electronic, hydraulic and mechanical systems. They also test and inspect ammunition, missiles and their ordnance components. GMs train and supervise personnel in the handling and stowage of ammunition, missiles and assigned ordnance equipment.</p>
<p>QM</p>  <p>Ship's helm</p>	<p>QM - Quartermaster</p> <p>QMs assist the navigator and officer of the deck (OOD), steer the ship, take radar bearings and ranges, and make depth soundings and celestial observations, plot courses and command small craft. Additionally, they maintain charts, navigational aids and oceanographic publications and records for the ship's log reports. They maintain files and service records.</p>
<p>ET</p>  <p>Helium atom</p>	<p>ET - Electronics Technician</p> <p>ETs are responsible for electronic equipment used to send and receive messages, detect enemy planes and ships, and determine target distances. They must maintain, repair, calibrate, tune and adjust all electronic equipment used for communications, detection and tracking, recognition and identification, navigation and electronic countermeasures.</p>
<p>DK</p>  <p>Key on check</p>	<p>DK - Disbursing Clerk</p> <p>DKs maintain the financial records of Navy personnel. They prepare payrolls, determine transportation entitlements, and compute travel allowances and process claims for reimbursement of travel expenses. DKs also process vouchers for receiving and spending public money and ensure accounting data is accurate. They maintain fiscal records and prepare financial reports and returns.</p>
<p>SK</p>  <p>Crossed keys</p>	<p>SK - Storekeeper</p> <p>SKs are the Navy's supply clerks. They see that needed supplies are available including everything from clothing and machine parts to forms and food. SKs have duties as civilian warehousemen, purchasing agents, stock clerks and supervisors, retail sales clerks, store managers, inventory clerks, buyers, parts clerks, bookkeepers and even fork lift operators.</p>
<p>YN</p>  <p>Crossed quills</p>	<p>YN - Yeoman</p> <p>YNs perform secretarial and clerical work. They deal with visitors, telephone calls and incoming mail. YNs organize files and operate copy machines and order and distribute supplies. They write and type business and social letters, notices, directives, forms and reports. They maintain files and service records.</p>

<p>DT</p>  <p>"D" on caduceus</p>	<p>DT - Dental Technician</p> <p>Navy dentists, like many civilian ones, are assisted by dental technicians. DTs have a variety of "chairside," laboratory and administrative duties. Some are qualified in making and fitting artificial teeth; dental X-ray techniques; clinical laboratory required.</p>
<p>HM</p>  <p>Caduceus</p>	<p>HM - Hospital Corpsman</p> <p>HMs assists medical professionals in providing health care to service people and their families. They serve as pharmacists, medical technicians, food service personnel, nurse's aids, physician's or dentist's assistants, battlefield medics, X-ray technicians and more. An HM's work falls into several categories: first aid and minor surgery, patient transportation, patient care, prescriptions and laboratory work, food service inspections and clerical duties.</p>
<p>EM</p>  <p>Globe with longitude, latitude lines</p>	<p>EM - Electrician's Mate</p> <p>The operation and repair of a ship's or station's electrical power plant and electrical equipment is the responsibility of EMs. They also maintain and repair power and lighting circuits, distribution switchboards, generators, motors and other electrical equipment.</p>
<p>EN</p>  <p>Gear</p>	<p>EN - Engineman</p> <p>Internal combustion engines, diesel or gasoline, must be kept in good order. This is the responsibility of ENs. They also maintain refrigeration, air-conditioning, distilling-plant engines and compressors.</p>
<p>MR</p>  <p>Micrometer and gear</p>	<p>MR - Machinery Repairman</p> <p>MRs are skilled machine tool operators. They make replacement parts and repair or overhaul a ship's engine auxiliary equipment, such as evaporators, air compressors and pumps. They repair deck equipment, including winches and hoists, condensers and heat exchange devices. Shipboard MRs frequently operate main propulsion machinery, besides performing machine shop and repair duties</p>
<p>BU</p>  <p>Carpenter's square on plumb bob</p>	<p>BU - Builder</p> <p>Navy builders are like civilian construction workers. They are skilled carpenters, plasterers, roofers, cement finishers, asphalt workers, masons, painters, bricklayers, sawmill operators or cabinetmakers. BUs build and repair all types of structures including: piers, bridges, towers, underwater installations, schools, offices, houses and other buildings.</p>
<p>PH</p> 	<p>PH - Photographer's Mate</p> <p>PHs photograph actual and simulated battle operations and make photo records of historic and newsworthy events for the Navy. They expose and process light-sensitive negatives and positives, maintain cameras, related equipment, photo files and records and perform other photographic services for the Navy.</p>
	<p>AD - Aviation Machinist's Mate</p> <p>Usually, ADs are assigned to billets concerned with maintaining turbo-jet aircraft engines and associated equipment or to any one of several types of aircraft maintenance activities. ADs maintain, service, adjust and replace aircraft engines and accessories, as well as perform the duties of flight engineers.</p>
<p>Other ratings found in the Navy</p>	



NAVAL CUSTOMS AND TRADITIONS

Learning Outcomes:

After the class discussion, the students are expected to:

- a. Know by heart the different customs and traditions of the PN
- b. Know the procedure of leaving and boarding the PN ship
- c. Know the guidelines for midshipmen inside the wardroom

A. General:

NAVY – came from a Latin word “NAVES” which means ships.

1. **Salute:** normally given with the right hand; when right hand is encumbered, left hand could be used; not given when uncovered

2. **Honors To The Flag**

Colors – paying honors to the flag; hoisted in the morning and lowered in the afternoon.

- a. For ships not underway and Shore Commands:

0800H – Morning Colors

Sunset – Evening Colors

Procedures:

- a. Five minutes before colors, first call is sounded (announce as “first call to colors)
- b. 0800H or time of sunset – “attention to colors” is sounded and passed - National ensign is raised/ lowered at the flag gaff.
- c. At the completion of music – “carry on” is passed
- d. Jack flag is also raised/lowered

- b. For ships underway: National ensign is raised/lowered at the mast; the jack flag is not raised.

Shifting colors:

1) When ship leaves the pier or weighs her anchor, shifts the National Ensign from the flag gaff to mast. The national Ensign is then called steaming ensign. Jack Flag is lowered at the same time.

***When is it done?** When the last mooring line leaves the pier or when the anchor is aweigh, a long blast of whistle is sounded that signal for the shifting.*

2) When ship arrives at the pier or anchors: Shifts the National from mast to flag gaff. Jack flag is raised at the same time.

***When is it done?** When the first mooring line reaches the pier or when the anchor is dropped, a long blast of whistle is sounded that signal for the shifting.*

- c. **Honors Rendered by Merchant Ships (Dipping):**

Merchant ships salute navy ships by dipping their ensign. Navy Ships respond by lowering the steaming ensign to half-mast for a few seconds then close it up. After which, the merchant ship may raise again her flag.

- d. **Passing Honors:** honors exchange between two ships or boats when comes close aboard:

1) Distance:

Ships: 600 yards

Boats: 400 yards

2) Ships/boats whose Commanding Officer/Boat Captain is junior in rank renders passing honors to Commanding Officer/Boat Captain Senior in rank.

3) Procedure:

- a) Attention is sounded at the "Junior" ship/boat using the following:
 - 1 long Blast – attention to starboard (the ship/boat to be honored is at the starboard)
 - 2 long Blasts – attention to port (the ship/boat to be honored is at the portside)
- b) Ship/boat being honored does the same.
- c) Carry on – 3 long blasts rendered by ship/boat being honored
- d) End of salute of ship rendering honors – 2 long blasts

3. Other Honors:

- a. The arrival/departure of the ship's Captain is usually announced at the PA system. He is always piped when he boards or leaves the ship
- b. Nobody is allowed to sit in the Captain's Chair at the bridge unless offered.
- c. In boarding the ship, Junior goes first. In disembarking, senior goes first.
- d. Navy Officers eat in the place called "Wardroom"
- e. Side boys are detailed in the quarter deck to welcome a distinguished visitor:

CAPT and below	– 4 side boys
COMMO to REAR ADMIRAL	– 6 side boys
VICE ADMIRAL up	– 8 side boys

4. Bridge Customs:

Bridge is the center of operations of the ship while underway. If CO is present, appropriate greetings must be rendered.

5. Procedure in Entering/Leaving the Ship:

a. At the Gangway – if the National ensign is flying, turn aft before getting aboard and salute the ensign. Upon boarding, before striking the ship's deck, render another salute to the OOD or his/her representative by saying "Request permission to come aboard Sir." For disembarking, it is done in a reverse manner.

b. When boarding in-group – only the one in charge shall render salute.

6. Crossing the Nest:

Usually done when your ship is in nest with other ships:

a. Boarding: Salute the colors and OOD of inboard ship
Say "*Request Permission to cross*" until you reach your own ship.

b. Leaving: Salute your OOD and the National Ensign
Say "*Request Permission to cross*" until you reach your own ship.

c. Do not salute the OOD and the National Ensign of ships between your ships and the ship alongside the pier.

d. Salute your OOD and the National Ensign of the ship alongside the pier.

7. Half Masting:

Tribute to the dead.

- a. When raising, the flag is first closed up then lowered at half mast
- b. When lowering, closed up first then lowered.

8. Basic Rules for Boat and Vehicle:

"Seniors are last in, first out"

9. Divine Service:

- a. Church pennant is flown at the mast.
- b. All persons within the area are required to uncover including watches.

10. Sick Bay:

Uncover when entering

11. Wardroom Etiquette:

These are some guidelines for midshipmen when invited to mess in the wardroom by officers in authority:

a. The wardroom is each officer's seagoing home – a home in which they should be proud to entertain family and friends. Whatever the event, it is a place where members should conduct themselves with the ordinary rules of propriety, common sense, and good manners in observing the rules of etiquette founded on customs and traditions.

b. Stowed in an appropriate location. If unsure, ask.

c. Be punctual for all meals. All officers should remain standing until all guests and the seniors of the mess are seated. If an officer is late for a meal, an apology should be made to the senior officer of the table by stating "Request permission to join the mess, sir." Never choose a place at the wardroom table until you are sure of seating arrangements.

d. Never appear at the wardroom out of uniform. (Civilian clothes may be worn in wardroom only when passing through. Do not lounge around onboard in civilian clothes.

e. Do not be boisterous or noisy in the wardroom. It is the home of all officers, and their rights and privileges should be respected.

f. Consideration of others is one of the basic elements of a lady or gentleman. Show consideration for your fellow officers by:

1) Moderating the sound of audiovisual devices to minimize interference with others. These devices should not be turned on during meal hours unless authorized by the Commanding Officer.

2) When playing cards, etc., by choosing a table location that will not interfere with others.

3) There is no objection to dropping into wardroom for coffee, but do not make a practice of loitering there during working hours.

4) The mess tables must be cleared at least thirty (30) minutes before meals in order to permit the mess personnel to set up on time.

5) Magazines and papers should be carefully handled, not left adrift, damaged, hoarded or removed where they have been placed for availability to all members.

6) When you are finished with your coffee, except meals, remove the cup and saucer from the table to pantry shelf or sideboard if there are no mess personnel available. This is a little thing that will help improve the general appearance of the wardroom.

7) Remember that obscenity and vulgarity do not belong in an officer's conversation at any time.

g. A junior officer pursues the correct course by being the best listener in the mess; the senior officer, by setting the example in manners, consideration, and intelligent conversation. Unkind and unfavorable comments about officers and opinions about seniors are not appropriate.

h. When guests are present, especially seated alongside of you, their presence should be recognized. Engaging them in polite conversation, if the opportunity presents itself, will be appreciated by the guests and their host.

i. Your feet belong on the deck and not on the furniture. If you wish to sleep, you should retire to your stateroom.

j. Stay clear of the wardroom immediately after breakfast, usually the period of general cleaning.

k. When leaving the wardroom, leave the place you have been occupying neat and orderly whether you found it that way or not. These will be appreciated by those who follow you.

l. Office work should not be performed in the wardroom unless absolutely necessary.

m. When authorized to view movies in the wardroom, midshipmen are to stay in the rear. They are to remain seated only if all officers have seats.

n. Impeccable table manners are the mark of a lady or gentleman. Ensure that your table manners are above reproach at all times.

o. Always rise when the commanding officer, squadron commander or a flag officer enters the wardroom, unless in the process of eating- then follow lead of the senior member of the wardroom.

12. Officers and CPO's Country:

Includes staterooms, mess hall for CPO's, wardroom and living spaces:

- a. EP are not allowed to enter unless on official business.
- b. NOT used as passageways or shortcuts.

13. At the Mess Hall:

Uncover when entering

NAVAL TERMS AND PHRASEOLOGIES

Learning Outcomes:

After the class discussion, the students are expected to:

Know the different definition of nautical terms commonly used in the Philippine Navy aboard ship

A. Naval Terms (Denotes direction and location)

1. Aft- behind or further aft, astern or toward the stern.
2. Abeam- at right angle to the centerline of the ship
3. Aft-in- near or toward the stern
4. Alongside- on side a pier or berth
5. Amidship- the middle portion of the ship
6. Astern- toward the stern, an object or vessel that is abaft another vessel or object
7. Bridge- raised platform from which a ship is navigated
8. Bow- the forward part of the ship
9. Broadside- at right angle to the fore and aft line of the ship
10. Centerline- imaginary line running from the ships bow to stern: divides the ship lengthwise vertically
11. Dead ahead- directly ahead of the ship s bow in line of the centerline
12. Dead astern- directly aft of the ship in line of the centerline
13. Draft- depth of the water from the surface waterline to the ships keel
14. Fantail- main deck section in the after part of the ship
15. Freeboard- height of ships side from the waterline to the main deck
16. Leeward- direction away from the wind
17. Port Bow- bearing 315 degrees relative to the bow of the ship
18. Portside- left hand side of the ship facing forward
19. Starboard Bow- bearing 45 degrees relative to the bow
20. Starboardside- right hand side of the ship facing forward
21. Waterline- the line which makes the surface with the hull
22. Windward- direction toward the wind

B. Naval Terms (denotes nomenclature of fittings)

1. Bitts- strong iron post on a ships deck for working of fastening lines almost invariably in pairs.
2. Bulkhead- one of the vertical wall like structures enclosing a compartment
3. Brig – a prison on a ship or a shore base
4. Bollard- wooden or iron post on a pier or wharf for securing mooring lines
5. Cleat- a small deck fittings or metal with horns used for securing lines
6. Deck- on a ship, its corresponds to a floor in a building
7. Compartment- it corresponds to a room in a building
8. Overhead- equivalent to a ceiling of a building ashore
9. Head- compartment of a ship having toilet facilities
10. Superstructure- all equipment and fittings except armament extending above the hull
11. Mast- upright spar supporting signal halyard and antennas in a naval ship
12. Wardroom- officers mess and lounge room aboard ship
13. Yardarm- a spar attached to the of a mast running athwart ship

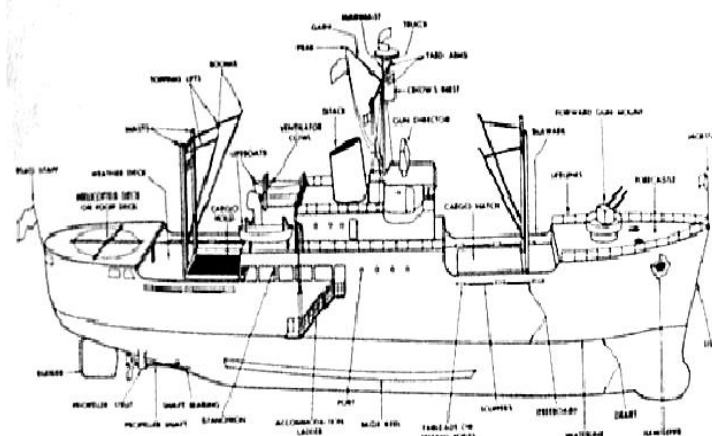


Figure 12-6. These are the principal parts of a typical auxiliary ship

14. Rudder- flat movable structure and vertically attached to the stern used for steering the ship
15. Lazarette- storage compartment of the stern below deck
16. Galley- the ship kitchen
17. Cabin- the captains living quarter

C. Other Naval Terms:

1. Adrift- loose from mooring or out of place
2. Aye-Aye- a reply to an order to indicate that it is understood and will be carried out
3. Billet allotted sleeping place: also a man's location in the ship's organization
4. Avast- a command to desist for whatever is being done
5. Black Gang- slang for the engineering force
6. Bear Hand- cooperation among the ship's company
7. All Hands- entire ship's company
8. Binnacle list - sick list: list of men excuse for duty
9. Boot- slang for new recruit
10. Coxswain- enlisted men in charge of a boat
11. Crossing the line- crossing the earth equator
12. Dolphin- cluster of piles at the corner or edge of a pier
13. Dead in the water- said of a ship when she has neither headway nor steerway in the water
14. Fathom- six (6) feet unit of length
15. Field day- general cleaning day aboard ship, usually a day before inspection
16. Flag Officer- an officer with the rank of COMMODORE and above
17. Gangway- opening in the bulwarks: order to stand a while and get out of way
18. General Quarters- battle station for all hands
19. Gig- ship's boat designated for the use of the Commanding Officer
20. Java- slang for coffee time
21. Jump ship- slang for leaving the ship without authority/permission
22. Irish pennant – untidy loose end of a line
23. Lucky bag- stowage of article found adrift
24. Landlubbers- seaman's term for one that has never been at sea
25. Passageway- corridor
26. Pipe down- an order to keep silent
27. Pass the word- to repeat an order or information to the crew
28. Pollywog- a person who has never cross the equator
29. Sea dog- an old sailor
30. Sea lawyer- an enlisted men who likes to argue; usually one who thinks he can twist the regulations and standing order to favor his personal inclinations
31. Shell back – a man who has cross the equator and has been initiated
32. Skag- slang for cigarettes
33. Ship-shape- term for a neat and orderly condition
34. Sickbay- ship's hospital or dispensary
35. Skippy- slang for undershirt
36. Secure- to make fast; to tie; an order given in completion of a drill or exercise meaning to withdraw from drill station and duties

NAMING AND CODE DESIGNATION OF PN VESSELS

Learning Outcomes:

After the class discussion, the students are expected to:

- a. Know how name and designation of ships is being done
- b. Know the procedure of assigning tail numbers to aircraft of the PN

A. Naming of PN Ships and Aircraft:

The Philippine Navy has a system of naming and/or assigning codes to all of its ships, small craft and aircraft. The assignment of names and designation of codes are decided at Headquarters, Philippine Navy.

Commissioned vessels likewise carry the word "BAPOR NG REPUBLIKA NG PILIPINAS OR (BRP)" before the name to identify it as a ship owned by the government of the Republic of the Philippines.

For purposes of visual or voice radio communication, the code designation of ships maybe used for initial call to establish communication.

1. Naming of PN Commissioned Ship:

In general, only commissioned ships are given names while those categorized as small craft, boats and service craft are only given code designations.

The name is etched on a nameplate displayed on each side of the superstructure as well as marked at the stern.

The following is the guide in naming PN ships:

Type of Ship	Prospective Names
Aircraft Carriers	The three geographical division of the Philippines
Surface Combatants	National heroes, historical figures, past heads of State
Submarines	Philippine native fishes
Amphibious Warfare Ships	Philippine provinces and cities
Mine Warfare Ships	Historical military sites and places
Auxiliary Ships	Philippine tribes and ethnic groupings
Medical Ships	Native term related to ship's mission
Service Ships	Philippine peaks
POL/Water Tankers	Major rivers and the smaller islands not classified as province or sub-province

2. PN Ships and Small Craft Code Designation:

All PN ships, small craft, boats and service craft are assigned code designation consisting of two letters followed by numbers.

The first two letters are the type code designation and the class code designation and the numbers following is the bow number.

Small craft and boats organic and assigned to bigger ships carry the serialized marking consisting of the mother unit's bow number followed by a dash (-) and the number assigned to the small craft.

The bow number is marked conspicuously both at the bow and stern for a ship; at the bow for small craft, boats and service craft; and, at the tail assembly for aircraft.

7. Assigning Tail Number to PN Aircraft:

All aircraft in the inventory of the PN are assigned numbers in accordance with the order of their acquisition consisting of three digits.

The first digit refers to the code number for the type of aircraft and the second and third digit refer to the number based on the order of their acquisition using the **system of base 5**.

The fixed-wing aircraft are assigned **code number 3** while the rotary-wing aircraft are assigned **code number 4**. The assigned tail number is marked at the vertical fin assembly, centered horizontally.

When referred to, the tail number is prefixed with the letter PN to identify it as an aircraft assigned to the Philippine Navy.

As an example, the tail number PN304 refers to the fourth fixed-wing aircraft acquired belonging to the Philippine Navy. On the other hand, the tail number PN403 refers to the third rotary-wing aircraft acquired belonging to the Philippine Navy.

SHIP TYPE AND THEIR CHARACTERISTICS

Learning Outcomes:

After the class discussion, the students are expected to:

- a. Know some of the different combatant vessels and samples of each
- b. Know the procedure of leaving and boarding the PN ship
- c. Know the guidelines for midshipmen inside the wardroom

A. Combatant Vessels:

1. **Warships** – primarily used for naval operations:

a. **Aircraft Carrier** - a warship designed to deploy and recover aircraft—in effect acting as a sea-going airbase. Aircraft carriers thus allow a naval force to project air power great distances without having to depend on local bases for land-based aircraft.

General Characteristics

Power Plant:	Eight nuclear reactors, four shafts
Length, overall:	1,101 feet 2 inches (335.64 meters)
Flight Deck Width:	252 feet (75.6 meters)
Beam:	133 feet (39.9 meters)
Displacement:	89,600 tons (81,283.8 metric tons) full load
Speed:	30+ knots (34.5 miles per hour)
Aircraft:	85
Crew:	
Ship's Company:	3,350
Air Wing:	2,480
Armament:	Two <i>Sea Sparrow</i> missile launchers, Three <i>Phalanx</i> 20 mm CIWS mounts



b. **Cruisers** - is a large warship capable of engaging multiple targets simultaneously. Historically they were generally considered the smallest ships capable of independent operations.

General Characteristics:

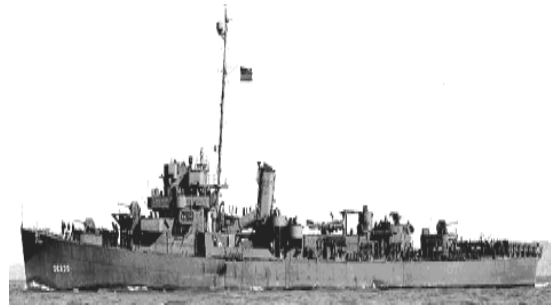
Propulsion system:	four General Electric LM 2500 gas turbine engines
Propellers:	two
Blades on each Propeller:	five
Length:	567 feet (173 meters)
Beam:	55 feet (16.8 meters)
Draft:	34 feet (10.2 meters)
Displacement:	approx. 9,600 tons full load
Speed:	30+ knots
Aircraft:	two SH-60 <i>Sea Hawk</i> (LAMPS 3)
Armament:	Two Mk 41 VLS for standard missiles, Tomahawk, ASROC; Mk 46 torpedoes, Harpoon missile launchers, Two Mk 45 5 inch / 54 caliber lightweight guns, Two Phalanx CIWS
Crew:	33 Officers, 27 Chief Petty Officers and approx. 340 Enlisted



c. **Destroyers** - is a fast and maneuverable yet long-endurance warship intended to escort larger vessels in a fleet or battle group and defend them against smaller, short-range attackers (originally torpedo boats, later submarines and aircraft).

General Characteristics:

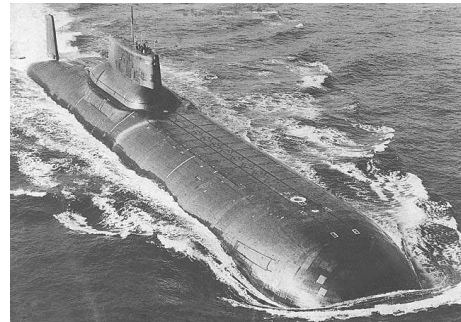
Length:	"Short hull" 289' 5" x 283' 6"
Molded Beam:	35' 2"
Displacement:	1,140 long tons standard; 1,430 full load.
Draft:	
Light:	8' 3"
Deep:	11' 0"
Designed Complement:	
Officers	15
Enlisted	183
Shaft Horsepower:	6,000
Speed:	
Trial:	21.5 knots
Service:	19.5 knots.
Screws:	Two
Rudders:	Two
Bridge:	High, open.
Stacks:	One
Initial Armament:	3 x 3-inch/50 dual purpose guns; 1 x quad 1.1-inch cannon; 2 x single 40mm guns; 1 x quad 40mm gun; 8 x single 20mm guns; 3 x depth charge racks; 8 x depth charge projectors; 1 x Hedgehog.



d. **Submarines** - specialized watercraft that can operate underwater. Submarines, first widely used in World War I, are used by all major navies today, especially the American, Russian and British navies. Civilian submarines and submersibles are used for marine and freshwater science and for work at depths too great for human divers

General Characteristics:

Displacement:	18,700 tons submerged
Length:	560 feet
Beam:	42 feet
Draft:	36 feet
Speed:	25+ knots submerged
Depth:	Greater than 800 feet
Complement:	154 (approx.)
Vertical Tubes:	24 TRIDENT C-4 (or D-5) Missile Tubes
Horizontal Tubes:	Four 21-inch Tubes
Builder:	General Dynamics, Electric Boat Corporation



2. **Amphibious Warfare Ships** – ships utilized for the forward deployment of infantry units of the Navy.

a. **Amphibious Force Flagship** (AGC) - a floating command post with advanced communications equipment and extensive combat information spaces to be used by the amphibious forces commander and landing force commander during large-scale operations.

General Characteristics:

Displacement:	12,550 tons
Length:	459 ft 2 in (140 m)
Beam:	63 ft (19.2 m)
Draft:	25 ft
Speed:	15 <u>knots</u> (31 km/h)
Complement:	664
Armament:	1 x 5 in (127 mm)/38 cal gun; 8 x 40mm guns (4x2)

b. **Attack Cargo ships (AKS)** - designed to carry military cargo and landing craft, and to use the latter to land weapons, supplies, and Marines on enemy shores during amphibious operations.

General Characteristics :

Displacement: 13,910 tons full
 Length: 459 ft 2 in (140 m)
 Beam: 63 ft (19.2 m)
 Draft: 26 ft 4 in (8.0 m)
 Speed: 16.5 knots (31 km/h)
 Complement: 362
 Armament: 1 × 5 in (127 mm)/.38 cal dual purpose gun mount; 4 × twin 40mm gun mounts



c. Dock Landing ship - designed to support amphibious operations. These amphibious assault ships transport and launch amphibious craft and vehicles with their crews and embarked personnel. They are mainly used to carry Landing Craft Air Cushions (LCACs), as well as carrying Marines.

General Characteristics :

Length: 609 feet (185.6 m)
 Beam: 84 feet (25.26 m)
 Fully Loaded Displacement: 16,708 tons (16,976 t)
 Speed: 20+ knots
 Ship's Company: 22 officers, 391 enlisted
 Military Lift: 402 standard
 102 additional for surge
 Aircraft: Large helicopter platform aft, no hangar
 Armament: 1 or 2 Mk 49 RAM missile launchers; 2 Mk 15 Vulcan Phalanx; 2 Mk 38 25 mm guns; 6 M2 .50 cal machine guns



d. **Amphibious Transport Dock** - (also called a landing platform dock or LPD) is an amphibious assault ship, a warship that embarks, transports, and lands elements of a landing force for expeditionary warfare missions. The Navy operates several of this type of ship; their helicopters, vertical take-off and landing aircraft, and air-cushion or conventional landing craft support of the Marine Corps's "vertical envelopment" assault doctrine.

General Characteristics

Power plant: four sequentially turbocharged marine Colt-Pielstick diesel engines, two shafts
 Length: 684 ft (208.5 m)
 Beam: 105 ft (31.9 m)
 Displacement: Approximately 24,900 tons (25,300 metric tons) full load
 Speed: in excess of 22 knots (39 km/h)
 Aircraft: Launch or land up to four CH-46 Sea Knight helicopters; or up to two MV-22 Osprey tilt rotor aircraft simultaneously with room to spot four MV-22s on deck and one in the hangar.
 Complement:
 Ship's Crew: 28 officers, 333 enlisted;
 Landing Force: 66 officers, 633 enlisted
 Armament: Two Bushmaster II 30 mm Close in Guns, fore and aft; two Rolling Airframe Missile launchers, fore and aft.
 Landing Craft/Assault Vehicles: Two LCACs or one LCU; and 14 Advanced Amphibious Assault Vehicles.



e. **Tank Landing Ship** - created during World War II to support amphibious operations by carrying significant quantities of vehicles, cargo, and landing troops directly onto an unimproved shore

General Characteristics

Displacement:	
Unloaded:	1,780 t (1,600 t),
Fully loaded:	3,880 t (3,500 t)
Length:	328 ft (100 m)
Beam:	50 ft (15 m)
Draft:	
Unloaded:	bow 2 ft 4 in (0.7 m); stern 7 ft 6 in (2.3 m)
Loaded:	bow 8 ft 2 in (2.5 m); stern 14 ft 1 in (4.3 m)
Speed:	12 knots (22 km/h)
Complement:	8 to 10 officers, 100 to 115 enlisted
Troop Capacity:	approx. 140 officers and enlisted
Boats:	2-6 LCVP
Armament:	1 x 3 in (76 mm) gun; 6 x 40 mm gun; 6 x 20 mm gun; 2 x .50 cal (12.7 mm) machine guns; 4 x .30 cal (7.62 mm) machine guns
Propulsion:	two General Motors 12-567 diesel engines, two shafts, twin rudders.



3. **Minesweeper** - a military ship designed to neutralize naval mines placed in the sea by enemies. The same ships are sometimes used for mine laying, equipped with mechanical or influence sweeps to detonate mines, produces much less noise than other ships and are often constructed with hulls of wood, plastic or low-magnetic steel.

General Characteristics:

Displacement:	460 tons
Length:	56.8 m (186 ft)
Beam:	7.8 m (25.5 ft)
Draft:	2.2 m (6.9 ft)
Speed:	15 knots (28 km/h)
Complement:	45
Armament:	1 x 3"/50; 4 x 40mm (2x2); 2 x k guns (2x1); 2 x depth charge tracks; 6 x 20mm (6x1)



4. **Patrol Ships** - Used mainly to screen convoys, hunt down submarines and serve as general warning craft.

a. **Destroyer Escort Ship (DE)** - classification for a small, comparatively slower warship designed to be used to escort convoys of merchant marine ships, primarily of the United States Navy in WWII. It is usually employed primarily for anti-submarine warfare, but also some protection against aircraft and smaller attack vessels in this application.

General characteristics:

Displacement:	4,064 tons
Length	438 ft
Beam:	47 ft
Draught:	25 ft
Propulsion:	Steam Turbines
Speed:	27 knots
Complement:	243 officers and enlisted
Armament:	ASROC, 1 5", 4 tt



b. **Guided Missile Escort Ship (DEG)**

General Characteristics:

Warship kind:	Missile escort ship
Boat shape:	Flat deck type
Standard displacement:	3,050 tons
Total length:	131.0m
Width :	13.4m
Draft :	4.2m
Main engine:	Ishikawajima GE impulse type steam turbine x 2 basic 2 axial propulsion
Output:	60,000hp
Speed:	33 knots
Crew-member:	290
Anti-aircraft armament:	Tartar / Standard anti-aircraft missile
Anti-submarine armament:	ASROC 8 connected launchers; 2 hedgehog anti-submarine rocket launchers
Torpedo armament:	2 - triple launchers
CIWS:	2 - 20 millimeter CIWS Mk15
Gun:	2 - 50 caliber 76 mm connected mount rapid fire guns



c. **Destroyer Escort Radar picket ship (DER)** - a radar-equipped ship used to increase the radar detection range around a force to protect it from surprise attack. Often several detached radar units encircle a force to provide increased cover in all directions.

General Characteristics:

Evarts Class Destroyer Escort:

Displacement:	1,436 tons
Length:	289'5"
Beam:	35'1"
Draft:	11'10"
Speed:	21 knots
Complement:	15 officers, 183 enlisted
Armament:	3 3"/50; 1x2 40mm or 1 1.1"; 9 20mm; 1 hedgehog; 2 depth charge tracks; 8 "K" gun projectors



Diesel-electric drive with tandem-motor drive; 6,000 hp.
Built at Boston Navy Yard and commissioned 9 July 1943

d. **Patrol Craft Coastal (Fast) (PCF):**

General Characteristics:

Length, Overall:	51.62 M (169 ft 4 1/4 in.)
Beam, Maximum:	7.62 m (25 feet)
Length at design waterline (DWL):	48.00 m (157 ft 5 3/4 in.)
Draft above Bottom of Keel:	2.14 m. (7.02 ft)
Displacement, Full Load:	315.32 tons (SW) [310-34 L Tons (SW)]
Boats:	1 20' RIB, (2) Combat Rubber Raiding Craft (Large)
Crew:	30 persons
Capacity (including crew):	39 persons
Maximum Speed (sea state 1, 50% fuel capacity):	35 knots
Cruising Speed (sea state 3, 50% fuel capacity):	25 knots
Minimum maneuvering speed:	3 knots



5. AUXILIARY VESSELS:

The Navy could start a war without auxiliary ships, but it couldn't fight very long without these vessels since the auxiliaries provide the material and services which keep the fleet and its advanced base operational.

Example:

- a. Destroyer Tender
- b. Repair Ship (AR) Hospital Ship (AH)
- c. Salvage ship (ARS) Submarine Ship (AH)

6. SERVICE CRAFT:

The navy service craft come in an even greater variety of sizes and functions than the auxiliaries. Once called yard and distinct craft, most of them work around harbors and navy yards

MARLINESPIKE SEAMANSHIP

Learning Outcomes:

After the class discussion, the students are expected to:

- Know what is marlinspike seamanship
- Know the different kinds of ropes and their stowage

Marlinspike Seamanship is the art of handling and working all kinds of fiber and wire rope. It includes every variety of knotting, splicing, serving, and fancy work.

➤ Use line for tying up during mooring and docking and for rigging aloft or over the side during painting details.

➤ Use wire rope during replenishment of supplies and for highline transfers. These are only a few of the jobs that require to use line or wire rope; there are many more.

1. ROPE

➤ Rope is manufactured from wire, fiber, and combinations of the two. Fiber rope—or line, as it is commonly called—is fashioned from natural or synthetic fibers.

➤ Rope, a general term, can be applied to both fiber rope and wire rope. In the Navy, sailors refer to fiber rope as line, whereas they refer to wire rope as rope, wire rope, or just wire. More clearly defined, a line is a piece of rope, either fiber or synthetic, that is in use or has been cut for a specific purpose, such as a lifeline, heaving line, or lead line.

1.1 CONSTRUCTION OF LINE

➤ Line currently used in the Navy may be three-strand, braided, or plaited. In three-strand line, fibers are twisted into yarns or threads, the yarns are twisted in the opposite direction into strands, and the strands are twisted in the first direction, making line. Taking the process further, lines are twisted into cable. Line can have various numbers of strands, and the direction the strands are twisted determines the lay of the line. That is, if the strands are twisted to the right, the line is said to be right-laid.

➤ **Four-strand line** is right-laid strands around a center core. Each strand is aramid fibers laid into parallel yarns left laid helically around the strand core with a braided helical of alternating aramid and polyester yarns.

➤ **Braided lines** have certain advantages over twisted ropes. They will not kink nor will they flex open to admit dirt or abrasives. The construction of some braids, however, makes it impossible to inspect the inner yarns for damage. The more common braided lines are hollow braided, stuffer braided, solid braided, and double braided lines.

➤ **Hollow braided lines** usually have an even number of parallel, tapelike groups of small yarns braided into a hollow, tubelike cord. This type of construction in cotton formerly was used for signal halyards—a purpose now served largely by three-strand and double braided nylon. Other uses are parachute shroud lines and shot lines for line-throwing guns.

➤ **Stuffer braided lines** are manufactured in a similar manner except that the braid is formed around a highly twisted yarn core, which rounds out and hardens the line. This type of construction in cotton is used for sash cord (heaving lines).

➤ **Solid-braided lines** are fashioned in various ways. One familiar construction is that used for leadlines, taffrail log lines, and the like. This braided line is of large yarns, either single or plied, tightly braided to form a hard, relatively stiff line that will not kink, snag, or swell in water.

➤ **Single braided line** consists of 12 strands in a twill pattern, where one strand of one direction of rotation about the axis of rope passes over two strands of the opposite direction and then passes under the next two strands of the opposite direction. Single braided line is used for mooring lines and towing hawsers.

➤ **Double braided line** is two hollow braided lines, one inside the other. The core is made of large, single yarns in a slack braid. The cover is also made of large, single yarns but in a tight braid that compresses and holds the core. Double braided line is

manufactured only from synthetics, and about 50 percent of the strength is in the core. It is used for mooring lines, towing hawsers, signal halyards, dressing lines, and many other purposes.

➤ **Plaited line** is made of eight strands—four right-twisted and four left-twisted. The strands are paired and worked like a four-strand braid.

1.2 USE AND CARE OF LINE

➤ Following are some pointers on the use and care of fiber line for you to remember:

- Coil right-laid line right-handed or clockwise. Flake down braided and plaited line.
- Keep line from touching stays, guys, or other standing rigging.
- When surging line around bits, take off enough turns so the line does not jerk but surges smoothly.
- If line becomes chafed or damaged, cut and splice. A good splice is safer than a damaged section. However, do not cut a line without your supervisor's permission.
- Do not lubricate the line.
- Whip all line ends.
- Inspect natural fiber line frequently for deterioration. Open the lay and inspect the fibers. White, powdery residue indicates internal wear.
- Dragging a line over sharp or rough objects cuts or breaks the outer fibers. When line is dragged on the ground, other particles are picked up and eventually work into the line, cutting the inner strands.
- Natural fiber line exposed to the atmosphere deteriorates about 30 percent in 2 years from weathering alone. Natural fiber line received from supply that is 3 years old should be returned to supply noting uneconomical to use.

2. SMALL STUFF

Line 1 1/2 inches or less in circumference is called small stuff. Its size specification is governed by the number of yarns it contains (called threads in this instance).

2.1 SIZE OF SMALL STUFF

To find the size of a piece of small stuff, open a strand, count the number of threads it has, and multiply this result by 3 for three-strand stuff. The largest small stuff is 24-thread, with three strands each containing eight yarns.

2.2 USE OF SMALL STUFF

Round line is three-strand, right-laid tarred hemp is used for seizing and servings on ships where neatness is required.

Sail twine is small stuff laid up right-handed by machine, like regular line, but it is not much larger than fishing line is used for servings when a fancier job than can be done with marline is desired.

Cod line is the light, white line formerly used in hammock clews (lines for suspending a hammock) is used for decorative purposes.

2.3 STOWING SMALL STUFF

Coils of natural fiber line should always be stowed on shelves or platforms clear of the deck.

Arrange the coils of small stuff along a shelf according to its size.

The most commonly used sizes of small stuff should be put on reels; then you will not have to worry about somebody fouling up a partially used coil.

Coils of large line should be stowed with their proper side up for opening.

Whenever possible, wet line should be dried thoroughly before stowing.

3. SYNTHETIC FIBER LINES

Aramid, nylon, polyester, polypropylene, and polyethylene, in the descending order of strength are the synthetic fibers used to make line.

3.1 SECURING ENDS

Never leave the end of a line dangling loose without a whipping to prevent it from unlaying. The end of line will begin to unlay of its own accord. To prevent fraying, you should put a temporary plain whipping on with anything, even a rope yarn, as shown in figure 3-6.

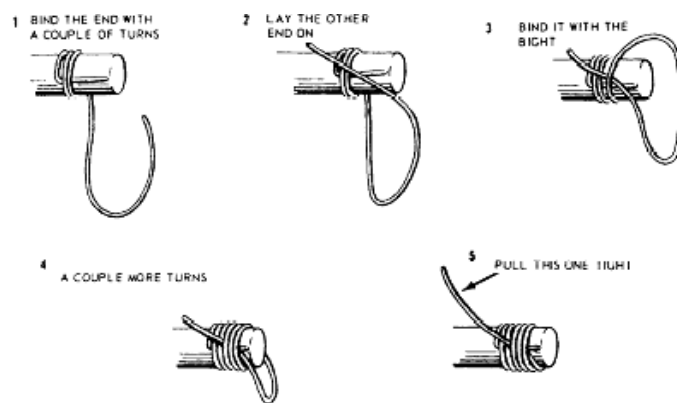


Figure 3-6.—Plain whipping a line.

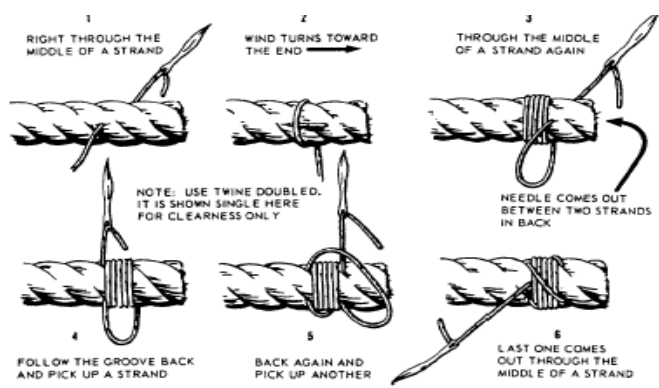


Figure 3-7.—Palm and needle whipping.

4. FAIRLEADS, KINKS AND TWISTS

If a line does not lead fairly to a winch or capstan, it becomes badly distorted when it is heaved in.

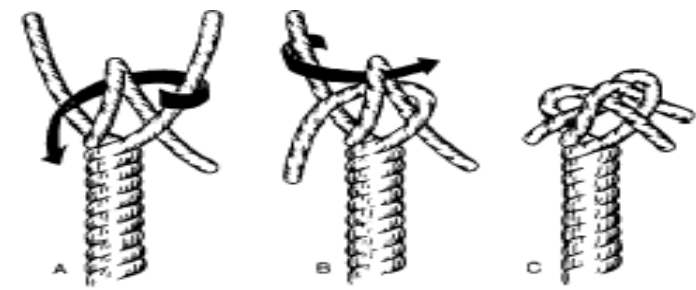


Figure 3-8.—Steps in making a crown.

Frequently, it is necessary to put on inside turns when a fairlead does not line up properly with a winch drum.

A line with a kink in it, or a tackle that is twisted from having a dip in it, should never be heaved hard while that condition exists. A strong strain on a kinked or twisted line puts a permanent distortion in the line.

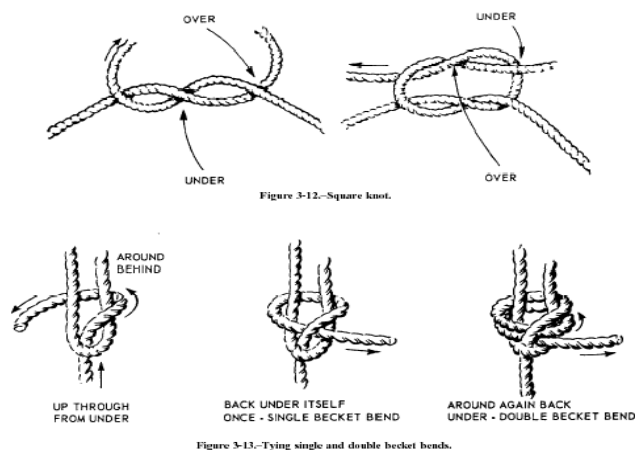
Deterioration of natural fiber line through age or exposure is indicated by the gradual change in its color from a yellowish white to a gray.

Deterioration from use or abuse is shown by the bristling of the ends of broken yarns. An overstrained line also shows a decrease in diameter. An individual should never be sent aloft or over the side on such a line.

If the identification marker tape indicates the natural fiber rope is 5 years old, it should not be used for critical operations or those involving the lives of personnel.

5. KNOTS

Seamen must know which knot, bend, or hitch will serve best in a particular circumstance.



The bowline is a good knot with many uses. It is used whenever a loop is needed, such as in making a temporary eye in a mooring line.

According to a Seaman's use of the term knot, the line usually is bent to itself. The knot forms an eye or knob or secures a cord or line around an object, such as a package.

A bend ordinarily is used to join two lines together. The square knot, also called the reef knot, is the best known knot for bending two lines together. However, it can jam on a strain and become very difficult to untie.

For a square knot, both parts of the line must be under the same bight. If one part is up and the other part is down, you have a granny knot, which is of no use to any seaman. Figure 3-12 shows how to get a square knot every time.

Here is the proper procedure for tying a square knot: Take the end in your right hand, say to yourself, "over-under," and pass it over and under the part in your left hand, as shown. With your right hand take the end that was in your left, say to yourself this time, "under-over," and pass it under and over the part in your left hand.

A becket bend, is especially good for bending together two lines of different sizes.

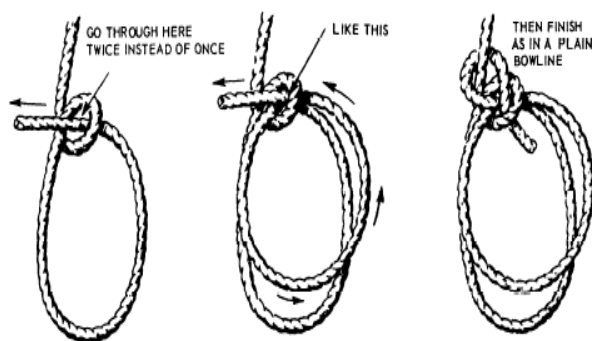


Figure 3-17.--Tying a French bowline.

5.1 BENDING TO A HOOK, RING, OR SPAR

You can use a hitch to secure a line to a hook, ring or spar. We will describe various hitches in this section. A hitch differs from a knot in that it ordinarily is tied to a ring, around a spar or stanchion, or around another line. It is not tied back on itself to form an eye or to bend two lines together.

The rolling hitch is one of the most useful and important hitches on deck.

Use it for passing a stopper on a mooring line when shifting the line from a winch or capstan to a cleat or bitts. It may also be used to secure a taut line back on itself. If tied properly, it holds as long as there is a strain on the hitch.

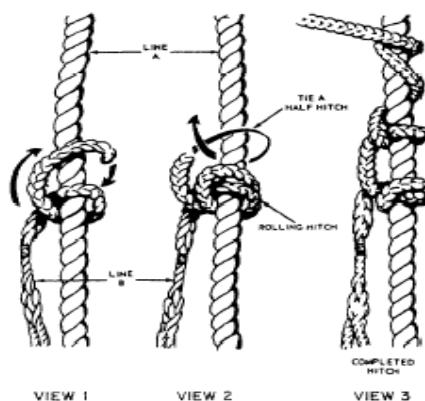


Figure 3-18.—Rolling hitch.

6. SPLICES

Splices are used to make permanent eyes and permanent repairs in lines. There are three general types of splices: eye, short, and long. When splicing fiber line, you should take three or four tucks with each strand.



Figure 3-19.—Throwing a clove hitch.

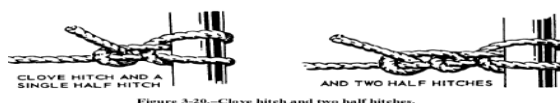


Figure 3-20.—Clove hitch and two half hitches.

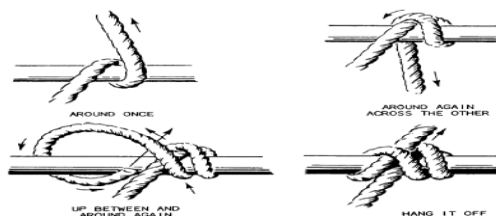


Figure 3-21.—Stopper hitch.

6.1 EYE SPLICE

To make an eye splice with manila or synthetic lines, you must untwist the strands in the end of your line anywhere from 4 inches to 2 feet, depending on the size of the line, and splice them into the standing part of the line by tucking the unlaid strands from the end into the standing part.

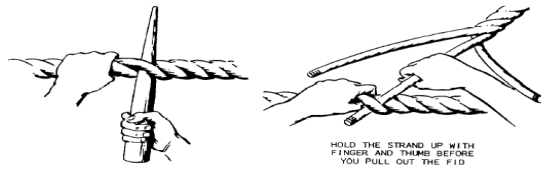


Figure 3-22.—Working the fid.

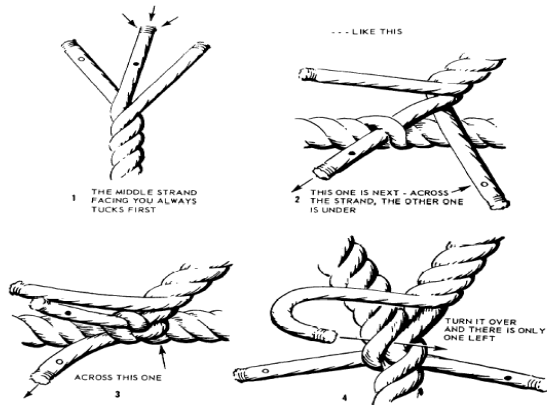


Figure 3-23.—Making an eye splice.

6.2 SHORT SPLICE

Lines are short spliced together when a slight enlargement of the diameter of the line is of no importance. Slings are made of pieces of line, with their own ends short spliced together.

The only trick to short splicing is in seizing the ends together (fig. 3-24) so each strand in one end lies along a corresponding strand in the other end. After unlaying the strands, you simply butt the two ends against each other until you see that they are interlaced correctly.

With large lines you now must put on a temporary seizing where they join to keep them from suddenly coming apart. It is better to do that with small lines, too, until you get the hang of holding them together while you tuck.

Once your seizing is on, tuck over and under the same way you finish off an eye splice. Three tucks on each side of the seizing are sufficient.

6.3 SAILMAKER'S SPLICE FOR FOUR-STRAND ROPE

An eye splice consists of three main component, the eye, individual strands, and the standing part of the rope.

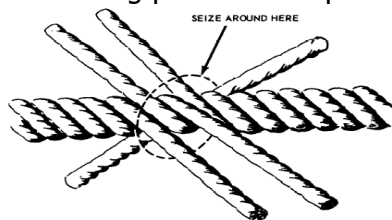


Figure 3-24.—Seizing lines for splicing.

NOTE

The last two tucks may be tapered, if desired, by cutting approximately half of the fibers for each taper. Chafing gear on the eye is required for abrasion.

7. WIRE ROPE

Although wire rope may have only a few applications in some Navy ships, in others, wire rope is very important. It behooves all seamen to learn all they can about wire rope.

7.1 CONSTRUCTION OF WIRE ROPE

The basic unit of wire-rope construction is the individual wire made of steel or other metal in various sizes. These wires are laid together to form strands.

The number of wires in a strand varies according to the purpose for which the rope is intended. A number of strands are laid together to form the wire rope itself.

Wire rope is designated by the number of strands per rope and the number of wires per strand. Thus, a 6 X 19 rope has 6 strands with 19 wires per strand, but has the same outside diameter as a 6 X 37 wire rope, which has 6 strands with 37 wires of much smaller size per strand.

Wire rope made up of a large number of small wires is flexible, but the small wires break so easily that the wire rope is not resistant to external abrasion.

Wire rope made up of a smaller number of larger wires is more resistant to external abrasion, but is less flexible.

Wire rope is made of annealed steel, traction steel, or improved plow steel. The basic metal may be plain or galvanized. galvanizing protects the rope from the elements, but makes it stiffer and reduces its strength by as much as 10 percent.

Galvanized rope most commonly is used for standing rigging, but also is used for some running rigging (such as wheel ropes) where it is not subject to much wear.

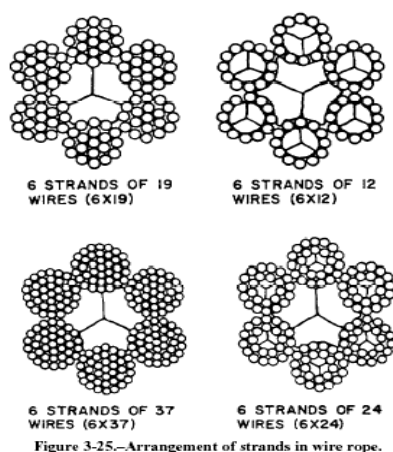


Figure 3-25.—Arrangement of strands in wire rope.

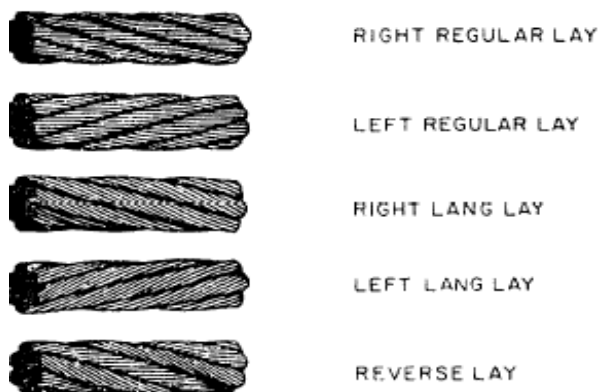


Figure 3-26.—Lays of wire rope.

RIGHT LANG LAY: Both wires in the strands and strands in the rope are twisted to the right.

LEFT LANG LAY: Both wires in the strands and strands in the rope are twisted to the left.

RIGHT REGULAR LAY: Wires in the strands are twisted to the left; strands in the rope are twisted to the right.

LEFT REGULAR LAY: Wires in the strands are twisted to the right; strands are twisted to the left.

6.2 CARE OF WIRE ROPE

- Long lengths of wire rope are usually on reels when received from your supply activity.
- Never try to unreel wire rope from a stationary reel.
- Mount the reel on a pipe or rod supported by two uprights.
- When spooling under the reel, start at the right and work toward the left. Naturally, handle left-laid wire rope just the opposite.
- If wire rope is being run off one reel to a winch drum or another reel, run it from top to top or from bottom to bottom.
- Make up short lengths of wire rope in coils and stop off tightly for stowage.
- When uncoiling wire rope, stand the coil on edge and roll along the deck, uncoiling as you go.
- If a wire rope becomes kinked, never try to pull it out by putting a strain on either part. As soon as a kink is noticed, uncross the ends by pushing them apart.
- If a heavy strain is put on a wire rope with a kink in it, the rope no longer can be trusted. Cut out the kinked part and splice the ends together.
- Wire rope should be inspected frequently, checking for fishhooks, kinks, and worn and corroded spots. Worn spots show up as shiny flattened surfaces. One or more of the following conditions is sufficient

7.2 STORAGE

Wire rope should not be stored in places where acid is or has been kept.

Stress the importance of keeping acid or acid fumes away from wire rope to all hands at all times.

Before storage, wire rope should always be cleaned and lubricated.

Lubricant film is applied properly and the wire is stored in a dry place, corrosion will be virtually eliminated.

7.3 SEIZING WIRE ROPE

Seizing is the process of securing one rope to another, two or more parts of the same rope to itself, or fittings of any kind to a rope by binding with small stuff or with annealed iron wire.

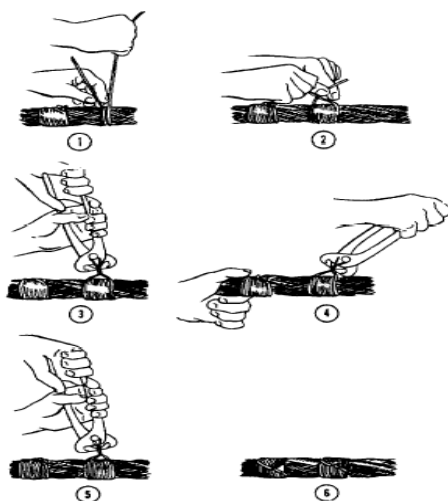


Figure 3-31.—Putting seizing on wire rope.

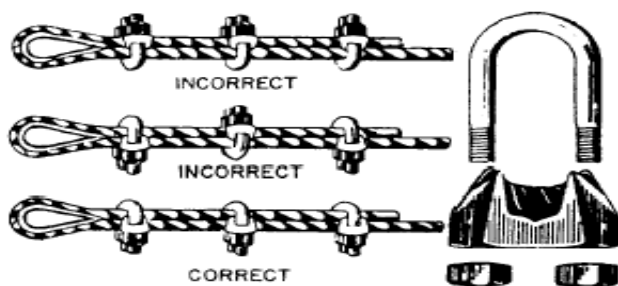


Figure 3-32.—Correct and incorrect use of wire-rope clips.

7.4 WIRE-ROPE CLIPS

A temporary eye splice may be put in wire by using wire-rope clips. The correct and incorrect ways of using these clips are shown in figure 3-32. The U-bolt always goes over the bitter end and the roddle goes on the standing part. Space the clips at a distance apart equal to six times the

diameter of the wire. After the rope is under strain, tighten the clips again as a safety measure.

The clips must be rechecked periodically thereafter and retightened as needed. Pay particular attention to the wire at the clip farthest from the eye because vibration and whipping are dampened here and fatigue breaks are likely to occur.

KNOTS, BENDS AND HITCHES

Learning Outcomes:

After the class discussion, the students are expected to:

- Enumerate the different kinds of knots and their usage
- Be able to perform or tie commonly used knots

There are four classes of knots:

- (1) knots in the end of line, used in fastening a line upon itself or around an object;
- (2) Knots for bending two lines together;
- (3) knots that secure a line to a ring or spar (hitches or bends);
- (4) knots used to give finished to the end of a line and to prevent unreeling or for ornamental purposes.

CLASS 1 KNOTS

Knots in the end of a single line – the knots of class 1 are used in fastening a line upon itself or around some other object. Some of these are:

- Overhead Knot – used in making other knots. Never used alone
- Bowline - a temporary eye in the end of a line. It will not slip or jam.
- Running bowline – a convenient form of running an eye. Formed by making a bowline over its own standing part.
- Bowline on a bight – used to sling a man over the side. It will not slip and constrict him
- French Bowline – has the same purpose as the bowline on a bight. It gives two loops that can be adjusted to fit.
- Spanish bowline - Can be used wherever it is desirable to have two eyes in the line. Its primary purpose however is, as a substitute for the boatswains chair.
- Sheepshank – used to shorten a rope in three parts, and half hitch each part around the bight of the other two parts.
- Cats Paw - a double loop formed by twisting two bights of a rope. The hook of a tackle is passed through them.
- Figure Eight – used to prevent the end of line from unreeling through a block or eyebolt.
- Black Wall Hitch – used to secure a line to a hook quickly

CLASS II KNOTS - Knots for bending or joining two lines together.

- Square of reef knot - used for tying reef points and bending tines together
- Granny knot – usually mistaken for a square knot. It will slip under strain.
- Sheet or becket bend (single) – used for bending line to becket and for bending lines of different sizes together.
- Sheet or becket bend (double) - same use as the sheet or becket bend (single)
- Two bowlines – a safe and convenient way of bending two hawsers together
- Carrick Bend – used to bend two hawsers together – it will not slip or jam, and no matter how long the hawsers are in the water it can be easily untied
- Reeving line bend – used to bend together two lines that must reeve around a capstan or which drum.

CLASS III KNOTS

Knots for securing a line to a ring or spar. They are called bends and hitches.

- Fisherman's Bend - used to secure a rope to a ring or a hawsers to the ring of an anchor
- Tolling hitch used to bend a line to a spar or to the standing part of another line
- Round Turn and Two Half Hitches – used to secure the end of a line made around any other object.
- Clove or Ratline Hitch – convenient for making a line fast to a spar, the standing part of another line, or a bollard.
- Half hitch or two half hitch – used to secure a line temporarily around any object
- Stopper hitch – used to check a running line
- Cats paw – used to secure a line to a hook.

CLASS IV KNOTS

Knots worked in the end of a line. They are fancy knots which are used to give a finish to the end of a line, prevent unreeling, or for ornamental purposes

- a. Wall knot - the reverse of a crown knot. It is never used alone, but always as a part of a line. There are various combination of wall and crown knot.
- b. Crown knot the simplest and best-known knots in the end of a line. It is never used alone, but always as a part of some other knot.
- c. Manrope - combination of a double crown and wall not. An ornamental knot worked in the end of gangway (handrails made of line)
- d. Mathew Walker - the navy standard knot for the end of hammock jackstay. The three strands are brought back together, so they can be laid up again.

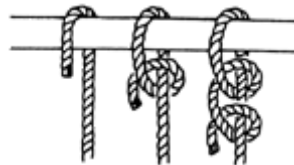
COMMONLY USED KNOTS

Knowing how to tie a few basic knots is essential to a boater's security. Following are simplified instructions for tying a few commonly used knots.

Two Half Hitches

This reliable knot is quickly tied and is the hitch most often used in mooring. To tie:

- Pass end of rope around post or other object.
- Wrap short end of rope under and over long part of rope, pushing the end down through the loop. This is a half hitch.
- Repeat on long rope below first half hitch and draw up tight.



Bowline

This knot doesn't jam or slip when tied properly. To tie:

- Make the overhand loop with the loop.
- Now pass end up behind the again.
- Draw up tight.



end held toward you, then pass end through standing part, then down through the loop

Figure Eight

This knot is ideal for keeping tackle or pulley. To tie:

- Make underhand loop, bringing end
- Pass end under, then up through the
- Draw up tight.



the end of a rope from running out of

around and over the standing part. loop.



Square Knot

This knot is used at sea in reefing and furling sails. To tie:

- Pass left end over and under right end. Curve what is now the left end toward the right and cross what is now the right end over and under the left.
- Draw up tight.

Anchor Bend

This knot is used to secure a rope or a line to an anchor. To tie:

- Pass two loops through ring.
- Place free end around standing line.
- Pass free end through loops.
- Complete by making half hitch.



Clove Hitch

This knot is the "general utility" hitch when you need a quick, simple method of fastening a rope around a post, spar or stake. To tie:

- Make a turn with the rope around the object and over itself.
- Take a second turn with the rope around the object.
- Pull the end up under the second turn so it is between the rope and the object. Tighten by pulling on both ends.



DECK SEAMANSHIP

Learning Outcomes:

After the class discussion, the students are expected to:

- Know what is deck seamanship
- Know the different kinds of ground tackle
- Know the different kinds of deck fittings and equipment aboardship

In general, *rigging* is a large part of deck seamanship. The ship's standing rigging consists of *lines, wires, turnbuckles, and other gear* supporting and attached to the stacks, the masts, and the topside structure. Running rigging includes the rigging used in hoisting and lowering heavy weights or in positioning and operating movable deck gear.

1. GROUND TACKLE - equipment used in anchoring and mooring with anchors and buoy mooring with chain and appendages.

The following are defined as ground tackle:

□Anchor chain, wire rope, synthetic line, or combinations of these materials, when used with anchors

□Appendages consisting of connecting shackles or links, detachable links, pear-shaped links, end links, bending shackles, mooring shackles, mooring swivels, detachable-link tool sets, clear hawse pendants, dip ropes, chain stoppers, wrenches for chain stoppers, outboard swivel shots, chain cable jacks, mooring hooks, chain hooks, anchor bars, and anchor buoys.

1.1 SHIP'S ANCHORS

All anchors are designed to take hold as quickly as possible after they hit bottom. They take hold in one of two ways: either by hooking into the ground with one or both of their sharp flukes or by burying themselves completely. When an anchor is let go in fairly deep water, it strikes the bottom crown first. From this position, any drag on the chain causes the flukes, if properly set, to dig into the bottom. As the drag continues, the fluke is forced further into the bottom.

1.2 CHAIN AND WIRE ROPE CABLES

Chain, wire rope cables, or cable composed of both chain and wire rope for use with ships' anchors is a part of the ship's ground tackle. Ground tackle is the collective term applied to all equipment used in anchoring. It includes the anchors, their chain or cables, connecting fittings, and all associated equipment used in anchoring, mooring with anchors, buoy mooring, being towed, or securing or letting go anchors in or from their hawsepipes.

1.2.1 TYPES OF ANCHORS

Anchors used in the Navy today are grouped according to type. The most common types used are stockless anchors, lightweight (LWT) or stock-incrown anchors, and two-fluke balanced-fluke anchors. Stock anchors (old-fashioned) and mushroom anchors are no longer specified as a part of Navy ship ground tackle.

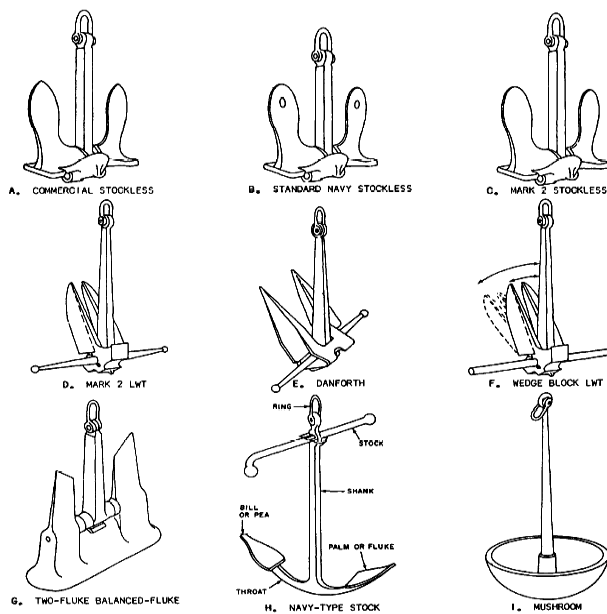


Figure 4-1.—Types of anchors.

shown in views D and F of figure 4-1.

Lightweight anchors are constructed of comparatively light metal, but are very strong in tension. They gain their holding power by digging deep into the bottom rather than lying as a deadweight.

1.2.1.3 TWO-FLUKE BALANCED-FLUKE ANCHORS

The two-fluke balanced-fluke anchor (view G of figure 4-1) is used for anchoring some surface ships and the newer submarines and is normally housed in the bottom of the ship. This anchor is used on certain combatant-type surface ships in place of a bower anchor, which could interfere with the ship's sonar dome.

1.2.1.4 STOCK ANCHORS

Old-fashioned, or stock, anchors (view H of figure 4-1) have been abandoned by large merchant and Navy ships because they are extremely cumbersome and difficult to stow.

1.2.1.5 MUSHROOM ANCHORS

Mushroom anchors are shaped like a mushroom with a long narrow stem serving as the shank.

1.3 CHAIN AND APPENDAGES

Navy anchor chain of the flash butt welded type is the Navy standard for new ship constructions and replaces die-lock chain as required for back fit.

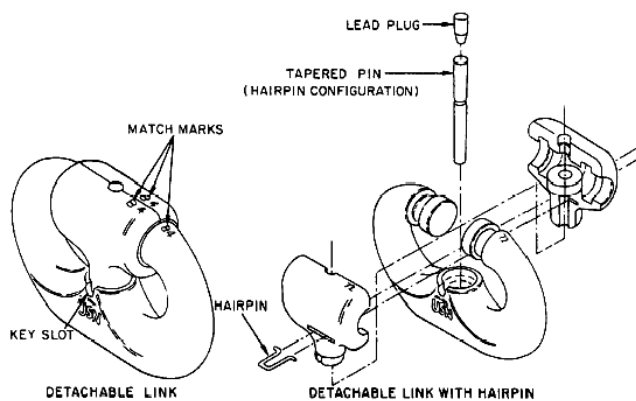


Figure 4-2.—Detachable link.

1.2.1.1 STOCKLESS ANCHORS

Three designs of stockless anchors are in use on naval ships: commercial, standard Navy, and the Mark 2 (Mk 2). These are shown in views A, B, and C of figure 4-1. Of the three, the Mk 2, with its long flukes, has the greatest holding power. It is made only in the 60,000-pound size for use aboard aircraft carriers. The short, commercial-type flukes have the least holding power.

1.2.1.2 LIGHTWEIGHT ANCHORS

Two types of lightweight anchors are used on Navy ships: the Mk 2 LWT and the wedge block LWT anchor. These are

An anchor chain is made up of many parts besides common links and requires a variety of equipment and fittings to use and maintain the chain. The following descriptions will acquaint you with the details of anchor chain and some of the equipment associated with using and maintaining the chain.

1.3.1 Standard Shot

The lengths of chain that are connected to make up the ship's anchor chain are called *shots* and are made up with an odd number of links.

A standard shot is 15 fathoms (90 feet) long.

1.3.2 Detachable Links

Navy-type detachable link consists of a C-shaped link with two coupling plates that form one side and stud of the link. A taper pin holds the parts together and is locked in place at the large end by a lead plug.

Detachable link parts are not interchangeable, so matching numbers are stamped on the C-link and on each coupling plate to ensure its identification and proper assembly.

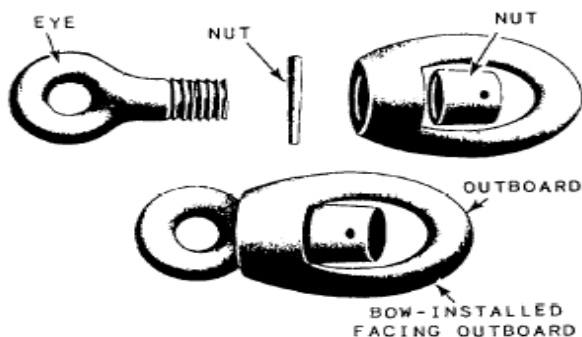
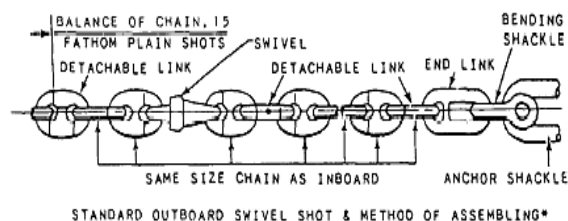


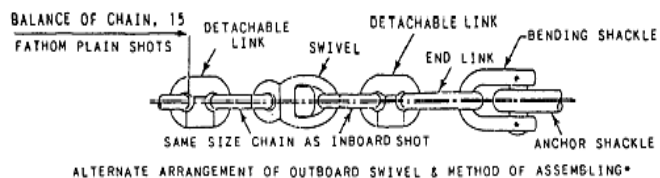
Figure 4-3.—Chain swivel.

Chain swivels (fig. 4-3) are furnished as part of the outboard swivel shot. They reduce kinking or twisting of the anchor chain.



1.3.3 Riding, Housing and Towing Chain Stoppers

Riding and housing chain stoppers consist of a turnbuckle inserted in a couple of links of chain. A pelican hook is attached to one end of the chain; a shackle is attached at the other end. The housing stopper is nearest the hawsepipe and must be installed outboard. Bending shackles (fig. 4-4) are used to attach the anchor to the chain of the swivel; the riding stopper is farther inboard. These stoppers are secured by the shackles to permanent pad eyes on the ship's deck. Chain stoppers are used to hold the anchor taut in the hawsepipes, to ride to an anchor, or to hold the anchor when the anchor chain is disconnected for any reason.



* NOTE
STANDARD AND ALTERNATE OUTBOARD SWIVEL SHOTS SHOWN REFLECT LATEST DESIGN ON LATER SHIP CLASSES USING FLASH BUTT WELDED CHAIN. VARIOUS ARRANGEMENTS WILL EXIST ON OTHER SHIPS USING DIE-LOCK CHAIN WITH COMMON LINES ON EACH SIDE OF THE SWIVEL.

1.3.4 Mooring Shackles

Forged steel mooring shackles (fig. 4-6) are used to attach the anchor chain to mooring buoys.

All mooring shackles, regardless of size, have a standard opening of 7 inches. Mooring shackles are not to be used for any other purpose.

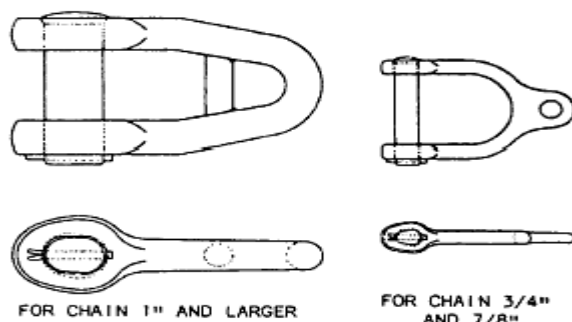


Figure 4-6.—Mooring shackles.

1.3.5 Mooring Swivels

Forged steel swivels, with two links attached at each end, are used to moor with anchors. They are inserted in the chain outboard of the hawse and serve to keep the chain from twisting as the ship swings. Mooring swivels are attached in the chain with the eye end outboard, or down, to prevent them from hooking on the outer lip of the hawse when they are heaved back aboard.

1.3.6 Chain Cable Jacks

A cable jack (fig. 4-8), consisting of a lever mounted on an axle and two wheels, is used to handle anchor chain of 2 3/4 inches, or larger, in size. It is used to pick the chain up to pass a chain stopper. A pinchpoint crowbar type of anchor bar is issued for smaller sizes of chain.

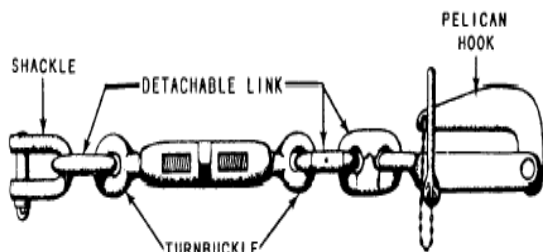


Figure 4-5.—Navy standard chain stopper.

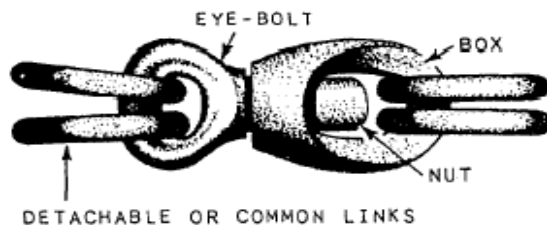


Figure 4-7.—Mooring swivel.

1.3.6 Clear Hawse Pendants

A clear hawse pendant is a wire rope pendant, 5 to 15 fathoms long, with a thimble at one end and a pelican hook attached to a length of open-link chain fitted in a thimble at the other end. This pendant is used to clear a hawse fouled by the anchor chain. See figure 4-9.

1.3.7 Dip Ropes

A dip rope is a fiber or synthetic rope pendant, 14 to 36 fathoms long, fitted at one end with a thimble and a dip shackle large enough to engage a link of the anchor chain. A dip rope is used when mooring or clearing a hawse.

1.3.8 Chafing Chain or Pendant

A short length of chain and/or a wire rope pendant is inserted between the anchor and the anchor buoy line. This prevents the anchor buoy line from chafing on the anchor and parting.

1.3.9 Anchor Chain Markings

The detachable links of anchor chains are painted red, white, or blue as follows: red for 15 fathoms, white for 30 fathoms, blue for 45 fathoms, red for 60 fathoms, white for 75 fathoms, and so on.

Each link of the entire next-to-last shot is painted yellow. The last shot is entirely red. These last two shots give warning and danger signals of the approach of the bitter end of the anchor chain.

1.4 CARE OF GROUND TACKLE

The chain is overhauled by the ship's force whenever necessary and precautions are taken to see that the various shots are properly marked and in good order.

Once each quarter, and more often if subjected to normal use, all anchor chains in sizes up to and including 1 1/2 inches are laid on deck and their entire lengths examined.

Anchor chain and appendages are carefully examined for cracks, excessive wear, distortion, or other defects.

Parts that require coating are painted with anchor chain gloss black paint.

Shackles, bolts, locking pins, and swivels are examined carefully and put in order.

The turnbuckles in chain stoppers require frequent attention to keep them clean, free from rust, and well lubricated with graphite grease.

Chain of sizes by more than 1 1/2-inch wire diameter is overhauled, wire brushed, and placed in a good state of preservation as often as required.

At least once every 18 months all anchor chain, regardless of size, (including all fittings) is examined, overhauled, and placed in a good state of preservation (5 years for carriers).

2. ANCHOR WINDLASS

Windlasses are installed on board ships primarily for handling and securing the anchor and chain used for anchoring the ship and for handling anchor chain used for towing the ship.

Capstan and gypsy heads fitted on windlasses are keyed to the drive shaft and rotate when the windlass power source is turning. When using the heads, apply the wildcat hand brake, then disengage the wildcat locking head. The heads will now operate independently of the wildcats. When the wildcats are used, however, the capstan heads will always rotate.

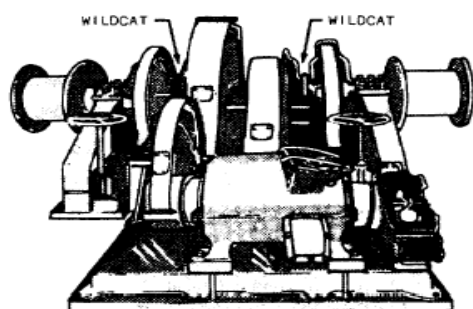


Figure 4-11.—Horizontal shaft anchor windlass.

3. Letting Go

When anchoring and weighing anchor, the ship's first lieutenant is in charge on the forecastle. Aboard most ships, the first lieutenant's assistant is the ship's Boatswain or Chief Boatswain's Mate.

The windlass is tested, the anchor in the hawse is freed, the anchor is walked out if anchoring is in deep water or if the bottom is rocky; the brake is set; and the wildcat is disengaged.

All but one stopper is taken off and the anchor buoy line is shackled to the chafing chain or pendant.

The chain locker is checked for loose gear that may become wedged in the chain pipes or come flying out, endangering personnel on deck.

An order then is given to stand clear of the chain. For obvious reasons, it is urgent that all hands obey this order!

At the command "STAND BY" the brake is released and two Seamen—one with a sledgehammer or maul—take stations at the stopper outboard side of the chain. When the command "LET GO" is given, one Seaman pulls the pin from the stopper tongue.

The Seaman with the maul knocks the bail off the tongue of the pelican hook and steps clear. As soon as the Seaman is clear, the brake is fully released. If for some reason the stopper does not fall clear, the chain can still be controlled by the brake.

The Seaman tending the anchor buoy tosses it over the side and the jack is two-blocked (hoisted all the way up). On the signal bridge, the anchor ball is hoisted.

4. Weighing Anchor

Weighing anchor, the same gear must be checked and readied.

Securing gear must be available on the forecastle as for anchoring. In addition, there is a grapnel (a small four-armed anchor) used to retrieve the anchor buoy.

A hose is rigged to wash mud from the anchor and the chain.

The windlass is energized and tested, and then the wildcat is engaged.

The brake is then released and the wildcat is tested. The brake is set, and all stoppers but one are cast off.

When ready, the report "READY TO HEAVE IN" is made to the bridge.

On the command "HEAVE AROUND," the brake is taken off and the chain is heaved in enough to take the strain off the stopper.

Reports are made to the bridge periodically on the direction the chain is tending, the amount of chain remaining out, and the degree of strain on the chain. If the command were "HEAVE AROUND TO SHORT STAY" the chain would be heaved in just short of breaking out the anchor (pulling the anchor loose from the bottom).

On the command "HEAVE AROUND AND UP," start heaving.

When the flukes have broken out, and the crown still rests on the bottom, the report "ANCHOR IS UP AND DOWN" is made.

When the anchor is free of the bottom, it is said to be "AWEIGH" and is so reported.

The jack and anchor ball are hauled down and the ship is legally underway.

When the anchor comes into view and its condition can be noted, the report "ANCHOR IN SIGHT, CLEAR (or FOUL) ANCHOR" is made. The anchor is reported as housed when the shank is in the hawsepipe and the flukes are against the ship's side.

The anchor buoy is recovered as soon as possible, and a report is made to the bridge when the anchor buoy is on board.

5. DECK FITTINGS

Deck fittings are the various devices attached to the hull that assist in handling the ship.

The most common fittings are found around the weather decks. A brief description of some common deck fittings (fig. 4-17).

5.1 CLEATS

A cleat is a device consisting of a double-ended pair of projecting horns used for belaying a line or wire.

5.2 BITTS

Bitts are heavy vertical cylinders, usually arranged in pairs, used for making fast lines that have been led through chocks.

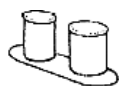
5.3 CHOCKS

A chock is a heavy fitting with smooth surfaces through which mooring lines are led.

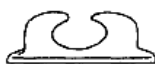
There are three types of chocks: An **open chock** is a mooring chock that is open at the top. A **closed chock** is a mooring chock, closed by an arch of metal across the top. A **roller chock** is a mooring chock that contains a roller for reducing friction.



CLEAT



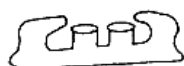
BITTS



OPEN CHOCK



CLOSED CHOCK



OPEN ROLLER CHOCK



PADEYE



BOLLARD

5.4 PAD EYES

A pad eye is a plate with an eye attached, welded to the deck to distribute the strain over a large area and to which a block can be hooked or shackled. A pad eye is also used in towing operations.

5.5 BOLLARDS

A bollard is a strong cylindrical upright on a pier, over which the eye (or bight) of a ship's mooring line is placed.

Figure 4-17.—Various deck fittings.

6. LIFELINES

- Lifelines are safety barriers to prevent personnel from falling or being washed over the side

- Lines erected around the edges of decks; referred to as follows:

a. Top - Lifeline

b. Middle - Housing line

c. Bottom - Foot rope

d. Snaking - Netting stretched between the deck and the housing line or foot rope to prevent personnel and objects from being washed overboard

Safety Note: Ensure that all lifelines are in place and in good condition.

7. OTHER DECK EQUIPMENT

7.1 Paint stage - Platform rigged over-the-side to support personnel

7.2. Boatswain's chair - Used for sending only one person over-the-side

Safety precautions:

- Personnel over-the-side must wear inherently buoyant life preservers.
- All boatswain's chairs must have a hand-tended safety line tended from the deck above.
- Safety lines should never be secured to lifelines.

7.3 Jacob's ladder - Flexible, portable ladder

with ropes and wooden rungs, slung over-the-side temporary use, commonly used for access to small boats secured to boat booms

7.4 . Boat boom - A spar swung out from a ship's side permitting small boats to ride safely alongside a ship while at anchor

7.5 Pilot's ladder - Flexible, portable ladder that is usually made of metal (sturdier than Jacob's ladder)

7.6 Sea ladder - Rigid, portable ladder that may be mounted and secured to the side

7.7 Accommodation ladder - Rigid, inclined ladder rigged to the side of the ship to provide a convenient means for boarding or leaving an anchored ship.

PAINING

Learning Outcomes:

After the class discussion, the students are expected to:

- Know the objective of painting
- Know how to prepare surfaces for painting
- Know the tools needed for removing rust and old paint
- Learn how to apply paint by brush
- Know different kinds brush and their uses
- Know the proper care and cleaning substance of brushes
- Know what to paint and not to paint surface
- Know safety precautions in painting

1. OBJECTIVE OF PAINTING

The protection of metal surfaces is the chief objectives of painting done aboardship. Paints and varnishes are also used to decorate surfaces.

The only effective protection against rust is good paint properly applied to metal surface that have been carefully prepared for painting.

2. PREPARING SURFACES FOR PAINTING

Even the most expensive paint is of little value if it is applied on an insecure foundation. Loose old paint, rust, dirt, dust, moisture or grease on any surface will prevent new paint from adhering to.

Before painting steel, it is necessary to remove all scale, grease, rust and moisture.



Rust spreads even if it is covered by paint.

Painting rusty surface causes paint to flake off.

Rust and old paint may be removed in several ways depending on the thickness of the coating, thickness of steel underneath, and materials stored on either side of steel plating

3. TOOLS FOR REMOVING RUST AND OLD PAINT

- **Scraper** – used for removing rust on plating surfaces.
- **Wire Brush** – used as welded areas.
- **Sand Paper** – used as abrasive to polish.
- **Chipping Hammer** – used for thick rust.
- **Scaling Hammer or Jitterbug** – never used in plating less than ¼ inch in thickness.
- **Rotary Power Brush** – it is operated by compressed air.
- **Power Sander** – it is also operated by compressed air.
- **Rotary Chipping Tool.**
- **Blow Torch** – satisfactory but should be hot enough to blister the paint and to burn wood underneath or to discolor paint.

4. APPLICATION OF PAINT BY BRUSH

- Hold brush firmly by the handle not by the stock. If held by the stock, hands become covered with paint and may cause poisoning especially if small cuts are exposed and lead paints are used.
- Hold brush at right angle to the surface with the end of the bristles alone touching and lift it clear to the surface when starting the return stroke.
- Do not completely fill the brush with paint. Dip only the end of the bristles into the paint. Do not charge the brush with paint until the preceding charge has become sufficiently exhausted.
- Apply paint with long stroke parallel to the grain of the wood.
- Cross the work by laying on the paint over a small section with parallel strokes. Then cross the first application with parallel strokes at right angle to the first one, all laying off (final) should be lengthwise.
- For vertical surfaces, work should be laid off vertically.
- For overhead surfaces, ceiling panels should be laid off fore and aft and the beams athwartships.
- Keep paint well-mixed while work is proceeding. Best result can be obtained by applying two coats of thin or medium body paint than one coat of heavy paint



5. TYPES OF BRUSHES AND GENERAL RULES

Flat Paint Brush----- large surface
Oval Sash and Trim Brush----small surface
Fitch Brush--- small and very small surfaces
Oval Varnish Brush----- rough
Flat Varnish Brush----- medium work
French Bristle Brush----- high grade work
Lettering Brush -small surface & large work
Painter Duster----- cleaning work

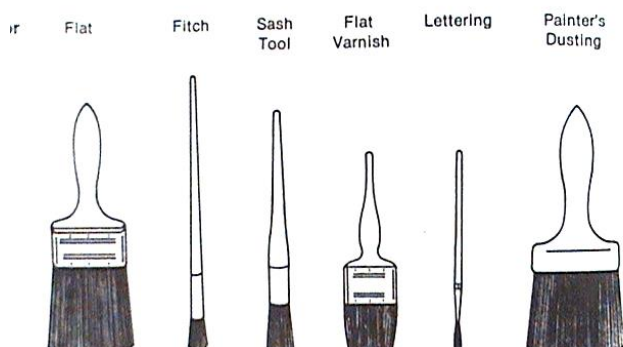


Figure 20-8 Types of brushes.

NOTE: *(Flat, oval and trim brushed are the two most useful brushes)*

6. CARE OF BRUSHES

Before using, rinse brushes with paint thinner and soak in boiled oil for about 48 hours to make them more flexible and easier to clean.

Care after use:

- Provide a container with compartments for stowing different types of brushes for a short period.
- The bristles must not touch the bottom as they eventually become distorted.
- Brushes which are to be used the following day should be cleaned with proper thinner and placed in the proper compartment of the container.
- Brushes not to be used soon should be cleaned in thinner, washed with soap and water and hang to dry. After drying, wrapped in waxed paper and stowed flat.
- Do not leave brush soaking in the water because it will cause the bristles to separate into hunches, flares and become bushy.

7. PROPER CLEANERS FOR BRUSHES WITH DIFFERENT FINISHES

Oil base paints and varnishes -- turpentine or mineral spirits

Rubber based paint----- water

Shellac----- alcohol

Lacquer ----- lacquer thinner

8. WHAT NOT TO PAINT

- Start-stop mechanism of electrical safety devices and control switchboards.
- Bell, pulls, sheaves, annunciator, chains, and other common mechanical devices.
- Dry sprinkling piping within magazines.
- Heat exchange surfaces of heating and cooling equipment.
- Identification plates.
- Joint faces of gaskets and packing surfaces.
- Rubber elements of isolated mounts, ground plates.
- Springs, strainers, threaded parts, hose and applicator nozzles.
- Knife edges, rubber gaskets, dogs, drop blots, electrical contact points and insulators.



9. PAINTING SAFETY PRECAUTIONS

- Complete ventilation of the compartment is essential to ensure immediate removal of vapors and paint dusts.
- Personnel using spray gun should wear clothing which fits smartly or tightly at the ankles, neck and wrist.
- Approved respirator must be worn and parts of the body not protected by clothing should be covered with petrolatum (Vaseline).
- Smoking, open flames, welding, grounding of spray equipment, chipping, and other spark-producing operations are prohibited in the compartment when spraying is in progress.
- Explosion proof portable lights should be used.

- Bulbs must not be replaced in a compartment or tank being painted until flammable or explosive vapors have been removed.
- Painted compartments long closed without ventilation must be entered with caution.
- Paint and varnish removers should not be used by persons having open cuts on their hands, unless rubber gloves are used.
- Paint and varnish removers should not be used in confined spaces because some have dangerous anesthetic property.
- If paint and varnish removers touch the skin and begin to burn, wash off with cold water immediately and consult the medical officer.
- Never use turpentine, spirits or other thinners for cleaning your hands after work because they can be absorbed through the skin pores. Use hand soap and water only.

SHIPBOARD ROUTINE (AT-SEA AND IN-PORT)

Learning Outcome:

After the class discussion, the students are expected to:

- Be able to know and enumerate the different shipboard duties at-sea and in-port

SHIPBOARD ROUTINE

Ships have standard routine in port and at sea.

PLAN OF THE DAY

Prepared and issued by the executive officer. It will name the duty officer, various watches, and include information as to changes or additions to normal routine. It also includes activities such as training, duty section, liberty section, and hours, working parties inspection etc. It is distributed and implemented by the OOD to all offices, officers, and division bulletin of the ship.

SHIPBOARD WATCHES

Duty personnel aboardship on a 24-hour a day basis to man all stations. It is usually of four (4) hours duration.

In-port watches:

- **Officer of the Deck (OOD) in port** - is responsible for the Safety of the ship and carries out the plan of the day.
- **Deck Petty Officer of the Watch (Deck POW)** – Assistant of the OOD.
- **Quarter Master of the Watch** – Assists the OOD in navigation and reports all changes in weather, temperature and makes appropriate entry in the QM logbook.
- **Radioman of the Watch** – Maintains required communication in the radio room.
- **Anchor Watch** – Tasked to assist the OOD during the night for such task as veering chain or adjusting lines.
- **Main Engine and Auxiliary Watches** – Tasked to maintain the operational readiness of main and auxiliary engines.
- **Bridge & Signal Watch** – Keeps the OOD informed on notable changes in weather, boats approaching the ship, unusual disturbances or distress in harbor and movements of other ships.
- **Cold Iron Watch** – Inspects secured machinery spaces.
- **Electrical Equipment Watch** – Assist the OOD in the maintenance of electrical equipment
- **Messenger** – commonly known as OOD messenger.
- **Oil King** – Records fuel soundings

At-sea or Underway Watches:

a. Bridge and Deck Watch

1. Command Duty Officer (CDO). In large ships, the CO normally appoints a CDO whenever they are at sea and this duty is performed by senior heads of departments. He is a line officer eligible for command who handles in behalf of the CO routine shipboard operational and watch related activities for the entire day. He is empowered by the CO to advise, supervise and direct key watchstanders in matters concerning the general operations and safety of the ship. He reports to the CO for the conduct of the watch and to the XO for affairs relating to the internal administration of the ship. He normally have no specific watch station but usually remains in close proximity to the ship's bridge.

2. Officer of the Watch (OOW). The OOW underway is the officer on watch stationed at the bridge responsible for the safe and proper operation of the ship. He reports directly to the CO for the safe navigation and general operation of the ship; to the EXO and CDO, if appointed, for carrying out ship's routine; and, to the Navigator for sightings of navigation landmarks and for any changes of course and speed.

3. Junior Officer of the Watch (JOOW). The JOOW is the principal assistant of the OOW and assists him in carrying out the duties of the watch. Normally, he answers the radio telephone and decodes messages. The OOW may give to the JOOW the conn or the authority to order course and speed changes, but, the latter should always retain the deck, i.e., the authority and responsibility for the bridge and the ship.

4. Boatswain Mate of the Watch (BMW). The BMW is the principal enlisted assistant of the OOW with a boatswain mate rating responsible for the bridge and deck watch. He conducts muster of the incoming watch section and sees to it they are properly posted and the outgoing watch section is properly relieved. He makes regular inspection of the top decks and upper deck compartments for any unusual occurrences and reports it to the OOW. He makes appropriate announcements to the ship's PA system in accordance with the ship's routine, subject to the permission of the OOW, and may sound the alarm for scheduled drills or actual emergencies.

5. Quartermaster of the Watch (QMW). The QMW is an enlisted man with a quartermaster's rating who assists the OOW in navigational matters. He maintains the ship's log and QM's Notebook and plots the ship's course on the bridge's navigational chart. He keeps the OOW informed on the ship's position and alerts him to any significant course and speed changes required, any navigational aids available to the ship and advises him concerning the weather and shipping likely to be encountered,. acts as the signalman and transmits and/or receives visual signals and records it in appropriate logs.

6. Helmsman. The helmsman, also called steersman, is an enlisted personnel with a seaman rating assigned to man the steering wheel and is responsible for steering the ship as ordered by the officer who has the conn. He repeats all orders given to the wheel word for word and reports back when the ordered action is completed or complied with.

7. Lee Helmsman. The lee helmsman or announcer who has a seaman rating is assigned to man the engine order telegraph responsible for transmitting ship's speed and direction orders to the engine room as he receives it from the officer who has the conn. He repeats all orders given to the engine order telegraph word for word and reports back when the ordered action is completed or complied with, ensuring that the engine orders are recognized and properly answered by the engine room watch personnel.

8. Telephone Talkers. The telephone talkers are enlisted personnel with seamen ratings assigned to man various SPT circuits and intercoms (MC) to relay all messages between the OOW and other watch stations. They communicate between stations in accordance with sound-powered telephone procedures.

9. Lookout Watches. The lookouts are enlisted personnel with seamen ratings who are stationed at a location where they can best see the areas of the sea and/or sky assigned to them. They serve as the eyes and ears of the ship in addition to the various detections and tracking equipment available on board. They are responsible for conducting visual search of their respective assigned sectors and reporting any sightings to the OOW, such as, smoke, markers, discolored waters, floating objects, small islands and islets, shallow waters, ships, small craft, aircraft, flares, men on the water, etc., which may have escape detection by radar or sonar because of their size, aspect, altitude or because of the weather as well as sounds of whistle signal, bells and engine noises.

10. Messenger of the Watch. The messenger is usually a young enlisted man who stands watch on the bridge responsible for delivering messages and answering telephones or carrying out duties as maybe assigned by the BMW or OOW.

11. Lifeboat Watch. In large ships or when conditions are such which requires the capability to rapidly recover personnel from the sea, a lifeboat watch is set and placed on readiness. This watch is composed of a boat crew stationed to man a designated lifeboat in case an immediate need to lower and use it becomes necessary.

12. CIC Watch Supervisor. The CIC Watch Supervisor is the most senior enlisted assistant of the CIC Watch Officer, usually with a radarman rating, who assists him in the conduct and performance of the watch. He maintains a complete and accurate written chronological accounts of both routine and unusual events pertaining to the watch in the CIC log. When necessary, he operates equipment, plots and works on maneuvering problems ensuring that proper evaluation is made on combat and operational information received and disseminated to the OOW.

13. Equipment Operators. The equipment operators are enlisted personnel with appropriate ratings that are assigned to operate radar, sonar, depth sounder, tactical voice radio and other electronic equipment at the CIC. They ensure that ships, aircraft, submarines and/or missiles are detected and reported as well as properly tracked.

14. Plotters/Recorders/SPT Talkers/Technicians. These are enlisted personnel of various seaman ratings assigned to maintain various plots and status boards, communicate and record messages and repair equipment malfunctions.

b. Communications Watch

1. Communications Watch Officer (CWO). In large ships, junior officers or senior enlisted watch stander are assigned as CWO responsible for the reliable, rapid and secure conduct of external visual and radio communications, other than tactical voice radio, and for the expeditious and efficient routing of messages. He exercises general supervision in the handling of communications traffic over the radio central (or radio room) and signal bridge through designated supervisors; and, personally check correctness of outgoing traffic and ensure that they are released as well as the routing of incoming traffic, except tactical signals.

2. Radio Watch/Signal Bridge Supervisors. These are the most senior enlisted assistant of the CWO, a radioman rating at the radio central and a quartermaster rating at the signal bridge. The radio watch supervisor monitors the frequencies in use, inspecting message traffic and logs to detect errors and taking immediate action to notify the CWO, CIC Watch Officer and OOW in the event of any equipment failure. The signal bridge supervisor assists the CWO in informing signalmen as to the location of ships to or from which messages maybe sent, ensuring that watchstanders know the meanings of all signals and maintaining all visual equipment ready for use.

3. Radiomen. The radiomen are enlisted personnel qualified in their rating assigned at the radio central to operate radio telegraph and radioteletype communications equipment; transmit and receive communications in accordance with the standard phraseology; and, process all types of messages including those requiring encryption and decryption as well as the handling and routing of same.

4. Signalmen. The signalmen are enlisted personnel with a quartermaster's rating assigned at the signal bridge and qualified to transmit and receive tactical signals as directed by the OOW through flashing light, flaghoist and semaphore signaling.

c. Engineering Watch

1. Engineering Officer of the Watch (EOOW). The EOOW is a commissioned officer or senior enlisted watchstander assigned to take charge of the engineering watch underway. He is responsible for the safe and proper operation of the ship's main and auxiliary propulsion systems. In the absence of a Damage Control Watch Officer his responsibility normally includes that of damage control.

2. Engineering Petty Officer of the Watch (EPOW). The EPOW is the principal enlisted assistant of the EOOW who assists him in the proper operation of the ship's engineering plant.

3. Main Engine Watches (MEW). These are enlisted personnel with firemen rating MEW who are assigned to operate and ensure the prompt and efficient operation of the main propulsion including engine controls.

4. Auxiliary Engine Watches (AEW). These are enlisted personnel with firemen ratings who are assigned to operate auxiliary engines, generators and switchboards, pumps and motors, refrigeration and air conditioning units and other auxiliary machinery in operation.

5. Sounding and Security Patrol. In large ships, these are enlisted personnel with firemen ratings who are assigned to check watertight integrity and maintain the material condition of readiness in effect throughout the ship. They conduct continuous inspection of all compartments and spaces below the waterline to check for flooding, fire and fire hazards, damage control closures, or other evidence of thief and sabotage. In addition, they also check soundings of ship's tanks to determine amount of fuel or water they contain.

6. Aft Steering Watch. In large ships, these are enlisted personnel composed of firemen and seamen ratings who are assigned to monitor the ship's aft steering and in the event of steering casualty, they take over steering control from the bridge helmsman as directed by the OOW. In small ships, however, this detail is organized from among the members of the section on watch and is only called upon when steering casualty is encountered.

NAVAL ORDNANCE

Learning Outcome:

After the class discussion, the students are expected to:

- Be able to know the different naval ordnance terms
- Be able to distinguish explosive ordnance from inert ordnance

A. DEFINITION OF TERMS:

1. **ORDNANCE** - comprises the physical equipment pertaining to weapon. Classified as:

a. Explosive Ordnance - including such elements

as:

1) Gun Ammunition - the complete assemblage of the component parts of ammunition details which makes up a round or a charge to any type of gun.

2) Torpedo - a self-propelled underwater missile use against ships and submarines.

3) Mines - are typically static weapon use to hinder enemy operations.

4) Bomb - covers all missiles dropped from aircraft, except torpedoes, mines and guided missiles.

5) Rocket - a self-propelled weapon whose absence of recoil makes it particularly suitable for firing from small craft or aircraft.

6) Guided Missiles - are new weapons which can travel great distance with heavy load and contain their own guidance.

7) Depth Charge - are thin walled container filled with relatively heavy charge of explosives and designed to explode at a predetermined depth or by the charge action of an influence type fuse.

8) Projector Charges - Similar to rockets and are used against submarines and close landing supports.

9) Chemicals - used to describes the variety of solid and gases which can be fired in projectiles from guns and mortars or dropped from aircraft. Used for screening, harassing etc.

b. Inert Ordnance - includes projecting devices such as:

1) **Guns** - typically consist of a tube closed at one end from which a projectile is fired by the burning in an enclosed space of the propellant charge.

2) **Launchers** - used to launch rockets or a device for hand thrown missiles or anti-submarine weapons.

3) **Projectors** - used to project DC, projector charges, etc.

4) **Release Gears** - one type of track use to drop DC from the stern of a ship.

2. **GUNNERY** - the art and science of using guns to include the operations and control of all elements of armaments.

3. **BALLISTICS** - the science of projectile's motion classified as;

a. Interior Ballistics - pertains to the motion of the projectile inside the gun bore.

b. Exterior Ballistics- pertains to the motion of projectile outside the gun bore or the action of the projectile in flight.

4. **FIRE CONTROL**- the practical application of exterior ballistics and the methods and devices used to control the guns and other weapons.

5. **CALIBER OR GUN**- the diameter of the bore measured between the top of the lands and it is expressed in inches or millimeters.

6. **MOUNT**- support and secure the gun to the ship's structure and provides for the train and elevation.

7. **TRAIN**- the position of the axis of the gun bore in azimuth as measured from the ship's centerline.

8. **ELEVATION** - the angle that the gun bore axis makes with the deck measured in a plane perpendicular to the deck.

9. **RECOIL** - the force tending to push the gun to the rear as the projectile is discharged. It is the gun's reaction to firing.

10. **COUNTERRECOIL** - the forward movement of the gun after recoil which return the gun into battery or original position.

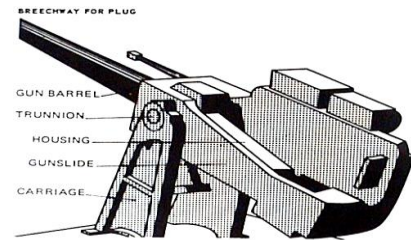
11. **IN BATTERY** - gun is said to be in battery when the gun is in its firing position. A gun moves out of battery during recoil and returns to battery during counter recoil.

12. **AUTOMATIC GUN** - guns in which some of the energy of explosion of the propellants is used to open the breech, eject the empty case and automatically load another round. Automatic gun can continue to fire as long as there is enough supply of ammunitions and trigger is pressed.

13. **SEMI-AUTOMATIC GUNS** - guns in which some of the energy of the explosion of the propellants is use to open the breech, eject the empty case, and automatically closed the breech when another round is loaded either by hand or by auxiliary equipment.

14. **NON-AUTOMATIC GUNS** - guns in which none of the energy of the explosion of the propellant is used to perform breech opening or loading and unloading functions.

15. **AXIS OF THE GUN BORE** - a straight line passing through the center of the gun bore



GUN AMMUNITION RECOGNITION AND PROJECTILE IDENTIFICATION

Learning Outcome:

After the class discussion, the students are expected to:

- Be able to know the different components of gun ammunition
- Be able to recognize the system of color coding

A. Basic Components of gun ammunition:

1. **Projectile** - contains the burster charge, fuze and/ or tracer.
2. **Propelling charges** - explosives that propels the projectile out of the gun bore.
3. **Primer** - initiates the burning of the propelling charges.

B. Gun ammunition is recognized by the information; ammunition lot number (ALN) stenciled/printed on their boxes and powder tanks through series of letters.

1. B - series for 5-inch gun ammunition
2. P - series for 3-inch gun ammunition
3. U - series for 40MM gun ammunition
4. Z - series for 20MM gun ammunition

C. Identification of projectile:

1. **By color** - which identify the primary role of the projectile and maybe in the form of an overall body color or if the projectile is colored green (old system) or olive drab (new system) it will have a 50MM (2") wide role band.

System of Color Coding:

a. For 3 -inch and larger caliber projectiles, colors are applied as overall body. Nose fuze and rotating band are not painted.

Color	Interpretation
Yellow	High Explosive
Brown	Low Explosive
Black	Armor Piercing
Silver/Aluminum	Counter measure
Light Green	Smoke/Marker
Light Red	Incendiary
White	Illuminating
Bronze	Drill/Inert/Dummy
Blue	Practice/Target
Orange	Exercise/Recoverable
Gray	Toxic or Irritant Agent

Non-significant color

Olive drab	All ordnance
Black	For lettering
White	For lettering

b. **Burster charge Color** - painted one (1) caliber from the nose of the projectile or from the base of the nose fuze.

Burster Charge	Band Color
-----------------------	-------------------

Explosive D	Yellow
Composition A	Medium
Inert material w/ color burst unit	Slate
Inert Material or Empty	Red

Illuminating, Chemical and Window Not painted with buster charge or load. Area painted the same as the body color.

c. In addition to the body color and the buster charge color, projectile were marked to indicate certain characteristics such as the presence of tracer, dye load or chemical filler.

2. **By code lettering** marked to indicate characteristics such as the presence and code of the tracer, dye load, a color burst unit and chemical filler.

Projectile 3-inch & larger are lettered on the body by the manufacturer with the following information:

Caliber and type of projectile

Ammo Lot Number.

Mark & Mod of fuze (SD or NSD).

Manufacturer's initials.

Mark & Mod of the projectile

Serial Number.

Mark & Mod of ADF (if applicable).

Year of manufacture.

Mark and Mod of Illum load or W Load (for ILUM and W only).

PN STANDARD SHIPBOARD NAVAL GUNS

Learning Outcome:

After the class discussion, the students are expected to:

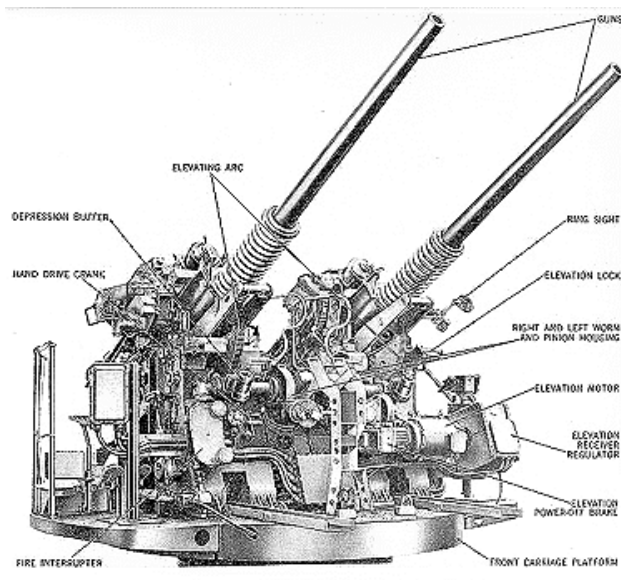
- Be able to recognize some of the PN shipboard standard guns and their characteristic
- Be able to enumerate the different gun personnel and their functions

The standard shipboard naval guns currently available in the PN inventory are mostly of the U.S.-made minor caliber guns - the **3-inch 50 caliber dual-purpose guns, 40MM and 20MM anti-aircraft guns**. These are the types of armaments installed in patrol combatants and naval auxiliary ships which were acquired by the Philippine government from the U.S. at the end of World War II. Since their acquisition, the PN has developed the technical expertise in maintaining and extending the operational serviceability of these guns.

During the late 70s, the PN has acquired a relatively modern weapon system as part of its modernization program, the **30MM Emerlec guns**, which are now installed in some of its newly-acquired or newly-constructed patrol gunboats. Some modern **belt-fed 20MM guns** have also replaced the old 20MM AA guns. In line with the enactment of the AFP Modernization Law, plans are in the offing for the PN to acquire some of the latest gun systems, such as the **Oto Melara 76MM/62 caliber dual-purpose**, rapid-fire guns and the **Bofors 40MM AA guns**.

Characteristics of Naval Guns in the PN Inventory

a. The 3-inch 50 Caliber (3"/50) Single Gun



The 3"/50 gun is a pedestal mounted, single or semiautomatic firing, dual-purpose gun designed for action against surface and air targets.

This was developed by the U.S. towards the end of World War II to combat high altitude bomber aircraft and replace the 40MM and 20MM AA guns.

The gun is air-cooled, recoil operated and uses a fixed type of ammunition.

It can be fired electrically by means of a solenoid key or manually through a firing foot pedal connected to the gun by mechanical linkages at the rate of 20 rounds per minute.

The gun is provided with a manual as well as telescopic gun sights and sight setting mechanism to aid in hitting the target and a fuze setting mechanism for setting the projectile's mechanical time fuze.

The following are other important data about the gun:

Weight of the gun	- 7,817 lbs
Muzzle velocity	- 2,700 ft/sec
Rifling	- right-hand twist
Number of grooves	- 24

- Length of recoil - 10-11.5 inches
- Maximum horizontal range - 14,600 yards
- Maximum vertical ceiling - 29,300 feet
- Effective range (horizontal) - 8,000 yards
- Effective range (vertical) - 4,000 yards

The 3"/50 single gun mount is normally manned by a gun crew of nine (9) personnel, maximum, and seven (7), minimum. These personnel with duties indicated are as follows:

a) **Gun Captain** - he is in charge of gun crew directing the operation of the gun and is provided with sound-powered telephone (SPT) to communicate and take orders directly from the Gunnery Control Officer. He takes station by the hand-operating lever at the right side of the breech mechanism of the gun.

b) **Pointer** - he operates the hand wheel to elevate and depress the gun and keep it pointed in the position angle of the designated target using the manual gun sight or by setting the horizontal crosshair of the telescopic gun sight to the target in coordination with the Trainer and fires the gun when ordered. He takes station to the left seat of the gun.

c) **Trainer** - he operates the hand wheel to move the gun to the left or right and keep it trained in the direction of the designated target using the manual gun sight or by setting the vertical crosshair of the gun sight to the target in coordination with the Pointer. He takes station to the right seat of the gun.

d) **Sight Setter** - he operates the range and deflection scales of the sight setting mechanism as directed and repeats all orders to control. He takes station at the sight setting platform on the left side of the gun at the back of the pointer. In case none is assigned, the Gun Captain acts as the Sight Setter.

e) **Fuze Setter No. 1** - he operates the fuze setting mechanism or in the absence of such mechanism, provides himself with a hand wrench for adjusting nose fuze setting of the projectile. He takes station at the fuze setting platform on the left side of the gun. He may be the only Fuze Setter assigned, hence, he should take one round from the ammunition locker, take station at the fuze setting platform on the left side of the gun to set the fuze and prepare to pass the round to the Second Loader.

f) **Fuze Setter No. 2 (or Third Loader)** - he normally takes out one round from the ammunition service locker for setting the fuze and prepares to pass the round to the Second Loader. He also takes station at the fuze setting platform in front of the Fuze Setter No. 1 on the left side of the Second Loader.

g) **Second Loader** - he normally stands by to receive the round from the Third Loader and prepares to pass it to the First Loader. He takes station in front of the Third Loader and to the left of the First Loader.

h) **First Loader** - he normally stands by to trip the salvo latch and receive the round from the Second Loader and prepares to ram the round into the gun. He takes station to a place behind and a little to the left of the gun with his left foot just beyond the danger circle.

i) **Hot Shellman** - he prepares to catch the ejected hot empty shell coming out of the gun as soon as it is fired. He takes station to a place behind and a little to the right of the gun convenient enough for him to do his job wearing asbestos gloves.

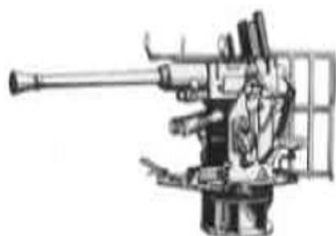
40 Millimeter Anti-Aircraft Gun(40MM AA)

The 40MM AA gun is a single or automatic firing (rapid firing), recoil operated gun designed for action against dive bombing aircraft or low flying aerial targets but maybe used against surface targets.

It maybe a single barrel (Army type), manually (local control) operated, air cooled gun; or, a twin or quadruple barrel (Navy type), manually or automatically (local or gun director control) operated, water cooled guns equipped with power drives for electric or electric/hydraulic operations.

This gun uses clip-feed ammunition, consisting of four (4) rounds, which are fired electrically by the gun director firing key and/or manually by pressing the firing foot pedal at the rate of 130-150 rounds per minute.

The gun is provided with manual gun sights for giving the necessary lead to allow for target motion during the time of flight of the projectile and also to provide for quick changing of the lead as the position of the target changes.

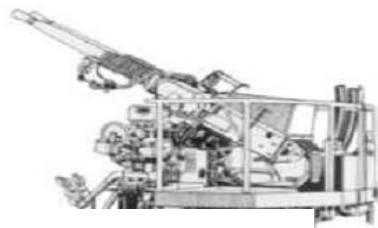


The following are other important data about the gun:

- Weight of the gun - 2,300 lbs
- Muzzle velocity - 2,830 ft/sec

- Rifling - right-hand twist
- Number of grooves - 16
- Length of recoil - 7.5 - 8 inches
- Maximum horizontal range - 11,000 yards
- Effective range (horizontal) - 5,000 yards
- Effective range (vertical) - 2,000 yards

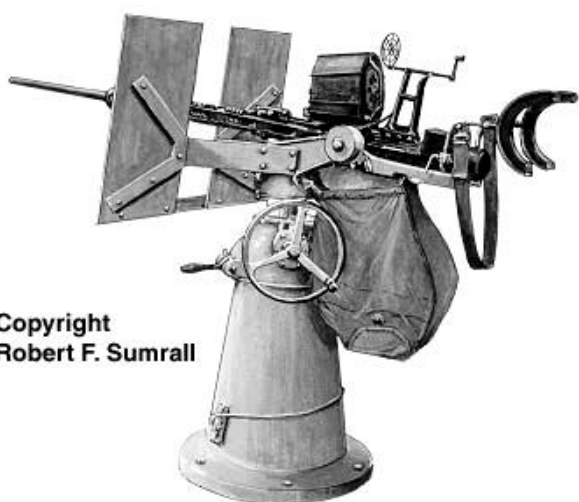
The 40MM AA gun is manned and operated by a gun crew composed of seven (7) members for a twin mount plus two (2) more and five (5) members for a much as 12-15 personnel.



for each mount with a gun director Mark 51 single mount. A quad mount would need as

20 Millimeter Anti-

Aircraft (20MM AA) Gun



Copyright
Robert F. Sumrall

The 20MM AA gun is a single or twin barrel, pedestal mounted, automatic firing, magazine-fed gun designed for action against low-flying aerial torpedo attack aircraft but can also be used against surface targets.

It is air-cooled and blowback operated wherein the barrel does not recoil but the breechblock is never locked and in constant motion at the instant the round is fired.

The force of counter-recoil is being checked by the explosion of the next round.

The gun maybe provided with a manual gun sight or the Mk 14 electrically operated telescopic gun sight to aid the gunner in hitting the target.

The magazine is a cylindrical drum containing 60 rounds of ammunition which is placed on constant tension.

The gun can be fired electrically through a solenoid switch or manually by means of a trigger mechanism at a rate of 450 rounds per minute.

The mount is provided with a cocking devise (a wire rope or bar), an empty cartridge bag, a bracket that supports the shields, cradle spring and cradle.

The following are other data about the gun:

- Weight of the gun - 141 lbs
- Muzzle velocity - 2,725 ft/sec
- Rifling - right-hand twist
- Number of grooves - 9
- Maximum range (45° elev) - 4,000 yards
- Effective range (horiz) - 2,000 yards
- Effective range (vert) - 1,200 yards

The 20MM AA gun is manned and operated by a gun crew composed of a minimum of 3 personnel (single barrel gun) and a maximum of six (6) personnel (twin barrel gun).

WATCH, QUARTER AND STATION BILL

Learning Outcome:

After the class discussion, the students are expected to:

- Recognize and discuss the importance of watch, quarter and station bill
- Know the different conditions of readiness
- Know what is the special sea detail

It shows the personnel duty assignments for a division as specified in the ship's Battle Organization and Regulation's Manual. Its purpose is to inform division personnel of their assignments. It is arranged in tabular form.

Column are provided for entering data from the battle organization manual and for the duties assigned under certain condition of readiness of the ship's Bill.

Some ships have additional columns too suit their special needs.

A. **Battle Organization Manual:**

1) It is a special organization and a special system of communication for battle conditions in order for the CO to fight the ship to the best of their abilities.

2) It contains four chapters describing the following:

a) **Battle Organization Chapter** - discusses chain of command; control of ship, armaments, communications, aircraft, casualties, etc. and the doctrines to fight the ship.

b) **Conditions of Readiness Chapter** - Covers the consideration affecting the selection of the proper condition of readiness and the measures that individual ships take to comply with the specified condition.

Conditions of Readiness:

1. Condition Watch I - the maximum state of readiness for battle, with the entire crew at battle stations prepared for imminent action. Modified version:

a) Condition Watch IE - a condition to provide temporary relaxation from the first degree of readiness and to permit designated personnel to draw and distribute meals at their action stations.

b) Condition Watch IA - frees enough personnel from their assigned GQ stations to carry out the ship's mission in amphibious assault operations.

2. Condition Watch II - a special watch applicable to gunfire support ships for situation such as extended period of shore bombardment.

3. Condition Watch III - Normal wartime cruising condition when surprise attack is possible. Part of the armament is manned and ready for immediate action.

4. Condition Watch IV - that condition to provide effective ship and aircraft control during peacetime cruising. No armament is manned.

5. Condition Watch V - ship in port peacetime, no armament manned.

c) **Battle Bill Chapter:** Lists the stations, which must be manned under battle conditions and for various conditions of watches and indicating the personnel requirements for manning those stations.

d) **Chapter 4** - Provides descriptive information on the various interior communication systems which include alarms and warning devices, battle announcing system, sound powered telephone circuits, ship's service telephone systems and voice tubes.

B. **Ship's Organization and Regulations Manual:**

1) It is a general directive, but it has the force and effect of regulations.

2) It is necessary to provide for almost any contingency. Routine work and other details or duties to be performed by or assigned to the several divisions are set forth in the manual.

3) This book outlines in a specific manner the following:

a) Administrative Bills:

- 1) Special Sea detail:
- 2) Underway replenishment:
- 3) Rescue and Assignment Bill
- 4) Landing Party
- 5) Visit and Search, Prize Crew, Boarding and Capture Bill

b. Emergency Bills - detailed procedures and specific assignment of men to perform an evolution on short notice when there is danger of loss of life or of the ship itself.

- 1) General Emergency Bill - collisions, grounding, explosion, storm or battle damage
- 2) Man Overboard Bill:
- 3) Fire in Port/ At Sea; and
- 4) Collision in Port/At Sea.

C. **Special Sea Detail (SSD) –**

- It is set whenever a ship gets underway from a pier or anchorage and goes to sea or returns from sea to an anchorage or mooring.
- It is set about a half-hour before getting underway and continues until the ship clears the harbor and is also set before entering port until the ship is docked or anchored.

D. **Regular Underway Watch Detail:**

Once the ship has cleared the harbor, the SSD is relieved and the regular underway watch is stationed: that is the cruising watches begin and the regular sections of the watch take over their prescribed duties.

MACHINERY AND EQUIPMENT

Learning Outcome:

After the class discussion, the students are expected to:

- Be able to know the different shipboard machinery and equipment
- Know the different types of propulsion used by the navy

1. **Ship Propulsion Engines:** Those engines used aboard ship that will enable the ship to move by rotating a propelling device such as oars, paddle, wheels or propellers.

Typical propulsion used in the Navy:

- a) Steam turbine gear drive
- b) Gas turbine gear drive
- c) Diesel engines (GM-6, GM-12, GM-16, GM-32)

2. **Auxiliary Machinery and Equipment** – Provides ship's smooth operation and personnel safety and comfort aboard ship.

- a) Refrigeration plant – primarily used for food storage, water cooling, and ice making.
- b) Air conditioning equipment – installed on naval ships for certain spaces where personnel efficiency, health, and safety on operation of equipment may be endangered by high temperatures or high humidity.
- c) Distilling plants – used to supply fresh water for shipboard uses and boiler feed water.
- d) Steering gears – there are two basic types of steering mechanisms used in the navy:
 - 1) Electromechanical steering gear – used extensively on small non-combatant ships.
 - 2) Electro-hydraulic steering gear – used extensively on large combatant ships.
- e) Anchor windlass – a piece of deck machinery used primarily for paying out and heaving in an anchor chain.
- f) Capstan – spool shaped, vertically mounted drum used for heaving in heavy mooring lines.
- g) Lube oil purifier – normally located in the engine room, used to for contaminated lube oil, water, sediments and other impurities.
- h) Air compressor – driven by electric motors commonly used for operating pneumatic tools, ejecting gas from ship's guns, starting diesel engines, charging and firing torpedoes, operating gun counter-recoil, providing pressures for the ship's horn.

Types:

 - 1) Low pressure compressor – has a discharge pressure of 150 psi or less
 - 2) Medium – has a discharge pressure of 151 psi to 1000 psi.
 - 3) High-pressure compressor – has a discharge pressure of more than 1000 psi.
- i) Cranes – are used to raise a load, lower and move it in horizontal direction. Used for handling airplanes, boats, bombs, torpedoes, minesweeping gears, missiles, trucks and stores.
- j) Elevator – used to raise and lower a load. The same use as the crane, except that it cannot move in horizontal direction.
- k) Winches – a piece of deck machinery that has a drum or drums on a horizontal shaft for handling loads with wire rope. In addition, cargo winches may be equipped with one or two gypsy heads fitted for handling manila rope.
- l) Laundry Equipment – consists of washer, extractor combinations, dryers, various types of ironing and pressing equipment plus numerous miscellaneous items such as laundry marking machine.
- m) Galley Equipment – food preparation and service equipment located in the galley and messing spaces aboard ship.

Examples:

- 1) ranges
- 7) coffee urns

- | | |
|-------------------------|--------------------------|
| 2) ovens | 8) toasters |
| 3) deep fat fryers | 9) steam jacketed kettle |
| 4) mixing machine | 10) refrigerators |
| 5) meat slicing machine | 11) dishwashing machine |
| 6) cube steak machine | 12) cooking utensils |

DAMAGE CONTROL

Learning Outcome:

After the class discussion, the students are expected to:

- Be able to know the different damage control system at the ship
- Know the reasons why ship compartmentalization is important

Damage Control – Procedure that helps reduce the harmful effects of impairment to the ship.

1. Preserve the watertight integrity of the ship.
2. Maintain the stability and maneuverability of the ship.
3. Make rapid repairs to damage gear on structures.
4. Furnish fire protection and extinguish fires.

THE DIFFERENT DAMAGE CONTROL SYSTEM

1. Drainage and flooding system.
2. Fire Main and Sprinkling system.
3. Ventilation System.
4. Fuel and fresh water system.
5. Compressed air system.
6. Communication system.

□ **Drainage and Flooding**

Drainage used for:

- a. Removing large quantity of water from compartment.
- b. Removing water from the hull under normal operating condition.

Flooding used for: Flooding compartments to balance the ship.

Three Principal types of drainage system:

1. **Main drainage system** - High capacity and is made up of piping and pumps that can move large quantities of water in short time.
 2. **Secondary drainage system** - Serves to drain small compartment forward and aft of the time drainage system.
 3. **Main condenser circulatory pumps** - Can be used for emergency drainage of the engine room.
- **Fire Main System** - made up of piping, pumps, plugs, valves and controls designed to supply plenty of water for fighting.
- **Ventilation System** - supplies fresh water, air and remove stale air and gases. It helps to prevent fires and explosion by preventing the accumulation of explosive gases.
- **Fuel Fresh Water System** - Consists of tanks, filling lines and feed lines. This is important in damage control because the list and trim of the ship can be partially controlled by shifting contents of the tanks. This method of balancing is better than flooding when the damage is below the waterline.
- **Compressed Air System** - Provides air for guns and torpedoes and for testing and blowing out compartment and tanks.
- **Communication System** - When ship is in action, the communication is vital importance in notifying the control system as to:
1. Location of casualties
 2. Extent of damage
 3. Corrective measure taken progress being made

SHIP COMPARTMENTATION

The ship is divided into compartments to:

1. Control flooding
2. Restrict chemical agents and gases
3. Segregate activities of personnel
4. Provide underwater protection by means of tanks and voids
5. Strengthen the structure of the ship

Compartments are designated and identified by symbols that are made up of letters and numbers. Symbols are stenciled on bulkheads.

Port compartments have even numbers while starboard compartments carry odd numbers.

DAMAGE CONTROL ORGANIZATION

Learning Outcome:

After the class discussion, the students are expected to:

- Be able to know the organization of the repair party
- Know the different functions of the repair party

Major Administrative Responsibilities:

1. The damage control function is delegated to the damage control assistant located in the damage control central (or designated repair party station on smaller ships).
2. Damage control can be accomplished only by the participation of all department aboardship. each department is responsible for the following:
 - a. Set material condition of readiness.
 - b. Enforce watertight integrity discipline.
 - c. Inspection of spaces in accordance with the hull report.
 - d. Require that damage control equipment and fittings be maintained in their proper location and in operation order.
 - e. Require the assignment of damage control duties to individual within each division, including the designation of a division damage control Petty Officer.
 - f. Secure department material and equipment against possible damage by heavy weather.
 - g. Immediately report to the damage control assistant any deficiency in damage control markings, devices, fittings, equipment or materials.
 - h. Train personnel in damage control matters.
 - i. Furnish personnel to repair parties as required by battle bill.
 - j. Be prepared to strip ship or clear for action.
 - k. Emphasize self-sufficiency in all battle stations by OJT in handling casualties to personnel and equipment.

Repair Party Organization:

- a. Repair 1 - Main deck repair party
- b. Repair 2 - Forward repair party below deck
- c. Repair 3 - After repair party below deck.
- d. Repair 4 - Amidships below deck repair party.
- e. Repair 5 - Propulsion Repair Party
- f. Repair 6 - Ordinance Repair Party
- g. Repair 7 - Gasoline Repair party and,
- h. Repair 8 - Flight deck repair party

General Functions of Repair Parties:

- Each repair parties must be capable of effecting repairs to electrical and battle telephone circuits.
- Capable in rendering first aid.
- Capable of detecting, identifying, measuring dose rate intensities and decontaminating the effect of nuclear, biological and chemical (NBC) attack.
- Organized to evaluate correctly the extent of damage in the areas in order to ensure the accuracy of on scene reports.

WATERTIGHT INTEGRITY

Learning Outcome:

After the class discussion, the students are expected to:

- Be able to know the different damage control system at the ship
- Know the reasons why ship compartmentalization is important
- Know the different tests for watertight integrity

The progress of damage control depends upon the proper utilization of watertight integrity features of the ships. The ship is divided into compartments and its purposes are:

1. Control flooding
2. Restrict NBC agents
3. Segregate activities of personnel
4. Provide underwater protection by means of tanks and voids.

The large combatant ships have an armored belt to protect vital machine spaces. In some instances an increase in an armored belt would reduce speed or have an adverse effect in the open of the ship as in aircraft carrier. Compartmentalization has been increased to compensate for reduction of armor.

1. Bulkhead – a traverse or longitudinal partition that separates the compartment.
 - a) Watertight bulkhead:
 - 1) Heavier metal than ordinary bulkhead.
 - 2) Some area unpierced except with watertight door or piping and wiring.
 - b) Collision Bulkhead:
 - 1) Designed to protect flooding through the ship.
 - 2) Bow collision bulkhead is the first transverse bulkhead aft of the stern.
 - 3) The last transverse bulkhead aft is the collision bulkhead that protects the after part of the

ship.

Doors and Hatches:

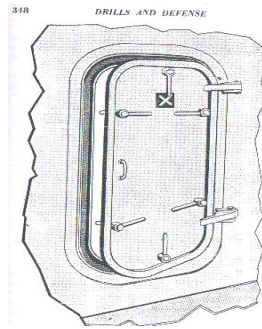
Enclosures for bulkhead opening. They are constructed such they will be as structurally strong as the bulkhead where they are installed.

1. Watertight doors
 - a. Used in watertight bulkhead on second deck and below.
 - b. Designed to resist 1 ½ times as much pressure as the bulkhead it services.
 - c. Have 6 to 12 dogs for securing.
 - c.1 Some dogs must be secured individually.
 - c.2 Usually a hand wheel is used for quick closing of the door.
2. Non-watertight Doors
 - a. Used on non-watertight bulkheads.
 - b. Usually they have fewer dogs than watertight doors and are made of dogs which require individual protection.
3. Airtight Doors
Are also fume and gas tight.
 - a. When used in locks, hand wheel is provided for quick closing.
 - b. When used in other places, individual dogs are provided.
4. Spray tight Doors – topside on ships with low freeboard to prevent entry of spray and water.
5. Panel Doors – ordinary metal joined doors to provide privacy in wardrooms, etc.
6. Hatches – are merely horizontal doors which are used for access through decks.
6. Escape scuttle – a round opening quick acting closure placed in a hatch.
8. Manholes

- a. Are really miniature hatches which are provided in deck for occasional access to water and fuel tanks.
- b. Bolted manholes are merely section of steel plates which are gasketed and bolted over deck access opening.
- c. Manholes are also found in bulkheads but are not so common as deck manholes.

Closure Fitting and Gaskets:

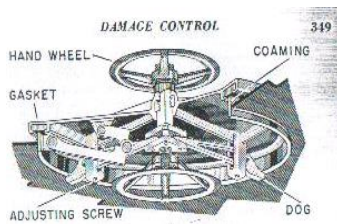
- 1. Gasket
 - a. Made of rubber installed on
 - b. Close against knife edges to tight fitting.
 - c. Must be kept free of dirt and



doors and hatches. form a water tight fitting and form air and gas grease.

- 2. Knife edges
 - a. Built out from decks and bulkheads.
 - b. Gasket on watertight doors and hatches close on knife-edges.

- 3. Dogs and Pins
 - a. Pins – are used to
 - b. Dogs – are used to



connect dogs make closure. oil on dogs and pins.

Watertight tests:

- **Chalk test** – for knife edges and gasket fitting.
- **Visual Test:**
 - Every six months
 - For compartment that cannot be tested.
- **Air Test** – Compartment designated for air test should be tested every 18 months.

MATERIAL CONDITION OF READINESS

Learning Outcome:

After the class discussion, the students are expected to:

- Be able to know the reasons for classifying fittings aboard ship
- Know the different kinds of material condition of readiness

In order to use compartments to its fullest advantage and to provide maximum preparedness, all the doors, hatches scuttles access valve and fittings of damage control valves are classified and manned. Navy vessels maintain different material conditions according to whether contact of enemy is improbable or imminent. Each condition represents a different degree of tightness.

To avoid confusion and frequent changes in regards to damage control fittings, settings are referred to by an old phonetic alphabet.

1. Reason for classification of Fitting:

Maintain the maximum degree of watertight integrity consisting of working requirements and health and comfort of the crew.

Maintain the maximum degree of readiness for battle station consistent with the demands of tactical situation.

Minimize the amount of time it takes to put the ship in a battle condition without jeopardizing the operational ability of the ship and the comfort of the crew.

2. Kinds of Material Conditions:

Condition X-RAY – Enemy improbable – Color Black.

- Setting provided the least amount of protection and in use only in well-protected harbors.
- Assigned to storeroom, tanks, voids, airtight fittings, fire main valve, etc.

Condition YOKE – Enemy is probable – Color Black.

- Next higher degree of watertight integrity.
- Used in unprotected ports during wartime cruising and entering port leaving during peacetime.
- Assigned to workshop, airport, lens, pump room, and fire main segregation valves.
- Set daily from sunset or at the end of the working day until sunrise.

Condition ZEBRA – Enemy is imminent - Color Red.

- Provide for the maximum degree of watertight integrity.
- Used in battle condition, emergency, when entering or leaving port during wartime.
- Assigned to fittings that would normally be opened at all times, except during battle condition and emergencies.

CLASSIFICATION OF FITTINGS

MATL CONDITION	X – RAY	YOKE	ZEBRA
X-RAY	Closed	Opened	Opened
YOKE	Closed	Closed	Opened
ZEBRA	Closed	Closed	Closed

3. Modifications to the Material Condition of Readiness:

a. Black Circle X – Ray Black Circle YOKE

- Fittings that give access to battle station ammunition, transfer and operational systems.
- Opened without DC central permission
- Closed when not in use.



- b. Red Circle ZEBRA\
 - Fittings that may be opened during prolonged period of general quarters.
 - Opened when authorized by the CO only.
 - Allows for the preparation and distribution of battle ration and for ventilation of vital spaces such as engineering rooms, etc.
 - When opened, these fittings are equipped with quick action devices.

- c. Red ZEBRA Surrounded by a D
 - Fitting that have access to weather deck not equipped with tight locks.
 - Used for darken ship.

- d. Circle Williams – Color Black
 - Primarily to ventilation fittings.
 - Access opening which are closed only in the event of NBC attack to prevent smoke or other airborne contamination from entering the ship.
 - Applies to non-vital sea section valves which when secured would not impair the mobility or fire protection of the ship.

- e. Williams
 - Special classification assigned to fittings essential for the operation of the ship such as valves, in piping system needed for safety and operation of the ship.
 - If closed would seriously hamper the mobility and fire protection of the ship.
 - Closed only to effect repairs or when causing flooding.

Learning Outcome:

After the class discussion, the students are expected to:

- Be able to know three elements of fire
- Know the different classifications of fire and corresponding remedy
- Know the classification of firefighting equipment and samples of each classification
- Know the general safety precautions of firefighting

Everyone on board ship have another big job - to work aside from their primary duties. This big job is to look out constantly for the safety of the ship and crew. When the ship puts out on a mission, all hands must do everything they can to:

- 1) Keep the ship afloat
- 2) Keep the ship underway
- 3) Keep the guns firing or ready to fire
- 4) Protect the lives of the crew

Causes of damage to a ship is divided into:

- 1) Fire
- 2) Collision
- 3) Enemy Action
- 4) Grounding
- 5) Weather

Fire - Is a chemical reaction between three elements such as oxygen, fuel and heat.

Classification of fire and extinguishing agent :

- Class A - common combustible materials like papers, woods, ropes, canvass - solid stream or water spray.
- Class B - flammable liquids and gases. Like kerosene, LPG, Gasoline - water fog, mechanical foam fire extinguisher.
- Class C - energized electrical equipment. - CO2 fire extinguisher
- Class D - combustible metal such as thermite, sodium and magnesium – sodium bicarbonate, lots of water,

FIREFIGHTING EQUIPMENT:

Firefighting equipment are classified into:

- 1) Portable - can be carried to the scene of fire. Contained in a cylindrical bottle.
- 2) Installed - are permanently or semi-permanently fitted on a ship and include the following:
 - a) Fire Main System
 - b) All-purpose fire nozzles and applicators.
 - c) Foam equipment
 - d) Fog sprays
 - e) CO2 Rail system
 - f) Mechanical Foam Equipment

SPECIAL PROTECTIVE EQUIPMENT:

The Navy believes in protecting its fire fighter. This protection includes the use of the following:

- 1) Oxygen Breathing apparatus (OBA)
- 2) Asbestos Suits
- 3) Hose (Air line) Mask
- 4) Life line

GENERAL SAFETY PRECAUTIONS:

You cannot win against fire. You can fight it, and you can hold down its damage. But some property will be destroyed and all too often men will be injured and even killed. Time is always lost, productive work is interrupted and additional efforts and materials are required to make repairs and to clean up the mess. The best thing therefore is to prevent fire from starting.

1. Three (3) general rules to good fire prevention:

- a) Keep things clean. Shipshape and in their right places.
- b) Keep flammable materials (gasoline, oily rags, paints, etc) away from fire starting things (torches, cigarettes, sparking equipment, heated areas). Do not take open flames near gasoline tank. Do not bring cleaning fluid near torch.
- c) Keep the correct fire fighting equipment in the right places and in good condition.

2. Fuel oil – Fuel oil itself is non-explosive and very difficult to ignite, and is normally incapable of spontaneous combustion. Fuel oil vapor however is heavier than air and it will accumulate in bulges and bottoms of tanks where it remains undiscovered until ignited by a naked light or spark.

Vapor is always present in partly filled compartments or tanks that contain fuel oil-unless the tank has been blown or washed out. While oil is being received or discharged there will be no naked light; no smoking; no electrical apparatus liable to spark are permitted on board ship within 50 feet of an oil hose tank and in compartments containing a tank or pump or a vent from a tank. Carrying of any matches when cleaning tank is prohibited.

3. Static Electricity:

Static Electricity is produced when gasoline or similar flammable liquids flow through hose, poured from one receptacle to another passed thru a filter or even splashed around a can. Enough static electricity can accumulate to cause a spark which can result in fire and explosion.

When working in or near fuel tanks or magazines you should never wear neither boots nor shoes with exposed nails, nor wear metal buttons or metal fastening.

In hazardous areas you must not wear outer – undergarments made of wool, silk, or synthetic textiles such as rayon and nylon. These materials can generate sufficient static electricity to cause ignition of inflammable products.

4. Electrical Equipment:

The following requirements are particularly not applicable where work with electricity is being carried on.

- a) Gasoline and similar flammable cleaning fluids are not used on either energized or de-energized electrical apparatus.
- b) Alcohol is not used for cleaning equipment. It damages most types of insulating varnishes.
- c) Alcohol is not used for cleaning near electrical equipment from which a spark might be received.
- d) Oil, grease, carbon dust, etc can be ignited by electrical spark. Machinery is to be kept absolutely clean and free of all such deposit.

Fumes from gasoline or other volatile flammables may be ignited by any of the following:

- a) Heat from a broken electrical lamp;

- b) Sparking in a motor;
- c) Ground or short in electric circuit;
- d) Spark from opening electric switches; and
- e) Static electric sparks caused by rubbing two things together.

NAVIGATION

Learning Outcome:

After the class discussion, the students are expected to:

- a. Be able to know what is navigation and its branches
- b. Know the various terms in navigation
- c. Know the different navigational aids and equipment
- d. Know what is a nautical chart and basic marine plotting and getting bearing and fixes

A. Definition:

Navigation: The art or science of determining the ship's or aircraft's position and of conducting a ship or aircraft from one position to another. The problems of navigation are those of position, direction and distance.

B. Four Branches of Navigation:

1. **Dead Reckoning (DR)** – a method of navigation by which the position of the ship is calculated from the direction and rate of progress through the water from the latest well-determined position.
2. **Piloting** – near-shore navigation method by which the movement of a ship is directed by reference to landmarks, navigational aids or soundings.
3. **Electronic Navigation** – a method of navigation which employs the use of various electronic devices. It differs from piloting primarily in the manner of collecting information.
4. **Celestial Navigation** – the position of the ship is determined by the observation of celestial bodies such as the sun, moon, planets and stars.

C. Nautical Terms:

1. **Earth** - the planet with which we are most familiar, although it is approximately an ablate spheroid, for navigational purposes, it is assumed to be a true sphere.

Diameter of the Earth:

- a. Polar Diameter – 6,864.57 nautical miles;
- b. Equatorial Diameter – 6,887.91 nautical miles or a
- c. Difference of 23.34 nautical miles
2. **Axis** – the diameter about which the earth rotates. The north end is the north pole while the south end is the south pole.
3. **Great Circles** – a circle on the surface of the earth, the plane of which passes through the center of the earth.
4. **Small Circle** – a circle on the surface of the earth, the plane of which does not pass through the center of the earth.
5. **Equator** – the great circle which is equidistant to the poles. The plane is perpendicular to the surface of the earth's axis.
6. **Parallel** – small circle on the surface of the earth having planes parallel to the plane of the equator and perpendicular to the earth's axis.
7. **Meridians** – great circle on the surface of the earth that passes through the poles.
8. **Prime Meridians** – meridians used as the origin of measurement of longitude, the meridian of Greenwich England.
9. **Latitude** – the angular distance between the position and the equator measured northward or southward from the equator along a meridian and labeled as appropriate N or S.
10. **Longitude** – the angular distance between the position and the prime meridian measured either eastward or westward from the prime meridian along the area of the equator to the meridian of the position in degrees from 0 – 180 deg and labeled E or W.

11. **Direction** – angular inclination of that line to the meridian measured right or counter clockwise from the north point of the meridian and expressed in three digits.
12. **Course** – as applied to marine navigation, is the intended direction of travel of a ship through the water
13. **Heading** – the direction in which the ship point or heads at a given time.
14. **Bearing** – the direction of a terrestrial object from the observer; azimuth as applied to the celestial bodies.
15. **Distance** – the length of a line joining two places on the surface of earth and is expressed in nautical miles. The shortest distance between two points on the surface of the earth is along the great circle joining them.
16. **Speed** – the velocity of travel and is expressed in knots. One (1) knot is equal to 6,080.2 feet per hour. One (1) minute of angular measurement in great circle for navigation purpose, is also equals to 2,000 yards.

D. Navigational Aids:

1. **Aids to navigation:** - any device external to a vessel or aircraft intended to assist a navigator to determine his position or safe course or to warn him from danger or obstruction to navigation.
2. **Buoys** – the primary functions is to warn of some danger or to delineate channels.

E. Various Types of Buoy:

1. **Can Buoy** – built up of steel plates having the shape of a tin cylinder used to mark left side of the channel from seaward.
2. **Nun Buoy** – built up of steel plates, the above water portion having the shape of truncated cone, cone in shape used to mark right side of the channel from seaward.
3. **Bell Buoy** – steel floats with a flat top on which a framework containing a bell is mounted. Most bell buoys are sounded by the motion of the sea and struck by compressed gases or electrically operated hammer.
4. **Spar Buoy** – slightly tapering pole or spar frequently used to mark side of channel. May replace the nun or can buoys.
5. **Gong Buoy** – similar in construction to bell buoy but has four (4) gongs each of different tones.
6. **Whistle Buoy** – provides a sound signal which is useful at night and also during fog and low visibility; cone in shape with a whistle, sounded by the motion of the sea.
7. **Lighted Buoy** – having batteries or gas tanks. Framework supports the light. A metal float on which is mounted a short skeleton tower.
8. **Combination Buoy** – lights and sound signals are combined, such as lighted bell buoys, lighted gong buoys and a lighted whistle buoy.
9. **Radar Reflected Buoy** – radar reflectors which return a strong echo to the radar screen are fitted on many buoys of all types.
10. **Lighthouses** – it is a man made permanent fixture having a light of certain characteristics and is usually watched.
11. **Lightships** – such as:
 - a. Floating lighthouses that mark approaches or entrances to harbors.
 - b. Used when building a permanent structure is impractical.
12. **Lighted Beacons** – similar to lighthouses and generally unwatched.
13. **Lighted Buoy** – lighted floating marker.

NOTE: These lighted aids to navigation have individual characteristics. To obtain the full benefits from the light, the navigator must understand their uses and be able to interpret data concerning them in light list and charts.


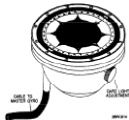
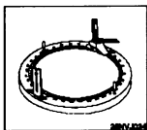
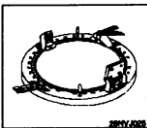

F. Characteristics of Lights:

1. General System:
 - a. Fixed light (F) – continuous steady light.
 - b. Flashing Light – shows single flash at regular interval, the duration of light always shorter than the duration of darkness not more than 30 flashes per minute.
 - c. Group Flashing (GP FL) – shows groups of two or more flashes at regular intervals.
 - d. Quick flashing (QK FL) – shows not less than 60 flashes per minute.

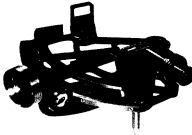
- e. Interrupted Quick Flashing (I QK FL) – shows quick flashes for about 4 seconds followed by a dark period of about 4 seconds.
 - f. Short Long Flashing (S L FL) – shows short flashes of about 0.4 second followed by a long flash of about 4 seconds in duration.
 - g. Group Occulting (GP OCC) – a light with a group of 2 or more eclipse.
2. Standard Colors of Lights:
 - a. White, Red, and Green.
 - b. Brilliancy – range of visibility.
 3. Light List Philippine Island: (Information Contained)
 - a. In the Philippines, the number starts from North to south in their approximate order (Geographical)
 - b. Name and Location
 - c. Position by Latitude and Longitude
 - d. Characteristics and Power
 - e. Height of light in feet above the water
 - f. Visibility in miles
 - g. Structure description

G. Navigational Instruments:

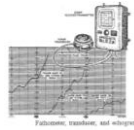
1. Direction Measuring Instruments:

Compass	Instruments that indicates directions.	
Magnetic compass	Depends on the tendency of a pendulous gyroscope to seek to along its axis with that of the earth.	
Gyro compass repeaters	Located at various positions throughout the ship to indicate the master gyro heading.	
Bearing circle	A non-magnetic ring formed to feet snugly over the compass bowl about which it can be turned to any desired direction. Used to determined bearings of terrestrial objects.	
Azimuth circle	Similar to the bearing circle with a special attachment for observing the sun. Used to determine bearings of celestial bodies.	
Pelorous (dumb compass)	Consists of a compass stand, compass bowls and compass card. used also in determining bearing.	
Alidade	An azimuth circle having a telescopic sight mounted over it.	

2. Short Range Measuring Device:

Stadimeter	Used to find range of objects of known height or height of objects of known distance.	
------------	---	---

3. Depth Measuring Device:

Hand lead	Weight attached to a marked line from 7 to 14 lbs.	
Deep sea lead	From 30 to 100 lbs.	
Sounding machine	Works under water pressure.	
Echo sounder (fathometer)	Works under speed of sound.	

4. Electronic Instruments:

- Radio Receiver – receives signals and weather information.
- Radio direction Finder (RDF) – receiver and a loop antenna which has directional properties.
- Radar (Radio Direction and Ranging) – used for obtaining bearings and ranges of objects in all conditions of visibility.
- Loran (long Range navigation) – measures the difference in the time reception of two synchronized radio signals which is used to determine a hyperbolic line of position.
- Sonar (Sonic Ranging) – uses speed of sound under water. It gives bearing and distance of objects underwater.



5. Celestial Navigation Instruments:

- Sextant – measuring angular heights of celestial bodies and measuring angles between two visible objects.
- Chronometer – accurate clock of superior construction for maintaining accurate time aboardship.
- Ship's Clock – ordinary clock set to keep standard or zone time.
- Comparing Watch – used for timing celestial observation.
- Stop Watch – useful in piloting for identification of lights and in celestial observation.
- Star Finder (H02102-D) – provides the navigator with positions of the celestial bodies relative to the position of the observer.

6. Plotting Instruments:

- Pencils – soft lead pencil with eraser.
- Navigator Case – contains drawing compass dividers, screwdrivers etc.
- Parallel Ruler – for drawing a straight line in plotting direction.
- Drafting Machine – measuring directions.
- Protractor – for measuring angles.
- Triangles – for transferring lines from compass rose to any place on the chart or vice versa.

7. Weather Instruments:

Barometer	Atmospheric pressure (Mercurial or Aneroid)	
Thermometer	Determines temperature.	
Psychrometer	Measure relative humidity.	
Anemometer	Measure wind direction and wind speed.	

H. Nautical Chart:

- Chart – a pictorial representation of the earth surface or part of it with provision for determining position, distance and direction and information of interest to the navigator. This shows usually coastal areas of water and gives a great deal of hydrographic information which is useful to the navigator.
- Map – for most part shows land areas including their political subdivision and topography.

3. Chart Projection: - methods of representing the curved surface of the earth on a flat surface.
4. Charts Symbols:
 - a. Fathom Lines – system of lines that indicates extent of fairways and restricted waters.
 - b. Soundings – (depth of water) numbers scattered on water areas of the charts. Sounding can be either in feet or fathoms and can be determined from the title of the charts.
 - c. Light (Lighthouse, Lighted Beacons, Lighted Buoys) – indicated on the charts by a red color or star. Characteristics and features near the symbols.
 - d. Examples: GP FL – 30 seconds 156 ft and 19 miles.
 - e. Buoys – opal or red colors other than black solid shape for black vertical stripes and horizontal stripes, lighted red/gray.
 - f. Compass Rose – used to measure directions. Outer indicates true direction, the inner indicates magnetic directions and it also gives variation to locality.
5. Shorelines:
 - a. Sandy Beach – rows of fine dots.
 - b. Gravel – small circles
 - c. Boulders – irregular shapes
6. Heights – numbers in feet above high water.

I. Types of Compass:

1. Gyrocompass – a compass that measures the direction by means of the principles of gyroscopic inertia and precision.
2. Magnetic Compass – a compass on its directive force upon the attraction of the magnetic poles of the earth.
3. Gyro Repeaters – may also be treated as a compass due to its parts. The compass card is driven through synchro system which receives an electrical input from the Master Gyro.

J. Bearing and Fixes:

1. Bearing – direction of terrestrial object from observer, azimuth as applied to a celestial body.
2. Fixes – position obtained from lines of position taken at the same time or the intersection of two (2) or more lines of position taken simultaneously.
3. LOP (Line of Position) – a line on some point of which the ship is located. This is established by the following means:
 - a. By Ranges – if two objects appear to be in line as seen from the ship, the ship must be along this line.
 - b. By Bearing – if the direction of the known object is sighted from the ship, it must be along this line.
 - c. By Distance – if the distance to known object is determined, the ship must be somewhere on a circle of which the object is the center.

SEMAPHORE

Learning Objective:

After the class discussion, the students are expected to:

- a. Be able to know what is semaphore signaling and its advantages and limitations over other means of naval communications
- b. Know the procedures in conducting semaphore
- c. Know the alphabetical/numerical meaning of semaphore flag signalling

A. Standard Apparatus:

1. Generally 15 - 18 inches square flag
2. Similar to OSCAR Flags
3. Attached to a staff long enough to be grasped firmly by the hand
4. Some times substituted by the PAPA Flag.

B. Advantages and Limitations:

1. Faster than flashing light
2. Possibly more secure than flashing light due to its short range
3. Best substitute for handling administrative traffic when radio silence is imposed.

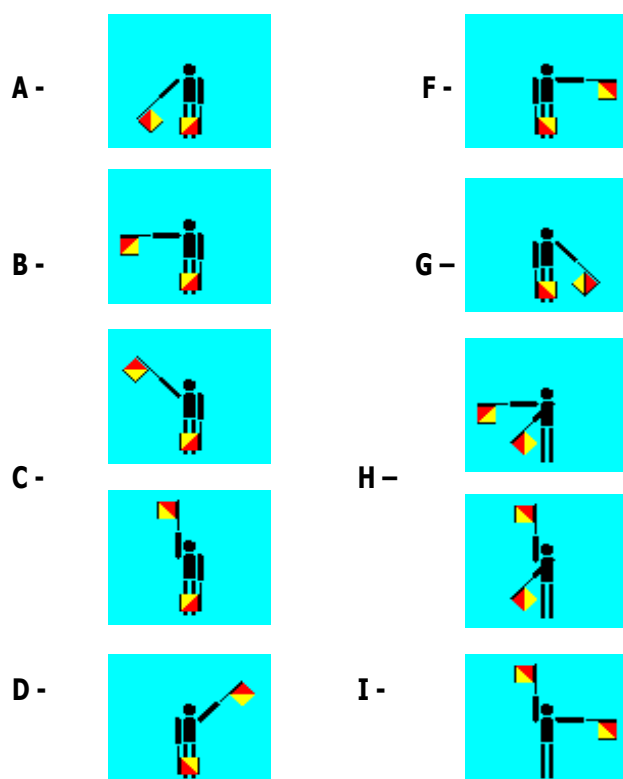
C. Procedures:

1. When transmitting:
 - a. Chose a good background
 - b. Characters are made facing the ships addressed
 - c. A distinct pause is made at each character position
 - d. When sending pro signs, operating signals and abbreviations, the pause is of double duration.
 - e. Between words or groups, drop your arms to the front position between letters.
 - f. When sending double letter, drop your arms to the front position between letters.
 - g. Numeral are spelled
 - h. If numerals or groups of numerals are to be recorded as digits, precede and follow the numerals with numeral sign, except in the heading or ending.
2. When calling:
 - a. Send the call sign of the station called
 - b. Making the attention sign
 - c. When flashing light is used to make a call - to indicate that a semaphore message will follow, send the pro sign SEM.
 - d. Using flag hoist - hoist flag JULIET for all ships present or the call sign of the ship called above the flag JULIET.
 - e. If the precedence of the message to follow must be indicated:
 - 1) DESIG is hoisted below JULIET for priority message.
 - 2) DESIG followed by appropriate precedence sign for message of higher precedence.
3. When answering
 - a) Made by sending either answering sign by semaphore or pro sign K by F/L.
 - b) When call is made by flaghoist:
 - 1) Hoist answer to the dip - have seen the signal
 - 2) Close-up - ready to receive
 - 3) Hauled down or dipped - acknowledge or receipt.
4. Receipting
 - a) Sending prosign R by semaphore or flash light
 - b) Hauling down answer after the transmitting station hauls down the call.

5. Repetition, Interruption and Relay

- a) Use IMI after the transmitting station completes the message - either by light or by semaphore.
- b) In flaghoist method of calling - request for repetition should be made before receiving for the message.
- c) If the transmitting station is required to interrupt a message.
 - 1) I dips the call - (flaghoist)
 - 2) Send prosign AS - Semaphore
 - 3) Receiving station dip the answering call when the transmitting station indicates interruption or when unable to receive.
- d) Relay procedure - essentially the same with flashing light except that relay ship should not wait for the end of the message before commencing relay.

MEANING OF SEMAPHORE FLAGS (A-Z)



E -

J -

K -



P -



L -



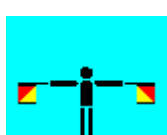
Q -



M -



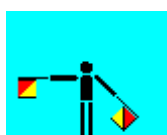
R -



N -



S -



O -

T -

U -



Z -



V -



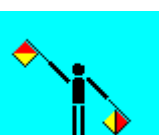
NUMERAL -



W -



ANNUL -



X -

ERROR -

Y -

FLAGHOIST SIGNALLING

Learning Outcome:

After the class discussion, the students are expected to:

- Be able to know what is flaghoist signaling and its advantages
- Know the procedures in flaghoist signalling
- Know the different meanings of flags as hoisted aboard ship

A. ADVANTAGES

1. Provides a rapid and accurate system of handling tactical and international signals of reasonable length during daytime between ships in proximity.
2. Ensures a more uniform execution of a maneuver than any other system.
3. The navy uses the international alphabet flags, numeral flags and pennants, special flags and pennants and Navy flags.

B. PARTS OF A FLAG

1. Flag - the length of the flag measured from the staff to the outside edge.
2. Hoist - is the vertical width of the flag when flying free.
3. Tabling - the double thickness of bunting type, bound and switch which is at the hoist of the flag.
4. Tail line - a short length of halyard attached to the lower part of the tabling and carrying the snap book, it serves as the spacer separating the flags of a hoist for clearness.

C. TERMS

1. Flag bag - a bag of flame metal covered with canvass where signal bags are stowed.
2. Halyards - light lines used in bending flags - numbered from out board to in board.
**Uphaul - part of halyard that is made fast to the last flag in a hoist.*
3. Retriever - a separate line attached with a metal ring to each halyard used to recover a lost flag.
4. Point of hoist - the block attached to the yardarm through which the halyard carrying the hoist is rove.
5. At the dip - when the hoist is three fourth of the way up toward the point of hoist.
6. Closed-up - when the top flag is touching the point of hoist.
7. Dipped - one a signal is closed up and is lowered a fourth of the way down from the point of hoist.
8. Hoist - a signal consisting of one or more flags in a single halyard.
9. Display - a complete signal, whether on one hoist or on one hoist or on two or more adjacent hoist.
10. Tack line - a 6 feet length of halyard having a ring at one end and a snap hook at the other used to separate flags or groups of flag.

D. PROCEDURES IN READING FLAGHOIST

1. Single hoist - from top to down
2. Two or more hoist - from top to down, from outboard
3. Triatic stay - from top to down, from forward to
4. Yardarm of different heights - from higher to lower yardarm.

MEANING OF ALPHABET FLAGS (A-Z)

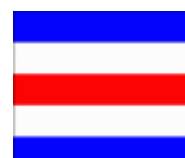
1. **Flag A**
a. Divers of friendly underwater demolition personnel down.
b. Displayed where best seen
c. Position indicator - precede numerals latitude and longitude



2. **Flag B**
a. Weapons practices
b. Fueling or transferring of explosives
c. Displayed on appropriate side or where best seen



3. **Flag C**
a. Affirmative
b. Displayed where best seen



4. **Flag D**
a. Degaussing
b. Displayed where best seen



5. **Flag E** – I am altering my course to starboard



6. **Flag F**
a. Flight operations
b. Displayed where best seen



7. **Flag G**
a. Guide flag
b. Displayed where best seen



8. **Flag H**
a. Helicopter operations
b. Displayed where best seen



9. **Flag I**
a. Going alongside (In port or at anchor)
b. Displayed on side rigged



10. **Flag J**
a. Semaphore message
b. Where best seen
c. Answered by addressee(s)



11. **Flag K**
a. Personnel working aloft



- b. Displayed where best seen
- c. In port only

12. Flag L

- a. RADRAZ ZERO WARMING
- b. Displayed where best seen



13. Flag M

- a. Medical duty ship (Not underway)
- b. Displayed where best seen
- c. Movements (Underway)-disregard my movements
- d. Displayed where best seen, repeated by addressee(s)



14. Flag N

- a. Your movements not understood
- b. Displayed where best seen, repeated by addressee(s)
- c. Visual watch--not keeping visual watch
- d. In port- displayed where best seen



15. Flag O

- a. Man overboard
- b. Displayed where best seen



16. Flag P

- a. General recall - all personnel belonging to this unit return to ship immediately.
- b. In port



17. Flag Q

- a. Boat recall
- b. Displayed where best seen



18. Flag R

- a. Replenishing or transferring alongside method
- b. Fueling astern method
- c. Displayed on side rigged/ on side hose is rigged
- d. Ready duty ship (Roger ship)
- e. Displayed where best seen



19. Flag S

- a. Drill signal - signal flying is for flaghoist drill only
- b. Displayed where best seen



20. Flag T

- a. Time indicator - precede numerals
- b. Displayed where best seen



21. Flag U

- a. Anchoring, mooring, weighing anchor
- b. Displayed where best seen or on appropriate side



22. Flag V
a. Streaming/recovering towed sonic devices not including mine sweeping equipment.
b. Displayed on appropriate side or where best seen



23. Flag W
a. Information addressee- info addressee follow
b. At yardarm



24. Flag X
a. Exercise - evolution/exercise completed
b. Displayed at fore yardarm repeated by addressee(s)



25. Flag Y
a. Acknowledge - repeated by addressee
b. Displayed at yardarm
c. Location of OTC
d. Displayed where best seen
e. Visual communication duty ship - A visual communication duty ship
f. Displayed where best seen



26. Flag Z
a. I require a tug.
b. When made by fishing vessels operating in close proximity on the fishing grounds, it means "I am shooting nets".



FLASHING LIGHTS

Learning Outcome:

After the class discussion, the students are expected to:

- Be able to know the different types of flashing lights
- Know by heart the international Morse code

A. TYPES:

1. Directional

a) Signals are sent out by signal searchlight that is pointed and trained directly at the receiver so as to be visible through a limited area.

b) It is the long range or visual signaling method

- 1) 12" Searchlight
- 2) 24" Searchlight

2. Non-directional

a) Signals are sent out from yardarm blinkers which are operated from the transmissions key located in the pilot house or on the signal bridge.

b) Lights are visible in any direction away from the ship, thus affording the sender effective way to communicate simultaneously with many addressees.

B. INTERNATIONAL MORSE CODE

1. Standard or all naval communications transmitted by flashing light or radiotelegraph.

2. Dot & dashes system

- a) A dot equals 1-unit duration
- b) A dash equals 3 unit
- c) The period between dots or dashes in the same character equals one unit
- d) The period between two characters equals 3 units
- e) The period between groups equals 7 units

3. Basic all consist of 36 sight patterns

- a) 26 alphabets - A-Z
- b) 10 numbers 1-0
- c) Additional and punctuation marks

4. Best way to learn code is by wholes

5. Try code group first then plain language

6. Letters and their Morse code equivalents:

A	· _	J	· _ _ _	S	... _
B	_ ···	K	_ · _	T	_ _
C	_ · _ ·	L	· _ ··	U	·· _
D	_ ··	M	_ _	V	··· _
E	·	N	_ ·	W	· _ _
F	·· _ ·	O	_ _ _	X	_ ·· _
G	_ _ ·	P	· _ _ ·	Y	_ · _ _
H	····	Q	_ _ · _	Z	_ _ ··
I	··	R	· _ ·		

7. Numerals and their Morse code equivalents

1	._ _ _	6	_....
2	.. _ _	7	_... _
3	... _	8	_... _
4 _	9	_... _
5	10	_... _

THE PHILIPPINE MARINE CORPS

Learning Outcome:

After the class discussion, the students are expected to:

- Be able to know what is the Philippine Marine Corps in relation to the Philippine Navy
- Know the reasons why ship compartmentalization is important
- Know the different tests for watertight integrity

The Organization of the by the late PRESIDENT Secretary of the National light, hard hitting, highly dedicated officers and men persistently pursue sea-going engaged on nefarious



Philippine Marine Corps was conceived in 1950 RAMON MAGSAYSAY when he was the Defense. He envisioned a Marine force that is mobile, and composed of disciplined and who are capable to aggressively and smugglers, pirates and other lawless elements activities all over the archipelago.

The Philippine Marine Corps has always to measure up to the standard or professional excellence set by President Magsaysay. In its almost five decades of dedicated service to our country, it has served as effective and indispensable tool of the government for nation building.

CREATION OF THE CORPS

The authority that provided for the formal creation of the Philippine Marine Corps was **AFP General Order No. 319 dated 02 November 1950**. Pursuant to this order, "A" company of the authorized Marine Battalion was activated on 02 November 1950 at Cavite Naval Base, Cavite City. The company consisted of 6 volunteer officers and 8 NCOs from the Philippine Navy, as well as 230 new civilian recruits. Most of the original officers and NCOs who served as drill instructor in the fledgling Marine Corps were veterans of World War II and were former members of the famed Philippine Scouts.

LIEUTENANT MANUEL A GOMEZ, an outstanding member of the Philippine Military Academy Class 1941 served as the first Commanding Officer of the Marine "A" Company. Lt. GOMEZ in his speech during the oath-taking ceremony of the first batch of Marine recruits prophesied the future role of the Marine Corps in the Armed Forces of the Philippines:

" The task of turning these young men into Marines rests upon us. Today as we start the training of these 230 volunteers, we will be striking the first hammer blow in forging the Cutting Edge of the Armed Forces "

THE PHILIPPINE MARINE CORPS TODAY

Through the years, the Philippine Marine Corps has remained as the nation's true force-in-readiness. Today, the corps consists of Headquarters and Headquarters Service Group, Combat Service Support Brigade (CSSB), Marine Corps Training Center (MCTC), three (3) Marine Brigade Headquarters with eleven (11) Marine Battalions under their operational control. To meet the growing combat support requirements of the unit, the Combat Service Support Brigade has absorbed the Assault Armored Battalion (AAB) and Field Artillery Battalion composed of three (3) howitzer batteries placed under the operational control of the three (3) Marine Brigades deployed in operational areas. The Corps also activated the Inshore Boat Company and upgraded the Reconnaissance Company into a Force Reconnaissance Battalion. In 1990, the Marine Guard Battalion was activated to perform security duties at the Senate and the House of Representatives.

For its reserve component, the Corps in 1996 activated the 4th Marine Brigade (reserve), the 202nd and 602nd Marine Reserve Battalions and Marine Mobile Medical and Surgical Company, manned by Marine Reservist all over the country.

At present, about 87 percent of the total strength of the officers and men of the Philippine Marine Corps are deployed in Luzon, Mindanao, Sulu and the Palawan regions. These Marines are actively participating in the government's effort to maintain National Security and to assist the local governments in these areas in promoting national development.

Today as the Philippine Marine Corps forges its almost five decades of service to our country and people its officers and men have constantly time-honored motto of **KARANGALAN, KATUNGKULAN AND KABAYANIHAN**. Marines in every assignment have always strived to live up to the renowned standard of excellence of the Corps and have proven their effectiveness in any mission they are tasked to perform. As always, they consistently carry out their duties and responsibilities faithfully to the best of their abilities and efforts carving into the Corps' history, the Marine Traditions of excellence, heroism, loyalty and the highest standard of professionalism.

In recognition to the Organizations fidelity to its mission, the Philippine Marine Corps today proudly flies in its standard the following: 5 Presidential Unit Citation Streamers: an AFP Chief of Staff Streamer: The Anti-Dissidence Campaign, Luzon Campaign, Jolo Campaign, Mindanao-Sulo Campaign, Visayas Campaign Streamer; COMELEC Citation Streamer; and the Disaster, Relief and Rehabilitation Operation Streamer.

MARINE CUSTOMS AND TRADITIONS

Being a major unit of the Navy, and due to the fact that the most of the first Marines were volunteers from the navy, many naval customs and traditions have been carried over and practice in the corps today. Likewise, since the birth of the organization almost five decades ago, Marines have evolved their own peculiar customs and traditions. These customs and traditions include the following:

- a. Like Navy personnel, Marines always in the affirmative and acknowledge that they understand the instructions of their officers by saying "Aye-Aye, Sir or simply "Aye, Sir!"
- b. Marine Officers and NCOs ascend to positions of command and responsibility in the corps only after strictly going through progressive billets, in the same manner as navy officers and the Petty Officers do in their shipboard and shore duties. Hence, a Marine NCO can never be designated as a Battalion Sergeant Major if he has not served earlier as Platoon Sergeant and later as a Company First Sergeant. This tradition is necessary to ensure that every Marine is professionally prepared to assume any higher position that he may be tasked to perform.
- c. Certain ceremonies in the Corps are variations, if not faithful copies of some enduring naval ceremonies. These include the parade for retiring Marine Officers, the commissioning of major weapon systems and equipment, the de-activation of a Marine unit, the welcome and send-off ceremonies for arriving and departing Marine Units, and many others. The Marine practice of providing side boys to honor visiting high civilian and military officials, is also an adoption of the ship side honors normally rendered to high-ranking visitors to Navy vessels.
- d. Marine's work hard to retain in their vocabulary many naval terms to constantly remind themselves that they have come from the navy. They for example, insist in calling the toilet as "head", the floor as "deck", and the right side and the left side of any structure as "starboard and portside" respectively.
- e. Marine units adapt the prescribed format of a "Naval Letter" when communicating either with Navy and Marine Headquarters and other Marine Units outside of the Navy and the Corps.

Marines regard their Commanding Officers with high respect and reverence in the same manner, as the crew would respect their ship's Captain. The CO's staff and immediate subordinates are sensitive to his wishes and generally try to unburden him of routine nuances and concerns in order that he may fully concentrate on the more important task of running the unit. A ware of the pivotal role of the Commander during dangerous combat operations, his men ensure that he is well secured against enemy action at all times. They know that by protecting their Commander, they are also protecting themselves and are ensuring the accomplishment of the mission of their unit. Both in the garrison and the field, the Commanding Officer is traditionally assigned orderlies and aides to assist him in his personal needs and official functions.

Through the years, the Marine battle cry or growl "**OOOOOWHA!**" has evolved many meanings in the different context that it is used in the Corps. It was originally intended by Marines undergoing strenuous fitness exercises to clear their lungs of stale air as they chant along during their morning road runs. The practice also became a way for Marines to "psych" themselves up, as long-distance runners or wrestlers would do, in order to get their adrenaline hormones flowing in their systems before a physically demanding any dangerous activity. The marine growl has become an expression of the Marines "esprit-de-corps" and state of high morale, of their enthusiastic approval of the words of a speaker, of their affirmation of their trust and confidence for one another and their commitment to perform any task to the best of their abilities and efforts. In a gesture of cheerfulness and good humor, Marines among an audience often do the growl whenever the words "**Philippine Marine Corps**" are spoken by the speaker. The Marine growl is even said to be an effective psychological weapon to unnerve a less resolute enemy to loose his fighting spirit and to take flight "**OOOOOWHA**" therefore is also the abbreviation of the traditional battle cry, "**LETS GO MARINES!**"

Members of the Marine honor guard, side boys and plane side honor guards, when rendering honors to an arriving VIP visitor or Guest of Honor in Military Ceremonies, shout "**KARANGALAN**" upon their execution of the command of the Honor Guard Commander to present arms. This traditional gesture aims to impress on the guest that the troops warmly welcome him and are greatly honored by his visit. During the departure honors, they also shout "**SALAMAT PO!**" upon their execution of present arms.

Most Marines have served in the land of our Muslim brothers in the Southern Philippines and have been exposed to their custom and traditions. One of their traditions that Marines admire is the sincerity with which Muslim brothers extend their hands in a handshake. Many Marines after years of observing their gesture during their assignment in Muslim Mindanao, have developed the habit of practicing it wherever they go. After firmly clasping the hand and looking directly at the eye of the person they meet, Marines now customarily bring their right hand to their chest, close to their hearts, as a sincere expression of goodwill. This peculiar form of handshake has become one of our trademarks as Marines, which distinguishes them from the other members of the AFP.

RAIDS AND AMBUSCADES

Learning Outcome:

After the class discussion, the students are expected to:

- Be able to know what are combat patrols and its types
- Know the procedures in the conduct of raid
- Know the different types, categories and fundamentals of a successful ambush as well as counter-ambush

Combat patrols provide security, harass, destroy, or capture enemy troops, equipment and installations. There are two (2) types of combat patrols.

A. Raid

A raid is conducted by a combat patrol whose mission is to attack a position or installation for any or all of these purposes:

1. Destroy the position or installation.
2. Destroy or capture troops or equipment.
3. Liberate personnel. Surprise, firepower, and violent action are the keys to raid.
4. Surprise is best achieved by attacking:
 - a) When the enemy may least expect an attack.
 - b) When visibility is poor, and
 - c) From an unexpected direction e.g., approaching from the rear or through seemingly impossible terrain such as a swamp.
5. Fire is concentrated at critical points to suppress the enemy.
6. Violence is best achieved by gaining surprise, by using massed fire, and by attacking aggressively.

Conduct of Raid

The patrol moves to an Objective Rallying Point (ORP) – as described for a reconnaissance patrol. Once ORP is secured, the leaders's reconnaissance is conducted, and plans are confirmed. Elements and team move to their positions. If possible, their movements are coordinated so that all reach their positions about the same time. This improves the patrol's capability for a decisive action if it is detected by the enemy too soon.

1. Security Element -- the teams of the security element move to positions from which they can secure the ORP, give warning of enemy approach, block avenues of approach into the objective area, prevent enemy escape from the objective area, or perform any combination of these tasks within their capability.

As the assault and support elements move into position, the security element keeps the patrol leader informed of all enemy action. It shoots only if detected or on the patrol leaders order.

Once the assault starts, the security element prevents enemy entry into, or escape from, the objective area.

When the assault is completed, the security element covers the withdrawal of the assault and support elements to the ORP. It withdraws itself on order or on a pre-arranged signal.

2. Support Element -- the support element moves into position prior to the assault element so that it can suppress the objective and shift fire when the assault starts. It normally covers the withdrawal of the assault element from the immediate area of the objective. It withdraws itself on oral order or on signal.

3. Assault Element -- the assault element deploys close enough to the objective to permit immediate assault if detected by the enemy. As supporting fire is lifted or shifted, the assault element assaults, seizes, and secures the objective. It protects demolition teams, search teams, and other teams while they work. On order or signal, the assault element withdraws to the ORP.

At the ORP, the patrol reorganizes and moves about 1,000 meters or one terrain feature away to disseminate information. During reorganization, ammunition is redistributed, casualties are treated and status reports are given.

B. Ambush

An ambush is a surprise attack from a concealed position on a moving or temporarily halted target. It may include an assault to close with and destroy the target, or the attack may be fire only. It does not require that ground be seized and held. It enables a small unit with few weapons and little equipment to harass or destroy a larger better armed unit.

1. Types of Ambush

A **Point Ambush** is one which troops deploy to attack a *single kill zone*.

An **Area Ambush** is one which troops are deployed as *multiple related point ambush*.

2. Categories of Ambush

Ambushes are categorized as either hasty or deliberate.

a) A **Hasty Ambush** is an immediate action drill.

b) A **Deliberate Ambush** is planned as a specific action against a specific target. Detailed information on the target are required e.g. size, organization, weapons, and equipment carried, route and direction of movement, and times the target will reach or pass certain points on its route.

3. Terms

AMBUSH SITE - The terrain on which a point ambush is established.

KILL ZONE - The part of an ambush site where fire is concentrated to isolate, trap, and destroy the target.

ASSAULT ELEMENT- The part of the patrol that fires into and assaults the kill zone.

SUPPORT ELEMENT - The part of the patrol that supports the assault element by firing into and around the kill zone. The early warning and security part of an ambush patrol. It secures the ORP and blocks enemy avenues of approach into and out of the ambush site. It does this to prevent any enemy from getting into or out of the ambush site.

4. Fundamentals of a Successful Ambush

Surprise-- surprise must be achieved, else the attack is not ambush.

Coordinated Fire-- all weapons, including mines and demolition, must be positioned, and all fire, including that of supporting artillery and mortars, must be

Control-- close control must be maintained during movement to, occupation of, and withdrawal from the ambush site. Control is most critical at the time of the target's approach.

Ambush Formations

□ **LINE** -- the assault and support elements are deployed generally parallel to the target's route of movement (road, trail, streams). This positions the assault and support elements parallel to the long axis of the kill zone and subjects the target to flanking fires. The size of the target which can be trapped in the kill zone is limited by the size area which the assault and security elements can cover with a great volume of fire. The target is trapped in the kill zone by natural obstacles, mines (Claymore, anti-tank, anti-personnel) explosives, and direct and indirect fire.

"L" Formation --a variation of line formation. The long leg of L (Assault Element) is parallel to the kill zone. This provides flanking fire. The short leg (support element) is at the end of, and at right angle to the kill zone. This provides enfilade fire, which interlocks with fire from the other leg.

"Z" Formation -- another variation of the line formation. The attack elements are deployed as in the "L" formation, but with an additional side so that the formation resembles the letter "Z" the additional side may serve any of the following purpose:

"T" Formation – can be used to interdict small groups attempting to high movements across open areas.

"V" Shaped Formation – The attack element is deployed along both sides of the target's route so that it forms a letter "V".

DEFENSE AGAINST AMBUSH

The small unit commander responsible for moving his unit independently must plan for the formation to be used, march security, communications and control, special equipment, and the actions to be taken if ambushed and needs to reorganize.

Two things should be done immediately:

- 1). Return fire with all weapons.
- 2). Get out of the killing zone.
- 3). Smoke and grenades are extremely effective in executing counter ambush.
- 4). Elements that are not trapped must initiate an immediate flank or rear assault.

AMPHIBIOUS OPERATIONS

Learning Outcome:

After the class discussion, the students are expected to:

- Be able to know what is an amphibious operation, its purpose and phases of operation
- Know the organization of boat teams and different functions

An amphibious operation is an aggressive incursion to hostile territory. It is an attack launched from the sea by naval and ground forces embarked in ships and which involve landing on a hostile shore.

Amphibious Operation is a complex operation that incorporates land, sea and air forces into one cohesive assault force and integrates them into a highly balanced, concentrated and tremendous combat power to defeat an enemy force entrenched ashore.

A heliborne operation may also be conducted to support an amphibious operation. The Philippine Marine Corps with its operating units is especially organized, equipped, and highly balanced; concentrated and tremendous combat power to defeat an enemy force entrenched ashore.

PURPOSE OF AMPHIBIOUS OPERATION

Amphibious operations are generally conducted to establish landing forces on a hostile shore for the following purpose:

1. Prosecute further combat operations.
2. Secure site for forward naval or air bases.
3. Decisively deny the enemy the use of vital areas of facilities.
4. Conduct swift and unexpected incursion into hostile territory or inflict casualties and damage to enemy personnel and material.
5. Gather vital information about the enemy activities and intentions.

PHASES OF AMPHIBIOUS OPERATION (PERMA)

Following are different phases of an amphibious operation:

1. Planning Phase (**P**). This phase starts from the time of the issuance and receipt of the initiating directive by the concerned units and extends to the creation of the amphibious Task Force. It also includes actual planning and revision of plans of all units

2. Embarkation Phase (**E**). The embarkation phase covers the period when the units that consist the landing force with all their equipment and supplies are assembled at the staging areas and are embarked aboard their assigned naval vessel.

3. Rehearsal Phase (**R**). The conduct of rehearsal is necessary in an amphibious operation to determine the adequacy of plan, the workability of communication equipment and armaments and to insure to familiarity of all members of the landing force with the over-all plan. Rehearsals are usually conducted on a beach similar to the actual beach objective and also as much as possible under similar time and sea conditions.

4. Movement to the Objective Area (**M**). In this phase, the vessels of the Amphibious Force with the landing force aboard maneuver in convoys towards the Amphibious Objective Area (AOA).

5. Assault Phase (**A**). This is the final phase of an amphibious operation. It commences when the Amphibious Task Force arrives at the objective area and ends with the accomplishment of the task force mission. It includes the disembarkation of troops from the transport ships into the landing crafts, their movement to the beach and subsequent landing under tactical condition. Once ashore, the landing force units assault their respective objectives using standard tactics of fire and maneuver and fire movement. After seizing the task force objective, administrative unloading of personnel, supplies and equipment from the transport ships and helicopters will commence.

ORGANIZATION OF BOAT TEAM

The elements of the amphibious landing force are organized into boat teams to ensure their fast and systematic loading. A boat team includes all the personnel, equipment and supplies assigned and embarked in one landing craft of a particular wave. Following are the members of the boat team and their respective responsibilities.

□ Boat Team Commander – He is the most senior commissioned or non-commissioned troop officer of the boat team. He maintains the discipline of the boat team and sees to it that all loose gears are properly secured. He directly coordinates with the boat crew for the control of the craft.

□ Assistant Boat Team Commander – He is the second most ranking troop commander aboard the craft. He assists the boat team commander in the performance of his duties and takes over his responsibilities in the event that becomes a casualty.

□ Loaders – Loaders are required when landing crafts used and when disembarkation of troops and equipment are done alongside transport ships. There maybe at least eight Loaders in a boat team when surface landing crafts are used. They are composed of four Deck Loaders and four Boat Loaders. Loaders are not necessary when troops, supplies and equipment are preloaded in Landing Vehicles, Tract (LVT)

□ Net Handlers - Four men are normally designated as net handlers but additional Net Handlers may be assigned depending on the size of the disembarkation net and sea condition. The Net Handlers are the first to go down the net and they relieve the boat crew from holding it. They keep the net taut and away from the side of the ship and the landing craft.

□ Boat Paddle Handler – Every boat, whether the landing craft used is a surface or an amphibious vehicle, the boat team is identified by a boat paddle. This marker is used by the Wave Commander in controlling the formation of boats prior to the assault of the beach

INDIVIDUAL EQUIPMENT PREPARATION

When surface landing crafts are used, equipment of participating personnel are rigged in peculiar manner so that they may quickly be dropped from the shoulder in the event that the marine falls into the water while disembarking from the ship or while wading to the ashore during the actual assault. This is the proper way on how to do it.

1. Canteens are hooked on the ammo belt well back on the left and right hip.
2. The ammunition or pistol belt is fastened and is left from the belt suspender straps on the pack.
3. The rifle is slung on the right shoulder with the muzzle down and with its sling loosened. Right, the weapon is then carried across the pack with the sling placed around the pack, bringing it to a vertical position behind the left shoulder. The rifle should fit snugly; otherwise you should properly adjust your sling. Marines may pair off in order to adjust the snugness of each other's rifle and equipment.
4. Your helmet strap should be worn loose but be fastened in order that you can easily discard your helmet when necessary, as when you accidentally fall from the disembarkation net into the water.
5. When a life jacket is used, it is normally put on after all the individual equipments are adjusted. The jacket is placed around your neck, crotch and waist and the straps are brought under the individual equipment. Extra care should be taken in order that the straps are not entangled with your clothing or other equipment, such that it will be hard to discard them when necessary.

LASHING AND LOWERING OF EQUIPMENT

It is the duty of the boat leaders to see to it that every piece of equipment or supplies to be lowered in the landing craft is properly lashed with a line, prior to the start of disembarkation.

In lowering, the rule to follow is to always keep the lines taut, carefully keeping the equipment away from the side of the ship and guiding it carefully into the landing craft.

Following are the different lines that are use in lashing and lowering equipment and supplies from the transport ship to the landing craft.

1. The Lashing line to be used should b strong enough to hold at least a 300-pound load and must have a 4-inch splice at each end.
2. The guide line is hooked at the eye of the lashing line which is nearer to the heavier end of the equipment.
3. The lowering line which also has a hook is engaged at the lighter end of the load.

GOING DOWN THE DISEMBARKATION NET

Members of particular wave will assemble by boat teams at the designated Assembly area at the deck of the transport ship. They shall wait for their turn to be called upon to go down the disembarkation net, into the landing crafts below.

1. Do not rush in going down the disembarkation net. Once you have positioned yourself approximately in line with the other member of your boat team, take one secured foothold. Look directly to the forward, neither looking up nor down.
2. "Feel" the next lower rung (net ladder step) with your feet without looking down.
3. Firmly take hold only of the vertical strands of the disembarkation net with your hands to avoid being stepped on by the others above you.
4. Avoid swinging and keep your body as close as to the net as possible.
5. If you lose your balance and you are about to fall, or has in fact fallen into the water, immediately loosen off and drop your equipment. Your immediate concern should be to save your own life.
6. Do not jump from the disembarkation net until you have reaches its lowest rung. Immediately clear the area and proceed to your position in the landing craft, in order to give way to others who are still going down.

ACTION DURING THE ASSAULT

When aboard a surface landing craft, the boat team commander will loudly give a warning when the craft is about a hundred meters from the beach. Upon hearing this, slightly bend forward and brace yourself in anticipation of the beaching of the craft. When this is done ad the landing craft ramps, dash out to the nearest cover. Disperse upon clearing the ramp of the landing vehicle and avoid bunching up with others. During a "wet" landing, wade as fast as you can to the shore.

When on the beach, dash to the first available cover and concealment. Note the location of your other boat team members and take positions approximately in line with other marines of your wave to avoid being accidentally hit by friendly forces from behind. When there is adequate cover or when enemy resistance is non-existent or light, orient yourself with the surroundings and immediately reorganized yourselves in order that you can begin to fight effectively as a unit.

Once reorganized, your commander will lead you attacking your designated objective using the standard tactics of fire and maneuver and fire and movement. This assault should be done as rapidly and aggressively as possible, regardless of the progress of the other squads or platoon of the landing force. After the seizure of your objective and the beachhead has been securely established, subsequent operations ashore may follow.

HELIBORNE OPERATION

Learning Outcome:

After the class discussion, the students are expected to:

- Be able to know what are heliborne operations and related terms
- Know the purpose, advantage and disadvantages
- Know the heli-team organization and the responsibilities of the team members

Heliborne Operation – an offensive operation in which combat forces and their equipment move out in the battlefield aboard air vehicles under the control of the ground force commander to engage in ground combat.

A. DEFINITION OF TERMS

- **Heli-Team** – consist of combat equipped troops lifted in a helicopter at one time
- **Helicopter Wave** – consist of helicopters which arrive together and land approximately and at the same landing zone.
- **Landing Zone** – a specified ground area for landing assault helicopter to embark or disembark troops and cargo.
- **Landing Point** – a point where one helicopter can land. It is designated by two (2) digit number.
- **Ready Circle** – are alert points from which the heli- teams are called to be explained.

B. PURPOSE

1. Reconnaissance and security operations – to block and screen enemy avenues of approach.
2. Diversionary actions.
3. Seizure and retention of key terrain.
4. Counter-attack of enemy penetrations
5. Long-range combat patrols
6. Raids

C. ADVANTAGES

1. Versatility and unique capabilities of the helicopter makes it the most suited aircraft for vertical envelopment missions.
2. Utilization of the rotary-winged aircraft increases the battlefield mobility of ground forces.
3. Makes the enemy territory deep inside accessible to combat units for conduct of offensive operations.

D. DISADVANTAGES

1. Adverse weather conditions may curtail the use of helicopter.
2. Limited support weapons, heavy equipment and means of communications.
3. Limited capability to engage in sustained combat.
4. Lack of vehicular mobility.
5. Vulnerability to enemy action during landing, assembly, and pick-up.
6. Loss of the element of surprise if airmobile operation is often resorted to by the commander since the enemy may learn to counter-act such operations.

E. HELI-TEAM ORGANIZATION AND RESPONSIBILITY

Principles to be considered:

1. Unit Integrity – this means that the unit organization of forces are preserved whenever possible.

2. Tactical Spread – key personnel & important equipment are judiciously distributed on the different aircraft to forestall their total loss in the event that same A/C will not successfully reach the landing zone.

ORGANIZATION: *the helicopter team, also referred to as HELI-TEAM consist of combat equipped troops lifted in one helicopter at one time. The HELITEAM is composed of nine men:*

- 1 – Squad Leader (Heli-team Commander)
- 2 – Fire Teams (A and B)
- 3 – Members of A and B fire teams and their equipment

RESPONSIBILITY:

1. Inspect each individual member for proper uniform, equipment while in the assembly area.
2. Muster the members of the heli-team prior to enplaning.
3. Checks all equipment assigned to the heli-team and sees to it that they are properly located before the team is called to the landing zone.
4. Ensures that all weapons are in safe position, all loose gears of the men are properly secured and that they do not carry anything higher than their heads.
5. Leads his heli-team from the assembly area to the control point and ready circle in the loading zone.
6. Supervise the enplaning of his heli team.
7. Supervises the deplaning of his heli-team personnel and equipment at the landing site.

AFP PRIMER

101 FREQUENTLY ASKED QUESTIONS

Q1. [What are the Legal Basis for the Organization and Development of the Reserve Force.](#)

A1. a) The 1987 Constitution "Provides that the Armed Forces of the Philippines shall be composed of a Citizen Armed Force who shall undergo military training and serve as may be provided by law. It shall keep a regular force necessary for the security of the State."

b) RA 7077 (AFP Reservist Act of 1991) is an act providing for the development, organization, training, administration, maintenance and utilization of the Citizen Armed Force of the AFP and for other purposes.

c) IRR to RA 7077. Guiding principle in the responsibility of all citizens to defend the security of the state and in fulfillment thereof, the government may require its citizen to render personal military or civil service.

d) RA 7898 (AFP Modernization Act) Calls for the development of a self-reliant and credible strategic armed force along the concept of a Citizen Armed Forces, the reconfiguration of the AFP structure and the professionalization of the AFP.

e) National Defense Act of 1935 Commonwealth Act No. 1 otherwise known as the national Defense Act – " Provides that during national emergencies, the government has the right to mobilize its citizen resources, either public or private as may be deemed necessary for national defense.

Q2. [What is Republic Act 9163?](#)

A2. RA 9163 is an act establishing the NSTP for tertiary level students, amending for the purpose RA 7077 and PD 1708, and for other purposes. The ROTC program was made optional and voluntary upon effectivity of this Act.

Q3. [What is the mission of the Reserve Force?](#)

A3. The mission of the Reserve Force, alternately referred to as the Citizen Armed Force is;

- To provide the base for the expansion of the AFP in the event of war, invasion or rebellion.
- To assist in relief and rescue during disasters or calamities; to assist in socio-economic development; and
- To assist in the operation and maintenance of essential government or private utilities in the furtherance of the overall AFP mission.

Q4. [How is the Reserve Force organized?](#)

A4. The Reserve Force shall be organized into five (5) components, namely: (Sec 8 RA 7077)

- a) The Army Reserve Component
- b) The Air Force Reserve Component
- c) The Navy Reserve Component

- d) The AFP-Wide Technical Service Reserve component; and
- e) The Affiliated Reserves

Q5. What is the goal of the AFP pertaining to the Reserve Manpower Build-up?

A5. In pursuance to the mandates of RA 7077 and RA 7898, the AFP is working for the build-up with a ratio of 80% Reserve Force and 20% Regular Force.

Q6. What is the Organizational Structure of the Reserve Force component?

A6. The organization, structure, manning and equipment of reserve units shall conform to the organization of the Regular Force. Reserve units of a battalion type or equivalent in PAF, PN shall be organized at the provincial level; and reserve units of a brigade and division type or equivalent, on a regional level.

Q7. How are Reservists categorized?

A7. There are three (3) categories of AFP Reservists:

- First Category Reserve is composed of able-bodied reservists whose ages are between eighteen (18) years and thirty five (35) years inclusive.
- Second Category Reserve is composed of able-bodied reservists whose ages are between thirty six (36) years and fifty one (51) years inclusive.
- Third Category Reserve is composed of all able-bodied reservists who are above fifty one (51) years of age.

Q8. What are the classifications of the Reserve Force Units?

A8. There are three (3) classifications of reserve Force Units.

1) The Ready Reserve

- a) The Ready Reserve is composed of citizen soldiers belonging mostly to the First Category Reserve.
- b) The Second Category Reserve and/or the Third Category Reserve, particularly the commissioned and non-commissioned officers, who volunteer to serve with the ready reserve shall be allowed, if qualified and fit for duty, to join and actively participate as part of the ready reserve and will serve with an appropriate ready reserve unit.
- c) Member of the AFP affiliated reserve units of various government and private utilities and services considered essential for the preservation of the economic stability of the country or particular locality, such as power and electricity, water supply, transportation and communications, among others, regardless of their categorization will be classified as ready reserve.
- d) All citizen soldiers belonging to the first category reserve, except those exempted under this act shall be required to serve with ready reserve units and will have assignments and promotion in accordance with existing policies of the AFP until transferred to the standby reserve by virtue of their age.

2) The Standby Reserve

The Standby Reserve is composed of citizen soldiers belonging mostly to the Second Category Reserve and the Third Category Reserve. The members of the standby reserve shall be organized and assigned to specified reserve units and shall be maintained through annual assembly test to update their records and their present address, among others.

3) The Retired Reserve.

PTP 4a SOP nr 11 dtd 28 Jun 04, AFP retired officers and EP who were compulsory and optionally retired from the active military service and those honorably separated members of the AFP who upon their voluntary act, will be integrated in the Reserve Force; and as such will be given reserve unit assignment and designated mobilization centers.

Retired Reserve is composed of citizen soldiers who have qualified for retirement through length of service, old age or disability. For this purpose, sixty five (65) years shall be considered as the retirement age. However, if qualified and fit for duty, a member of the retired reserve may be ordered to active duty in times of local or national emergencies if he volunteers for active duty and when the Secretary of National Defense determines that there are not enough qualified citizen soldiers with his special skills and qualifications in the ready reserve or the standby reserve in his particular area of residence.

Q9. What are classified as ready Reserve?

A9. Units classified as Ready Reserve I are the reserve units which maintains a high degree of readiness as to be ready for operational employment within seven (7) days after activation.

Q10. [What units are classified as Ready Reserve II?](#)

A10. Units classified as Ready Reserve II are reserve units which will be maintained in a degree of readiness as to be ready for operational employment within fifteen (15) days.

Q11. [What Units and/ or Offices administer and manage the AFP Reserve Force?](#)

A11. The Office of the Deputy Chief of Staff for Reservists and Reserve Force Development, J8; the Major Services 9's, the Major Services Reserve Command and the AFP Reserve Command administer and manage the AFP Reserve Force.

J8 has coordinative authority with the members of the Joint Staff and government and non-government agencies whose functions are related in the development of the AFP's Reservists and Reserve Force Development functions.

J8 has functional supervision over the following AFP components in their Reservists and Reserve Force Programs:

AFP Reserve Command (AFPRESKOM)

Major services Reserve Commands through their respective Major services Assistant Chiefs of Staff for Reservist and Reserve Force Development Affairs.

Q12. [What is the Supremacy of Civilian Authority?](#)

A12. The AFP shall at all times uphold the supremacy of civilian authority over the military. The President as the Commander-In-Chief of all Armed Forces shall exercise command and control over the Armed Forces. The AFP shall respect laws enacted by Congress, enforce writs issued by the judiciary, carry out directives of the Comelec under circumstances provided by law and subscribe to regulations enacted by the Commission on Audit concerning the management of funds.

Q13. [What is "Chain of Command"?](#)

A13. The AFP shall follow the Chain of Command. Every officer and soldier shall obey the lawful orders of his immediate superior. Anyone who shall refuse or fails to carry out a lawful order from the Chain of Command shall be subject to military discipline. On the other hand, commanders shall exercise their authority over their subordinates with prudence and shall accept responsibility for their action. Command by an appropriate and competent board.

Q14. [Who/ What is a Reservist?](#)

A14. Reservists-alternately referred to as Citizen Soldiers, are those individuals who compose the AFP Reserve Force and are incorporated as follows:

a) Commissioned Officers under Circular 30 s-87, Procurement and Appointment of Reserve Officer.

b) Cir 6, Commissioning of Elected Government Officials and Presidential Appointees in the Reserve Force, AFP.

c) Graduates of the ROTC Basic and Advance courses that were issued orders as enlisted reservists of officer reservists of the AFP.

d) Graduates of authorized basic military training/ instructions, that as result thereof, were issued orders as reservists of the AFP.

e) Ex-servicemen of the AFP who were honorably discharge or retired from the service and who are Filipino citizens.

f) Commissioned Officers and Enlisted Personnel under the Affiliated Reserves category and civilian graduates of the National Defense College of the Philippines (NDCP) who were commissioned in the AFP Reserve Force.

g) Commissioned Officers and enlisted personnel under existing laws including those procured under Project 36-70 and are included in the resent AFP roster before the enactment of RA 7077 and those to be commissioned or enlisted in the Reserve Force after the enactment of said Act.

Q15. [What are the roles of Reservists?](#)

A15 The following are the roles of reservists:

a. Peacetime Role – During peacetime, reserve forces are developed hand-in-hand with the active force through career development, unit training and participation in military exercises. They are also utilized in ISO, CMO and intelligence collection.

b. Crisis - During crises, Ready reserve Force units are utilized in nation-building activities i.e. MEDCAP, Disaster Operation, rehabilitation Operation.

c. Wartime Role – During wartime, reserve forces shall be utilized to provide service support and base defense and provide combat forces as need arises.

Q16. [What are the responsibilities of a Reservist?](#)

A16. To answer promptly to the call for mobilization, training and active duty.

- To know and remember at all times his reserve unit assignment and mobilization/ assembly center.
- To notify the administering unit in case of change of permanent residence.
- To answer promptly all letters emanating from the AFP authorities.
- To register every three (3) years at the Local Civil Registrar pursuant to PD 887.
- To be ready to assume his post as the country needs him.

Q17. [What is Article of War?](#)

A17. The Articles of War are the basic laws that govern all military personnel.

Q18. [Are the Reservists covered by the Articles of War?](#)

A18. Reservists undergoing training or those called to active duty training are covered by Articles of War.

Q19. [What is the Reservist Accounting System?](#)

A19. It is the policies and guidelines that will govern the system in the implementation of the accounting, mustering and organization of reservists.

Q20. [What are the six \(6\) phases in Reservist Accounting System?](#)

A20. Phase I - Preparation Phase

Phase II - Information Dissemination/ Coordination

Phase III - Registration and Mustering

Phase IV - Categorization, Classification and Organization

Phase V - Notification of Assignment

Phase VI - Monitoring/ Training/ Replacement

Q21. [What is the existing Policy on the Reservist ID?](#)

A21. AFPR G 121-243, subject: AFP Identification Card System dtd 12 dtd 12 Jan 1999.

a. The AFP ID Cards System aims to regulate the issuance of identification cards to military personnel and their dependents, P2Lts, civilian employees, reservists, retired and/ or separated military personnel, to include their direct dependents.

b. The ID card identifies the bearer whether he/ she is an active/ retired or separated member of the military organization, his/ her duty status, and/ or his/ her relation to a bonafide member of the Armed Force.

Q22. [Who facilitates the processing of Reservist ID card?](#)

A22. Initial processing is done by respective Maj Svc, RESCOM/ AFPRESCOM or their duly authorized representatives. The accomplished form are transmitted to OJ8; and thereafter to OTAG, GHQ, AFP.

Q23. [What are the requirements in applying for a Reservist ID card?](#)

A23. Enlistment/ Appointment Orders

Proper Endorsement by Maj Services/ AFPRESCOM thru channel

Must secure control number from Maj Svc/ AFPRESCOM and OJ8.

For AFP Identification System - Biometrics

Personal appearance in full uniform

Phil Army - BDA

Phil Air Force - GOA

Phil Navy - GOA

Technical Service - GOA

Q24. [Is the Reservist ID card free of charge?](#)

A24. No. AFP Reservist ID card costs P70.00 pesos only, both for new applicants and upon renewal. It will be processed at OTAG, GHQ.

Q25. [When are reservists authorized to carry fire arms?](#)

A25. Reservists are authorized to carry their firearms only during the conduct of training (i.e. FTX and Familiarization Firing). Individually owned firearms are subject to PNP regulations regarding permit to own and permit to carry firearms. Likewise, they are entitled for a discounted fee when applying for license and permit to carry.

Q26. [What is the duty of the local Registrar pertaining to the administration of the Reserve Force?](#)

A26. For the purpose of registration as provided in Sections 15 and 16 of RA 7077, the city/ municipal treasurers of chartered cities and municipalities are designated as registering officers who shall see to it that the registration is carried in proper manner.

Q27. [What is General Office Attire \(GOA\)?](#)

A27. GOA is the basic office uniform of AFP personnel.

Q28. [What is Battle Dress Attire \(BDA\) Uniform? When it is required?](#)

A28. BDA (known as camouflage is the basic military uniform worn by AFP personnel assigned in the filed units while performing their duties and garrison; or headquarters personnel during red alert status.

Q29. [What are the various military alert levels?](#)

A29. Basically, various military alert levels are as follows:

- a) White Alert Level (Normal)
- b) Blue Alert Level (Normal Heightened)
- c) Red Alert Level (Heightened)
 - 1) Defense Condition 1
 - 2) Defense Condition 2
 - 3) Defense Condition 3

Q30. [What is the proper wearing of Insignias?](#)

A30. Insignias shall be worn appropriately in accordance with the AFP Uniform Code.

Q31. [Are reservists entitled to military awards, medals and ribbons?](#)

A31. Yes, They are entitled to receive military awards, medals and ribbons just like ordinary soldiers provided they are covered by appropriate orders.

Q32. [What are the requirements for enlistment in the Reserve Force?](#)

A32. Following are the requirements for enlistment in the Reserve Force.

- Filipino citizen and good moral character
- Physically and mentally fit for military training as certified by a local physician
- Local Clearances (municipal Trial Court, Police and NBI)
- At least High School Graduates
- Eighteen (18) years old and above
- At least five (5) feet in height

Q33. [What are the requirements for Commissionship into the Reserve Force?](#)

A33. The applicant must submit his application for commission with the following requirements:

- a) Post card size picture (whole body)
- b) Birth certificate (Issued by NSO)
- c) If professional, submit copy of:
 - 1) Certificate/ license from Professional Regulation Commission or the Supreme Court as the case maybe.

- 2) Either ROTC Basic Course or ROTC Advance Course Certificate.
- 3) Proof of experience or practice of profession.
- d) If not a professional, submit copy of:
 - 1) College Diploma (original must be initially shown to processing officer)
 - 2) ROTC Basic Course or ROTC Advance Course Certificate.
 - 3) Summer Camp Training Certificate, if required.
- e) If not a college graduate, submit copy of:
 - 1) Transcript of records as proof of highest educational attainment, to include total number of college units earned.
 - 2) Basic of Advance ROTC, ROTC Certificate (Photostat copies only)
- f) If with prior military experience, submit the following:
 - 1) Statement of military service from the Adjutant General.
 - 2) Copy of Discharge Certificate/ Orders.
 - 3) Copy of orders, awards, decorations and or citations received for outstanding ability and/ or exceptional service rendered in combat duty, if the commission being applied for is based on these criteria (RA718)
- g) If for commission in the Chaplain Service, submit certificate from Ecclesiastical Superior permitting and recommending the commission.
- h) Physical and medical examination reports conducted by an AFP physician.
- i) An affidavit duly notarized by the Staff Judge Advocate of the Major Service concerned, or his authorized representative, stating clearly among other things that the applicant is not convicted of any offense involving moral turpitude in any military or civil courts in the Philippines.
- j) Clearance from the Intelligence Division of the Major Services and ISAFP will be the responsibility of the agency to the individual applicant.

Q34. Who are qualified to be commissioned as officers of the Reserve Force?

- A34. a) Elected officials and Presidential appointees who are degree holders.
 b) Degree Holders who are graduates of Basic ROTC (Cir 30. series of 1987)
 c) Key and technical personnel of Affiliated Reserve Units.
 d) deserving Non-Commissioned Officers (NCO) on active duty status qualified for commission under Cir 19 GHQ, AFP s-2000.
 e) Graduates of Masters in National Security Administration (MNSA) conducted by the National Defense College of the Philippines.

Q35. Can elected officials and presidential appointees be commissioned into the Reserve Force?

A35. Yes, they can be commissioned in the Reserve Force provided that they are degree holders. (Cir No. 6, GHQ AFP s-2003).

Q36. What Initial commission rank can be given to elected officials and presidential appointees?

A36. The initial commission ranks can be given to the elected officials are as follows:

<u>POSITION</u>	<u>MINIMUM RANK</u>
1) Senator	LTC
2) Congressman/ Congresswoman	LTC
3) Provincial Governor	LTC
4) Vice Governor	MAJ
5) Provincial Board Member	MAJ
6) City Mayor	MAJ
7) City Vice Mayor	CPT
8) City Councilor	CPT
9) Municipal Mayor	CPT
10) Municipal Vice Mayor	CPT
11) Municipal Councilor	1LT
12) Barangay Chairman	1LT
13) Barangay Councilor	2LT

The initial commission ranks can be given to the presidential appointees are as follows.

<u>CIV/RANK/POSITION</u>	<u>MINIMUM RANK</u>
Department Secretary	LTC
Supreme Court/ Court of Appeal Justice	LTC
Member Constitutional Commission	LTC
Ambassador	LTC
Undersecretary	MAJ
Asst secretary	MAJ
Bureau director/ Dept Service Chief	MAJ
Regional Director	MAJ
Director III & IV	MAJ
Director I & II	CPT

Q37. [What initial commission rank can be given to the Technical Service Reserves?](#)

A37. The initial commission rank given to the technical service reserve is based on the age, course and experience of the applicants. (Cir 30).

Q38. [What rank can be given to the key and Technical Employees of private and government entities which are Affiliated Reserve Units?](#)

A38. The initial commission rank given to the Key and Technical Employees of private and government entities which are Affiliated Reserve Unit shall be based on their present position in the organization as pre-determined in the approved Table of Distribution an Allowances (TDA) which form part of the MOA.

Q39. [What is a Line Officer?](#)

A39. Line Officers are commissioned officers of the AFP in the three specific Major Services (PA, PAF, PN) including officers commissioned under the Affiliated Reserve Unit Program of the AFP.

Q40. [What initial commission rank can be given to Line Officers?](#)

A40. The initial rank given to the general line officers is 2LT/ ENSIGN. However, this may vary depending on the qualifications of the applicant as stipulated in Cir 30.

Q41. [What is the initial commission rank awarded to graduates of NDCP?](#)

A41. The initial commission rank awarded to graduates of NDCP is LTCOL pursuant to section 1 of PD No 190 and section 7(a) of Presidential Decree No 452 as amended.

Q42. [What is the rank of Advance ROTC Graduates?](#)

A42. Those who successfully completed the advance ROTC Course (POTC) shall be recommended for commission in the reserve force as 2LT and assigned to the reserve units and mobilization centers in their provinces.

Q43. [When can a citizen incorporated into the Reserve Force?](#)

A43. Upon completion of the required pre-commission or pre-enlistment training, an individual will be appointed as reserve officer or enlisted into the reserve force and will be given a reserve officer/ enlisted rank and serial number and assigned to reserve units and mobilization centers.

Q44. [What is the technical Service? Where can they process their applications for commission?](#)

A44. Technical service is a component in the AFP composed of the following doctors (MC), nurses (NC), dentists (DS), lawyers (JAGS), chaplains (CHS), medical administrative corps (MAC) and veterinarians (VC). Applicant for Technical Service can apply at AFPRESCOM, camp Aguinaldo, Quezon City.

Q45. [What rank is awarded to graduates of the basic ROTC?](#)

A45. Graduates of basic ROTC shall be given the rank from Private to Sergeant or its equivalent with corresponding serial number and assigned to reserve unit and mobilization centers in their provinces.

Q46. [What is the disposition of those ROTC graduates who are not incorporated into Ready reserve formation?](#)

A46. ROTC graduates who are not incorporated into ready Reserve formation shall be assigned to the Standby Reserve Units.

Q47. [How can an ROTC graduate restore his lost reservist rank and serial number?](#)

A47. ROTC graduate who lost his reservist rank can request his former DMST for inclusion in the roster of ROTC graduates of the current year by presenting his transcript of records.

Q48. [How can a non-graduate of ROTC become a Reservist?](#)

A48. The non-graduate of ROTC or out of school youth can voluntarily apply to any reserve units (CDCs, ARCENs, NRCs) nearest their residence to join the BCMT in order to become reservist.

Q49. [Is the ROTC optional to tertiary students?](#)

A49. The ROTC was made optional and voluntary upon the effectivity of RA 9163, known as NSTP Act.

Q50. [Can a graduate of CWTS and LTS of RA 9163 be an AFP Reservist?](#)

A50. No, A graduate of CWTS and LTS shall belong to their separate NSRC and could be tapped by the State for literacy and civic welfare activities, through the joint effort of DND, CHED and TESDA in coordination with DILG, DSWD and other concerned agencies/ associations.

Q51. [What incentive is provided to cadet undergoing the Advance ROTC program?](#)

A51. Students undergoing Advance ROTC who belong to upper five percent (5%) of their academic class shall be provided a tuition subsidy of fifty percent (50%) of their annual tuition for the period of their Advance ROTC or can apply for the Chief of Staff AFP Scholarship Grant.

Q52. [Who can avail the Chief of Staff AFP Scholarship Grant?](#)

A52. CSAFP Scholarship Grant shall be granted to qualified Advance ROTC students with a regular academic load of not less than 15 units and with an average grade of not lower than "B" or its equivalent in the previous academic year with no failing grades in any subject. Twelve slots each are available annually to the Army, Navy and Air Force.

Q53. [What are the benefits due to an Incorporated Reservist?](#)

A53. An incorporated reservist has the chance to take professional military education courses, join the AFP in the conduct of civic and public affairs activities and receive commensurate awards and medals. Likewise, they will be provided appropriate identification cards.

Q54. [How is the evaluation and appreciation of the reservists conducted?](#)

A54. Evaluation and appreciation of reservists is made through the conduct of regular assembly and mobilization formation.

Q55. [What is compulsory training?](#)

A55. Compulsory training of not less than thirty (30) days but not more than sixty (60) days for reserve units and/ or individual reservists in a given year preferably to first category reservists. (Your employment will not be affected and you retain your position right after your compulsory training, RA 7077 sec, 32)

Q56. [What is voluntary training?](#)

A56. Voluntary training on a voluntary basis conducted to individual reservists, commissioned and non-commissioned officers to upgrade their proficiency and position especially officers and key non-commissioned officers.

Q57. [What is Reserve officer Non-Resident Instruction?](#)

A57. Non-Resident Instruction is a training through correspondence offered to reservists to maintain their proficiency and prepare them to assume higher position.

Q58. [What are the trainings for individual reservists and for Reserve Units?](#)

A58. Following are categories Reservist Training:

- a) Pre-Reservist Training
 - ROTC (Basic, Advance, POTC)
 - BCMT

- BMT (CAFGU)
- MOT (AFFARU program)
- b) Individual Reservist Training
 - ADT
 - MNSA
 - Officer Advance Course (NRI/ Reg)
 - Officer Basic Course (NRI/ Reg)
 - Officer Orientation Course
 - EP Basic and Advance Courses
 - Specialization Training
- c) Reserve Unit Training
 - RR Organizational Training (RROT)
 - DRRO
 - Refresher Training
 - Pre-Mobilization/ Assembly test
 - Pre-Integration Tests

Q59. [What is Active Duty Training?](#)

A59. Active Duty Training is a voluntary training to provide individual reservist to upgrade their proficiency. The call to active duty of reservist officer or enlisted reservist for a period of thirty (30) days or more but not exceeding sixty (60) days depending on the availability of funds, solely for the purposes of training.

Q60. [What is Active Duty Tour for Training \(ADTT\)?](#)

A60. ADTT is given to reservists to improve their professional competence and leadership quantities for a period not exceeding two(2) years without extension.

Q61. [What is Military orientation Training \(MOT\)?](#)

A61. MOT is conducted to members of affiliated reserve unit's personnel which serves as the pre-entry training for officers and enlisted personnel.

Q62. [What is the status of reservists on training?](#)

A62. Reservists on active duty training shall be subjected to military law. They shall receive allowances and other benefits as provided by law.

Q63. [Is there Security of Tenure in Government and Private Employment of Reservists on Military Training?](#)

A63. yes, there is. An employee in the government or employee in a government owned or controlled corporation or private employment with not less than 20 employees who undergo military training shall not be separated or terminated from such employment nor be considered as having forfeited his seniority status and shall continue to receive the salary he was receiving prior to his call to military training. Upon termination of his military training, he shall resume his former position or, if not practicable, he shall be assigned to a new position or, he shall be assigned to a new position without diminution of his salary and allowances, provided he is honorably terminated or discharged from such training or service.

Q64. [How do Reservist officers get promoted?](#)

A64. The following are the requirements for promotion:

- a) Reservist officers must have attained the minimum time-in-grade for promotion to each grade.

<u>Grade</u>	<u>Time-In-Grade</u>
O2	3 Yrs as second Lieutenant (2LT)
O3	4 Yrs as First lieutenant (1LT)
O4	5 Yrs as Captain (CPT)
O5	6 Yrs as Major (MAJ)
O6	7 Yrs as Lieutenant Colonel (LTC)
O7	2 Yrs as Colonel (COL)

- b) A reservist officer eligible for promotion must have satisfactorily completed the required career courses.

<u>Grade</u>	<u>Career Course</u>
O1 (Commission)	Pre-Entry/ Pre-Commission Course
O3	Basic Course (NRCC)
O4 and O5	Advance Course (NRCC)
O6 and O7	CGSC/ TCGCS

Q65. [What is Time-In-Grade?](#)

A65. This refers to the minimum number of years in specific rank/ grade required for promotion to the next higher rank/ grade.

Q66. [What are the requirements for promotion in Rank?](#)

A66 A reservist officer eligible for promotion must have satisfactorily completed the required career courses, must have attained the minimum time-in-grade for promotion to each grade and must be recommended by the RESCOMs Commanders.

Q67. [What are the career courses prescribed for promotion in Rank?](#)

A67. Following are the required career courses:

- a) Basic Officer's Course (Coy Comdr/ Bn Staff)
- b) Advance Officer's Course (Bn Comdr/ Bde Staff)
- c) Command and general Staff Course (Bde Comdr/ Div Staff)

Q68. [How do EP Reservists get promoted?](#)

A68. The following are the requirements for EP reservist promotion:

1. Candidate for promotion must be carried in the roster of any of the reserve units under the promotion authority.
2. Must attain the educational qualification, length of service ad time-in-grade requirements.
Satisfactorily completed his present grade any of the following:
 - Annual Training Duty Training
 - Week-end Active duty Training
 - Advance ROTC
 - Assembly test/ Exercise
3. Any other active duty training of not less than seven (7) days duration prescribed by the promotion authorities.
4. Occupying or is being earmarked to occupy a TO/ TD position calling for at least the grade to which he is being promoted and must be possesses the skills/ qualifications required of such TO/ TD position.
5. Must be able-bodied and physically fit for general military service.
6. No pending case or derogatory record against him.
Major service Commanders shall be the promotion authority for reservist enlisted personnel assigned to a particular Major Service Command.

Q69. [Can a reservist have the option to choose their Branch of Service in the Reserve Force?](#)

A69. Yes they can. They can request for change of branch of service if they feel they will be more useful to the branch of service of their choice.

Q70. [What are the requirements for a change of branch of service?](#)

A70. The following are the requirements for reservist change of branch of service.

- Letter of Intent
- Accommodation Letter of Gaining Unit
- Letter of no Objection from Loosing Unit
- Appointment/ Enlistment Order
- Whole Body Picture

Q71. [What is mobilization?](#)

A71. Mobilization is utilization of the Reserve Force in times of emergency to meet any threats to national security.

Q72. [What is mobilization Center?](#)

A72. Mobilization center is a specified area in the province designated by the Secretary of National defense in consultation with local executives, where the reservists will report upon mobilization.

Q73. [What is Full Mobilization?](#)

A73. Full mobilization is activation of all units of the Ready and Standby Reserves through the joint act of Congress and the President. All the reservists are called to active duty and the units activated are placed on operational readiness.

Q74. [What is Partial Mobilization?](#)

A74. In partial mobilization, when ordered, only the units of Ready Reserve are necessary to meet the threat will be activated. The reservists assigned to this unit are called to active duty and the activated units are placed on operational readiness. The activation is through the joint act of Congress and the President. The President will specify the units to be activated.

Q75. [What is Selective Mobilization?](#)

A75. Selective Mobilization by authority of the President maybe ordered to meet a local threat or emergency situation. When so ordered, only selected ready Reserve Units of the localities involved are activated and the reservists assigned to them are called to active duty.

Q76. [What is the status of Reservist on Mobilization?](#)

A76. An officer or enlisted reservist when called to active duty by virtue of mobilization shall receive all the pay and allowances medical care, hospitalization and other privileges and benefits prescribed by law or regulations for officers and enlisted personnel of the regular force.

Q77. [What is Demobilization?](#)

A77. When the threat or emergency for which mobilization had been ordered has passed, the president shall order the demobilization of the reserve units activated and the reservists of such deactivated units shall be reverted to inactive status.

Q78. [What is Mobilization Stocks?](#)

A78. The minimum essential and organizational equipment and supplies procured, stored and maintained for selected ready reserve units to enhance rapid transition to readiness required for employment in the shortest possible time.

Q79. [When can a Reservist or Reserve Unit be utilized?](#)

A79. Reservists or reserve unit shall utilize to render service to their respective localities during periods of calamities and when there are threats to peace and security.

- Reservists or reserve units shall be utilized for the defense of their respective localities in support to AFP operations and as dictated by the prevailing peace and order conditions.

- In case of local emergency situations and grave peace and order situations, qualified reservists may volunteer to serve either as civil or military service.

- The utilization of reservist or reserve unit in cases of local emergencies and grave peace and order situations shall be as prescribed in a memorandum agreement to be issued by the SND and the DILG for this purpose.

Q80. [What is an Affiliated reserve Unit?](#)

A80. Affiliated Reserve Unit are private and government entities, corporations, establishments and organizations at the national, provincial and municipal levels which provides essential public services such as water, light, transportation and communications which are necessary to support the prosecution of national defense plans or to meet an emergency and thereby organized as affiliated reserve unit as approved by the President upon recommendation of the Secretary of National Defense.

Q81. [Who approves the affiliation of certain government and private entities as Affiliated Reserve Units?](#)

A81. The approval of the affiliation of certain private and government entities as affiliated units of the Reserve Force is given by the President of the Philippines through the recommendation of the SND.

Q82. What are the roles of the Reserve Force in support to the AFP Internal Security Operation (ISO)?

A82. The AFP Reservists are utilized in information gatherings through the concept of "Man in every Barangay" mobilized during the occurrence of calamities and other non-traditional roles in nation building.

Q83. What are the objectives of the Utilization of Reserve Force in Support to AFP Internal Security Operation (ISO)?

A83. Following are the objectives:

1. Intensify intelligence training/ seminar of reservist Intelligence.
2. Collection Team (RITC) School Intelligence Collection team assets to enhance information collection.
3. Augment the reservist Medical and Dental Team in the conduct of MEDCAP during Special Operation Training operations.
4. Assists AFP units in the utilization of reservist lawyers on legal matters.
5. Assists AFP units in public information thru Trimedia or organization of speakers bureau composed of reservists.
6. Mobilize reservists during the occurrence of disaster calamities.
7. Enhance a coordinative effort between AFP units with its organized Reserve Force and cognizant government units and Non-Government Organizations for the conduct of socio-economic development of nation-building.
8. Enhance participation of reservists and ROTC cadets in environmental protection and other forms of civic action.
9. Maximize the utilization of reservists in the ROTC program.

Q84. Are members of Ready Reserve Units entitled to free Combat Clothing & Individual Equipment (CCIE)?

A84. Members of the Ready Reserve Units are entitled to free CCIE when mobilized.

Q85. What is Auxiliary Service?

A85. For the purpose of helping maintain local peace and order, meeting local insurgency threat, assisting in rescue and relief operations during disasters and calamities, health welfare activities and participating in local socio-economic development projects, the President of the Republic of the Phils may call upon the reservists in the affected or concerned localities to volunteer their services. Such voluntary services shall be referred to as auxiliary service and shall be of two (2) types, namely:

a. Civil Auxiliary Service - CAS covers services rendered in helping maintain local peace and order, assisting in rescue and relief operations, participating in socio-economic development projects, delivery of health services and any non-military activity.

b). Military Auxiliary Service- MAS covers services rendered in meeting local insurgency threat. Reservist serving under this category will be organized into ready reserve units. They must be issued and allowed to carry firearms; provided that these reservists will be utilized only for the defense of their respective localities and will not be employed outside their localities. Elected/ appointed local government officials are expected to perform their duties and responsibilities in their respective peace and order council levels or similar organizations efficiently and effectively to enhance a total integrated system approach against threats to national security.

Q86. Do we have women auxiliary corps in the Reserve Force?

A86. None, but we have female reservist.

Q87. What are the allowances and benefits due to a reservist on Auxiliary Service?

A87. A reservists performing auxiliary service shall not receive pay but shall be entitled to received allowances and burial benefits as provided by law. A reservist serving military auxiliary service is subject to military law whereas, a reservist serving civil auxiliary service is not.

Q88. When and how is an Auxiliary Unit Activated?

A88. In accordance with existing rules and regulations, the call of a part or as whole of the Citizen Armed Force as a military unit shall be covered by orders from the CSAFP. As a military unit, assignment of personnel thereto must also be covered by orders. Activation orders shall likewise include provisions for the attachment/ placement of the auxiliary unit with a regular AFP formation.

Q89. When and how is an Auxiliary Unit Deactivated?

A89. When the threat or emergency for which the call for auxiliary service has passed, the CSAFP, shall order the deactivation of military auxiliary units and the reservists of such unit shall be reverted to inactive status.

Q90. [Are CAFGU Active Auxiliaries \(CAA\) Reservists?](#)

A90. Yes, CAFGU Active Auxiliaries are also reservists on active duty.

Q91. [Can a Reservist be entitled or called to active duty in the regular force?](#)

A91. Yes, if he is qualified in accordance with the existing policies.

Q92. [How often does a Reservist report on Duty?](#)

A92. Since reservists renders voluntary services, frequency of reporting for duty is occasional.

Q93. [What are the entitlements of the Reservist once committed or in the Active Duty Status?](#)

A93. Reservists are entitled to the following:

Subsistence Allowance for Php 60.00/day

In case wounded/ sick – free hospitalization at any military hospital

In case death – burial assistance with full military honors.

Q94. [How can the reservists augment the standing or regular military force in so far as National security is concern?](#)

A94. Under Section 2 of RA 7077, it is the policy of the state to maintain a standing or regular military force in times of peace consonant to its adequate and actual needs for the security of the States but which can be rapidly expanded by the well-disciplined Citizen Armed Force in the event of war, invasion or rebellion.

Q95. [What is the AFP national Reservist Week?](#)

A95. The AFP National Reservist Week (NRW) is the celebration of the AFP Reservist day nationwide. As mandated by Presidential proclamation Nrs 1892 "Araw ng Laang Kawal Pilipino (Reservist day)" and 627 declaring 3010 of September as "Linggo ng Laang Kawal" (National Reservist Week) and September 1st of every year as AFP Reservist day respectively.

Q96. [What are the activities during NRW?](#)

A96. The following some activities of NRW:

a) Nationwide medical/dental civic action activities

b) Blood letting activities.

c) Nationwide environmental protection activities.

d) Decentralized Reservists Convention and fellowship.

e) Intensive public information activities thru print and broadcast media.

f) mobilization test.

Q97. [What is the State Partnership Program \(SPP\)?](#)

A97. The State Partnership Program (SPP) is a National Guard bureau (NGB) coordinated program that links a foreign nation and its military to a respective USA state and its National Guard. In the Philippines, we have the Hawaii-Guam-Philippines State Partnership program bridging AFP reserve Force with the Hawaii and Guam National Guards.

Q98. [What is the purpose of SPP?](#)

A98. The SPP aims to demonstrate, through the example of the citizen-soldier, military subordination to civilian authority, Military Support to Civil Authority (MSCA) and service of professional Reserve forces to democracy. The SPP provides emerging democratic nation a unique model of a democratic entity supported by a dual-missioned military force; It creates a long term relationships which citizen-soldier members of American communities, businesses and states, and its force market economy philosophy.

Q99. [When was the SPP conceived?](#)

A99. The SPP was conceived in 1992 as part of North Atlantic Treaty Organizations (NATO) Partnership for Peace Program. Since then, 33 States and territories and 31 countries on four continents have formed partnership in European Command (EUCOM), central Command (CENTCOM), Southern Command (SOUTHCOM) and Pacific Command (PACOM). The Hawaii-Guam-Philippines State Partnership program was started in 1997.

Q100. Are AFP reservists qualified to participate in the SPP?

A100. Yes, AFP reservists are primary participants in the SPP activities.

Q101. What are the typical activities included in the SPP?

A101. The typical SPP activities include the following:

- Domestic Emergency Response Seminar.
- Humanitarian Assistance/ Disaster Relief (HA/DR) Operations
- Participation in combined training exercise
- Humanitarian and Civic Assistance (HCA) projects
- Reserve Component subject matter exchanges
- Military support to civil Authorities (MSCA)
- Workshops and Reciprocal Program visits.