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Al-Qaeda

The Curricula Committee

"To be Prepared against Them" Series
Book Number ()

Individual Skills
First Year

1413

Chapter One
Introduction
Essential Works Manual
Job Duties Manual for the Centers

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[TC: This page is not in the right order; it should be before page 29]

Chapter Two: Essential Works

3- During cold weather conditions, the units should be arranged in groups of two; this is called the buddy system. Each person is responsible for his buddy, reminding him, if necessary, to move both of his feet and arms in order to keep warm. Everyone should keep an eye on his buddy and look for signs of frostbite and trench foot symptoms. We explained in another manual the first aid procedures for cold weather injuries.

Night Vision Equipment

Perform maintenance on the AN/PVS-2 night vision equipment.

Situation: You have AN/PV-2 night vision equipment with its carrying case, a charger, a bucket of distilled water (if available), a lens brush, lens cleaning tissue, and pieces of clean soft tissue along with a tactical manual.

Example: Examine all parts of the equipment and perform the maintenance procedure as stated in the tactical manual.

Required Measures:

(1) Examine the Night Vision Device:

- a- Refer to the tactical manual when examining the device to detect any defect or breakdown.
- b- In addition to the daily routine examination and services, the device should be examined and serviced before leaving for any mission and directly after returning from the mission.

(2) Clean the Device:

- a- Glass Surfaces: clean the exposed side of the objective lens and the optic lens collection by brushing away any dust with the lens brush then cleaning the glass surfaces with the lens tissue. Dampen a piece of cloth with water to remove any sticking dust, use distilled water if available. Dry and polish the lenses with a dry lens tissue.
- b- Metal Surfaces: clean all exposed metal surfaces with a fuzz-free piece of tissue. If necessary, dampen a piece of tissue with water, and allow all surfaces to dry before storing the device.
- c- The Rubber Armor Eyepiece: clean with a piece of wet cloth.
- d- The carrying case: Wipe the interior and exterior with a wet cloth.
- e- The battery charger holders: clean the outer surfaces with a wet cloth and leave them to dry.
- f- Battery charger compartment: Clean it with a wet cloth, if needed.

Perform a reconnaissance operation employing the night vision device.

Situation: During the night when you are safe in your defensive position and you have an AN/PVS-2 device, five BA1100 batteries and members of the enemy are moving in front of your zone.

Example: Perform reconnaissance and report any movements in the open areas up to 300 meters distance in front of your surveillance area.

Required Measures:

(1) Utilize the AN/PVS-2 Device.

Note:

Warning: Be careful! Make sure that the operating switch is in the off position, meaning the device should not be in use before placing the batteries.

1- Installing the Batteries:

- 1- First Step: Remove the battery lid by turning it counter clockwise.
- 2- Second Step: Install the battery by placing the positive pole (raised end) first in the battery designated area.
- 3- Third Step: Put the battery lid on by turning it clockwise. Close it tightly to prevent water penetration.

Warning: Always use the lens protection on the objective lens when using the device during daytime.

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Perform first aid for an open abdominal wound.

Situation: You were given an injured person with an open abdominal wound. In your possession, you have a first aid bandage.

Sample: Cover the wound with the first aid bandage. Place the casualty on his back with his head tilted on one side and his knees elevated.

Required Measures:

(1) Prior to performing any first aid procedures to any injured person, immediately examine the casualty to determine whether his condition requires one of the following life saving medical procedures:

- a- Make sure that the airways are free; restore his breathing and heartbeat.
- b- Stop the bleeding.

(2) Examine the casualty one more time and perform the following emergency procedures that the casualty may need to save his life:

- a- Treat him from the shock.
- b- Clean and apply a sterile dressing to the wounds, abrasion and fractures.

(3) Place the casualty on his back with his legs slightly elevated.

(4) Remove enough clothing to get an idea of the extent of the injury [wound]. Be aware not to touch the injury.

(5) Cover the wound and any organ that is sticking out with the first aid bandage. Don't try to touch or press down any protruding organ to push it inside the wound. However, if there is an urgent need to move part of the protruding intestines inside the abdomen to cover the injury, do that by applying the first aid sterile bandage.

(6) Fasten the bandage by placing its ends under the injured, then tie up the dressing edges without causing any intense pressure. You can use another bandage to stabilize the first dressing, if necessary.

(7) Do not give or allow the casualty to have anything by mouth. Wet the mouth of the injured with a wet towel to quench his thirst.

(8) Lay the casualty on his back with his legs slightly elevated, placing something under his knees to ease pressure or tension from the abdominal muscles. (This position will prevent the casualty's

intestines from protruding). Tilt his head to one of the sides because he may vomit.
(9) Transfer the casualty to a hospital as soon as possible.

Perform first aid to an open chest wound.

Situation: There is a casualty with an open chest wound. You have first aid dressings and other supplies to cover and swathe the injury.

Example: Cover the injury so as to keep air from going in or out. Place the dressing above the injury and tie it up; allow the casualty to lie on his back (the side of the injured area, whether the back or the abdomen) or allow him to sit down if not experiencing fainting. This possibly will facilitate the breathing process.

[Page 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34 & 36 are blank.]

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Required Measures:

(1) Before performing any first aid procedures to any casualty, examine the injured at all times to find out if he needs one of the following measures:

- a- Monitor the airway and restore to the injured his respiration and heartbeat.
- b- Stop the bleeding.

(2) Examine the casualty one more time and perform the following procedures as needed:

- a- Treat for shock
- b- Swathe and wrap the wounds, ruptures, and fractures.

Comment: The opened chest wound affects the airways and breathing, and the wound that allows the air to be sucked into the lungs will cause the lung to collapse. Whether or not the first aid man [rescuer] hears an obvious sucking sound the first aid procedures are the same in both cases.

- (3) Immediately and gently uncover the wound and remove clothing from the wounded area.
- (4) Proceed with the examination to detect any exit wound (a gunshot, shrapnel or sharp object). In case the entry and exit wounds are both present, the larger wound should be sealed securely and as soon as possible.
- (5) Seal the wound firmly, and by utilizing a hygienic technique place the inside surface of the plastic bag that includes the casualty first aid dressing above the wound. If the casualty is conscious, allow him to exhale [breath out as much as possible], hold his breath, and then put the plastic cover (close with adhesive tape). If the casualty is unconscious, place the plastic bag when he breathes out.

[Exhale] Illustration 1- A / B.

Comment:

Other resources can be used if the plastic bag is unavailable.

The main consideration is to close the wound securely (by using an adhesive tape) Illustration 1/ A/B.

Illustration 1 [TC: Blank space]

(6) Safety procedure - Secure the noninvasive seal properly by using the first aid dressing. (Illustration 1 / C)

- a- Secure the non-invasive seal by placing the first aid bandage on the wound and keep pressing evenly

on the dressing with both hands open. Same as the noninvasive seal (with adhesive tape), the dressing should be placed when the casualty breathes out. Fasten the bandage securely by tying up the dressing both trails.

b- Tie up any other appropriate strips, such as clipping rags, around the first aid dressing and securely fasten them by a strap. Figure (1/C).

(7) Examine the airways, if breathing is still difficult; examine once more the bandage and the noninvasive seal to make certain that both are effective.

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(8) Lay down the casualty:

a- If the casualty is unconscious, place him on his side where the injured side should be downward in order to ease any pain and help the casualty to breathe.

b- If the casualty is conscious, allow the casualty to sit up, lie back, or allow him to lie down on his injured side to alleviate the pain and assist him in breathing smoothly.

(9) Transfer the casualty to a hospital as soon as possible.

Moving as a combat team member

Situation: As a member assigned to a combat crew marching in a wedge formation and you are not the team commander in any environment or terrain.

Sample: Interact instantaneously with the crew commander and do exactly what he does as you are in your place within the wedge

Required Measures:

The commander should implement all exercises related to the combat formations by employing both crews and utilizing movement techniques, which are: walking; that is to progress cautiously (with cover) and to move forward with extreme caution (by jumping with the cover).

The commander and each crew member should be familiar with the characters and conducts of all personnel. And more importantly, the troop members should be adapted to the commander's technique and his commandment tactics (style).

The following points should be underlined regarding the proper movement of each member of the team:

(1) Maintain your relative location in the wedge at all times.

(2) You should be able to see your team members at all times.

(3) Do what the commander does in maintaining your relative location in the wedge.

(4) Keep a distance between yourself and your next comrade so as to keep him within your sight and be able to follow the commander's orders at the same time.

a- The normal distance during daylight is 10 meters (illustration 1)

(Illustration-1)

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b- The distance increases in the open terrain.

- c- The distance decreases when the visibility is limited because of the bushes, the land, darkness, smoke, or thick fog.
- d- Normal distance should be resumed when the cause for change is eliminated.
- e- The wedge flanks can be spaced apart from each other in the open terrains and they can come closer to assume a single ballast shape when climbing a mountainous passage or during minefield crossing or around large obstacles and when visibility is extremely limited. These changes take place spontaneously and without a need for orders.

(Figure 2)

Handling a flash bomb or an illuminated rocket:

Situation: When you hear during the night an illuminated rocket rising, or when all of a sudden your surroundings are illuminated as an effect of an aerial illuminated rocket or surface-to-surface missile.

Sample:

- 1- You have to take action when the site illuminates whether you were under enemy fire or far off from it.
- 2- You have to take action in the presence of an illuminated rocket launcher whether there was an early warning or not, and whether you were under direct fire from the enemy or not.

Required Measures:

(1) Illuminated ground rocket: keep far from the illuminated area.

- a- When you are unaccompanied, recognize the right direction and continue with your mission.
- b- If you are one of the combat fighting personnel, get together with your team members again according to the operations codified manual or according to the previous instructions and resume your mission.

(2) An illuminated rocket rising in the sky: (preceded by an early warning noise when rising), lie face down (if possible behind a barricade) before the illuminated rocket detonates.

(3) An illuminated rocket without warning:

- a- Lie face down behind a barricade if possible and hide until the rocket burns out completely, close one eye in order to protect your vision during the night and watch with the other eye. See (figure 1)
- b- When crossing a barbed wire obstacle so that laying face down becomes difficult, sit aside until the rocket burns out.

(4) An illuminated rocket when under enemy fire or being followed by enemy fire: Shoot while moving at the same time. (Choose a temporary place) Shoot, dash, and crawl, jump and shoot, etc... as referred to in the codified manual for this type of situation, and just as you function during the day.

(Figure 1)

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Transfer a casualty from the combat ground.

Situation: When training, or when in the battlefield and as you were carrying your equipment, supplies, and personal weapon, a Mujahid brother got injured and could not move it is crucial to transfer him from this location for tactical reasons.

Situation (1): It is necessary to transfer the casualty without anyone's assistance to another barricaded location and

a hideout (not more than 10 meters for training purposes).

Situation (2): It is necessary to transfer the casualty with another person's assistance to a barricaded location where they could hide and you should have two poles each at a length of 6 feet and a blanket or so. (For training purposes, move him at a distance of 20 meters.)

Example: In each situation, transfer the casualty to the nearest sheltered location or behind a barricade, and make every effort to avoid deterioration of his condition.

Situation 1:

a- Lift and carry the casualty using the one-man technique.

b- Drag the casualty at least 5 meters without revealing yourself or the casualty to the enemy or exposing either of you to the enemy's fire.

Situation (2):

a- Put together a stretcher and with the assistance of a colleague, transfer the casualty up to 20 meters distance.

b- Employing the 2-men carry technique, transfer the casualty up to 20 meters distance.

Comment:

1- Even though the life of the casualty might have been saved after administering first aid procedures, the casualty might lose his life due to negligence or improper handling during his transfer. Thus, before attempting to transport any casualty the nature and extent of his injury should be evaluated according to the situation. Make sure the dressings will not slip from the wound.

Furthermore, make sure that the fractured bones are stabilized so as not to move and subsequently cause more injuries to the flesh, body, or blood vessels. If the rescuers or every combatant were aware of the variety of lifting techniques varieties and the nature of wounds, he would be able to make the right decision for the situation he is facing.

2- Manual lifting is possible by one or two individuals. The two-man lifting method is employed whenever possible, because it accommodates the casualty with comfortable assistance thus averting possible deterioration of his conditions. This technique is useful in carrying the casualty for a long distance free of hardship.

Required Measures:

(1) One-man carry technique:

a- The fireman technique: This is the easiest technique for one man carrying another. (Figure 1) Lift the casualty as illustrated in (figure 1/5), images (3 - 6). There is another technique that consists of lifting the casualty from the ground (figure 1/1). This method is used only when the bearer is confident that the casualty's wounds will not be affected by this method. When using the second technique, be cautious not to thrust the injured head to the back harshly, thus causing a neck break.

b- Support technique: (Figure 2/8) this method is used when the casualty's condition allows him to walk or hop, on one leg, using the bearer as a crutch. This method can be used to transport a casualty as far as he is able to walk or hop.

c- Arm-carry: (Figure 2/9) is used to transport the casualty for a short distance and placing him on a stretcher.

d- Saddle carry: (Horse) (Figure 2/10) this method is used only for the casualty who did not lose consciousness, because the casualty is capable of holding to the combatant carrying him in this situation.

e- Back-strap carry: (Figure 2/11) the casualty's weight rests on the bearer's back; this makes it possible for the bearer to transport the casualty for a longer distance. Moving as a patrol member is required here.

(Figure 3)

(Figure 4)

(Figure 5)

Situation:

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Situation: In a battlefield environment at a time when you are part of a reconnaissance patrol team or combat patrol while you have your individual weapon and the entire combat equipment, one of which is the poncho and a light cap, and you were assigned other missions as referred to by the patrol's commander.

Sample: Moving as an individual in a patrol where:

- 1- You cannot simply see or hear during movement.
- 2- Clarify the technique used for meeting tactic and crossing dangerous areas for the enemy.
- 3- Be extremely alert, even yet, rely on the intuition that perhaps the enemy would attack you at any moment.

Required Measures:

(1) Infiltration: When you are a patrol member, it is necessary that you are able to move without being observed or heard whether walking during day or night. Employing the following tactic will multiply the infiltration leverage during patrolling:

- a- Conceal yourself and your equipment.
- b- Tie your equipment and fasten them with adhesive tape or any other method to evade making any noise when walking or running. Some objects such as your ID card, silver coins, dagger, and weapon case leash are known to make noise with any contact. Perform a test by hopping up and down and listen to anything that creates noise. (Similar to rubbing coins)
- c- Wear fitted and soft clothes because baggy and flowing clothes make noise and sound and it can be easily torn when moving. Metal jars and raincoats make noise especially when crossing dense places.
- d- Practice how to move without making noise while walking or crawling. Rest your feet cautiously in order to avoid breaking branches and dry tree leaves. Go around the trees instead of pushing your way through them to evade creating a sound and you may cause trouble for the person who is after you.
- e- Avoid sloping and dense places that you recognize as difficult or impossible to infiltrate.
- f- When moving at night, it is necessary to realize and avoid obstacles by touching. Feel your way using your free hand or search by your foot for hanging branches close to the surface, or holes or trunks and give a warning signal of your findings to the next person.

(2) Gathering Centers: When issuing orders of the operation or during the trip, the commander will give orders to meet at specific centers, which are usually easy to remember as night and day as they are natural

phenomena on earth. When the gathering point is defined, you have to remember the following:

- a- Memorize it and be familiar with its location, be ready to move back alone in case of getting separated from your unit or your patrol.
- b- Notify the rest of the group of the meeting point whenever it is necessary.
- c- Take the necessary measures according to the operations codified manual, or in conformity with the commander's instructions. The most experienced combatant will customarily lead the patrol until the commander arrives.

(3) Hazardous Regions: You have to familiarize yourself with them, stop, and notify your commanders of the terrain's regions where the patrol is in danger of being exposed to the direct line of enemy fire, mines, or pits.

A- Examples of these sites:

- 1- Places where the enemy is expected to be present.
- 2- Fields or any opened locations.
- 3- Linear obstacles like roads, canals, fences and alleys
- 4- Areas with buildings

B- Avoid these areas as much as possible, and follow the subsequent tactics if it is crucial for the mission to cross such regions:

- 1- Familiarize yourself with them in an orderly manner and secure the nearby and remote sides, as well as the right and left sides.
- 2- Open fire to protect the patrol members while crossing.
- 3- Cross the region as soon as possible and be extremely cautious.
- 4- Remove or eliminate any traces that hint to a crossing occurrence (Footprints, for example).
- 5- Be ready to move to the nearby or remote side of the gathering centers agreed upon if under enemy fire.

(4) Counting: When moving during low visibility conditions, the commander will follow a strategy to make certain that all patrol personnel are accounted for.

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The patrolling personnel are counting quietly from the rear to the front at intermittent intervals, usually after crossing an obstacle or passing through a rugged ground. Each patrol personnel should listen to the counting of the member behind him and carry it over to the member in front of him after adding one. Most frequently you may be obliged to attract the attention of the colleague in front of you by a pat before whispering the number.

(5) Attention! Use your utmost power to give the first warning sign for any potential threat or observation of the enemy.

- a- Watch the ground at all times, to the front, the sides and to the rear, for any sign of movement or any unnatural occurrence; discover the enemy before he discovers you.
- b- Keep in line and be harmonious with every sound around you and recognize any abnormal sound that is not in conformity with the rest of sounds.
- c- Stay vigilant and heedful to any barbed wire in the road or trickery coiled wires in order to evade them.
- d- Try to sniff any odor in the air that may indicate if there is smoke smell, food, etc...

Interaction with any suspected enemy, or documents, or equipment.

Situation: There is an area that is populated by civilians and some friends along with two members of the

enemy who had weapons in their possession, and they were handed over (guns and pistols) and a (spear). Furthermore, they have military documents that they turned over. There is an area behind at a distance of 200 meters to gather prisoners of war along with a number of POW badges.

Sample: Without allowing the prisoners of war to talk with each other, and without allowing anyone to harm them, confiscate all their weapons and equipment except for their identification documents. Place your unit badges on all personnel, as well as the prisoners of war, their weapons, and all of their equipment. Also, write down on your unit badges the date, the time, status, and place of captivity. Then, turn over the prisoners of war and their weapons and documents to the area where the prisoners gather.

Required Measures: Whether they are enemy personnel or individuals suspected of being enemy, they should be treated in accordance with the following rules:

- 1- Search the POWS for weapons or documents immediately following their capture as illustrated in figure (26). Confiscate their weapons to avoid any resistance and confiscate all documents except for documents related to their identification cards so they do not destroy them. The prisoners of war whose possessions were confiscated should be granted a receipt for the articles taken from them. In order to identify the items you took from each individual, place your unit emblem on their confiscated possessions. Allow them to keep their personal items, which might protect their lives and health similar to protective masks.
- 2- Separate them into groups as illustrated in figure (27); officers, non-commissioned officers, soldiers, escapees, civilians, women, and political teaching cadres. This separation technique prevents their commanders from arranging a group escape. It also prevents teaching the rest of the prisoners the techniques on how to confront interrogators.
- 3- Silence is very important (Figure 21). Do not allow the prisoners to talk to one another as it prevents them from making an escape plan.

Figure (1/26)

Figure (2/27)

Figure (3/28)

- 4- Rush the prisoners to the rear (figure 29) since the information they have is worthless until it reaches an interrogator who will be able to scrutinize the information and handle it.
- 5- Protect the prisoners when taking them to the back, figure (30) and do not allow anyone to mistreat them. Additionally, do not allow anyone to give them water, food, or cigarettes.

Figure (4/29)

Figure (5/30)

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(6) Put your emblem on the prisoners. The prisoners' badges should include the following:

(Figure 31)

- a- The Name of unit that captured them (sufficient information about the unit).
- b- Date and time of captivity.
- c- Location of the captivity and its coordinates on the map or in relation to a well-known place.
- d- Capture conditions (how it happened).

The same emblem, more or less, should be placed on their weapons and equipment, but the only

difference is the condition category, which should indicate the source of the equipment or the documents.

For example: was it from a prisoner - Najib Dustu, or was found it on a dead enemy soldier, as illustrated in figure (32).

Comment: The emblems can be printed before the battle or they can be made on the battlefield from available materials.

Figure (6/31)

Figure (7/32)

Identify the enemy's equipment and weapons

Situation: You have models or photographs of the enemy's equipment and weapons.

Sample: Identify every weapon or piece of equipment and their name.

Required Measures:

(1) Small Arms: The enemy's small arms are heavy and reliable. Their simple design facilitates training and easy handling and maintenance. Generally speaking, they are shorter than the western designs with the intent of being able to employ them from inside an armored vehicle carrying soldiers. The sidearm familiar weapon is the 9 mm semi-automatic Makarov pistol with a capacity of 8 rounds. Its basic feature is a star on the handle and a double action type trigger. (Straight blowback) (It employs 2 cartridges) (Figure 1/33).

(2) The A K Series Assault Rifle.

a- The Kalashnikov is a 7.62 mm caliber assault rifle and its basic feature is the gas chamber that is located above the gun barrel. Figure (34) AKM7.62 mm. Figure (2/34).

b- AKMS-7.62 assault rifle. Its basic feature is exactly the same as the AKM, except for the folding metal butt. Figure (35 and (3/35).

(3) The PK 7.62 mm series is a multipurpose machine gun.

a- PKM 7.62 multipurpose machine gun

Its basic characteristics are: A handle with an opening and mounted by a tripod. It is used at the company or group level. (Figure 36-Figure 4/36).

b- PKS 7.62 mm multipurpose machine gun

Their basic characteristic is that the gas chamber is located under the gun barrel. It has a three-leg tripod and it is being employed for air defense. (Figure 37)

Figure (5/37)

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c- RPK 7.62 - Light machine gun, basic characteristic: it is being employed as an ammunition box magazine or round drum-magazine. Figure (38) Figure (6/38)

(4) Anti-tank Weapons: In addition to a huge number of armored vehicles; the threatened forces can fill the battlefield with (RPG) missiles, recoilless cannon, and anti-tank guided missiles (ATGM).

a- (RPG-7) - Its basic characteristic is that it has two handles, a large telescope, and a funnel in the back. See figure (39) - figure (7/39).

b- (SPG-9) 73 mm anti-tank recoilless gun. Its basic characteristic is that it has a funnel shape at the end of the rear part. See figure (40).

Figure (8/40)

c- (ATGM) - Anti-tank guided (missile) - There are two types: (Sagger) is a wire guided anti-tank missile; therefore, it is not affected by electronic jamming. The other one is (Swatter), it is an anti-tank radio guided missile; therefore, it is affected by electronic jamming. Both are accurate at 3 km range. They are easy to move, capable of penetrating standard armors, and can be fitted on armored soldiers or light tanks carriers that are transported by aircrafts or on armored reconnaissance vehicles. See figure (41)
Figure (9/41)

1-The followings are the most important features of the anti-tank guided missiles:

- a- The missiles' longest range is extremely accurate and effective. They are deadly, which make them capable of hitting and destroying any traditional known armored weapon at a 3 km distance.
- b- It has numerous uses, which allows its crew to launch the rocket at a distant range. In the case of (Sagger), it is fitted on a (7 tons) reconnaissance-armored vehicle in a remote site at a distance of 80 meters from the vehicle. The Sagger box can be launched at a range of one meter from the launching platform.

2-Disadvantages: Notwithstanding the missiles advantages and despite the fact that they can be dependable and effective in long ranges, the anti-tank missiles of the enemy have a number of shortcomings:

- a- The crew should have a clear visibility of the missile and target during the launching. Therefore, these weapons are not effective during the night. Besides, the armored vehicles that are moving behind a cover, smoke, or shrubbery can probably avoid being hit by these missiles. The shrubs can possibly break the wires, guiding the Sagger and thereby lead the gunner to lose control of the missile.
The trees and dense shrubs can also cause the anti-tank guided missiles to explode.
- b- The crew member who is launching these shells is required to be highly trained, as it is necessary that the gunner tracks the missile and the target simultaneously with his naked eye when steering the missile to the target by means of a stick in the guided box.
- c- The missiles have a minimum range since the missile must keep flowing for about 500 meters after launching, before the gunner can spot it with his naked eye and steer it with the stick to the target. It has a slow movement compared to the Hues missile, which is optically wire-guided and launched with tube (TOW).

(5) The Artillery: The offensive forces are equipped with a variety of artillery weapons. They have the light and heavy mortars, the conventional field artilleries, and the Howitzer, in addition to the Multiple Rocket Launcher (MRL). The (MRL) is capable of directing (Saturation Fire), whereas the artillery directs fire against previously selected and defined targets and against the appropriate targets.

The conventional field artillery pieces are the towed 132 mm - 152 mm howitzer, and the maximum range for the 122 mm howitzer-DC is 15 km with a rate of firing of 7- 8 rounds per minute.

[Page 21]

a- The NATO Artillery: NATO Howitzer D-122 — 130.

Basic features: it has three retractable arms that are tied together to the gun barrel during transportation and is pulled by the barrel's opening.

Utilization: As a direct support to the patrolling group and the battalion (The battalion's artillery battery) and (the division's artillery). This weapon should be positioned at 1- 4 km behind the front edge of the battlefield during offense, or 2 - 7 km during the defense based on the duty of the unit (mission). Its maximum range is 15300 meters and the rate of fire is between 7 - 8 rounds per minute. See figure (10/42)

b- NATO Artillery: T-12/-T-12 A100 mm AT Gun - Anti tank Gun.

Basic features: the gun-barrel is long and ends with a part similar to the pepper container (the gun muzzle). It has a sliding wheel at the end of the arm. There is armor with two flanks directed to the rear at the end of the gun barrel. In the T12 Gun, there is a cylinder above and at the right of the rear part.

Utilization: It is employed to provide support for the battalion maneuver. The gun should be positioned at 2- 5 km behind the front edge of the battlefield for offense, and the distance for defense is 2 - 7 km. Its maximum firing range is 8500 meters and the rate of fire is 10 rounds per minute. (See figure 43)

(Figure 11 / 43)

c- NATO Gun: Gun/ Howitzer D-20-152 mm - Howitzer Gun D — 20, 152 mm caliber.

Basic features: the plate seat support is large and it is connected to the front bed for travel, same as a D-74 vehicle; a gliding wheel and a hoister at the end of each arm. It has a finned armor with a movable middle part. The barrel is shorter and thicker (thicker diameter) than the D-74, but has the same double-baffle winged muzzle.

Utilization: It should be positioned at 3-5 km from the forward edge of the battlefield for offense or 4 - 8 km for defense. It is very crucial to the division and battalion artilleries.

Its maximum range is 17300m and the firing power is 5 rounds per minute. See (figure 44)

Figure (12/44)

d- Howitzer NATO Gun D-1, 100 caliber/ Howitzer D-1 152.

Basic features: The design is the same as the Howitzer 122 mm. M 30 (M1938) but, it has a thicker gun-barrel (bigger in diameter), in addition to a double-baffle muzzle.

Utilization: It should be positioned at 2-3 km from the front edge of the battlefield for defense, and 3 - 6 km for defense. It is crucial to the artillery units in the joint forces at the division level/army. Its maximum range 12400 m at 3 - 4 rounds per minute. See figure (45)

Figure (12/45)

e- Hence, two pieces of mobile artillery [locomotive artillery] were recently added to the enemy's forces.

The 122 mm, 152 mm self-propelled gun; mm SP gun - 152 SP gun.

The 122mm self-propelled gun is fitted on an armored vehicle that has the same structure of the armored personnel carrier. The engine is similar to the 76 PT amphibious tanks. The gun is fitted on a turret with two openings, for the commander and the gunner. We do not know much about the 152 mm self propelled gun. See figure (14/46)

f- Customarily, the hostile forces employ the multiple rocket launchers, MRL, to cover the territory.

They are available with a wide variety of sizes, but the one most commonly used is the 122 mm that is mounted on a truck [wagon] and is capable of firing 40 rounds and with a 20 km range. See figure (47)

(Figure 15/47)

g- The Russian mortars are similar to the mortars of the American forces, but the one most common is the 120 mm mortar with a maximum range of 5700 meters and a firing range of 15 rounds per

minute. See figure (48).
Figure (16/48)

h- Anti-tank missiles and guns:

The Soviet Army was reluctant to replace its conventional anti-aircraft guns with more highly advanced weapons, such as SAM surface to air missile.

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The anti-aircraft weapons range in caliber from 12.7 mm to 130 mm.

Currently, attention is focused on high mobility guns with a quick firing speed, that is automatic and speedy and designed to provide the military on the battlefield with a low-flying and effective air defense system.

1- ZSU 23 - 4 Gun - fourfold shape, the gun barrel is self-propelled.

Features: Light armored vehicle fitted with 4 cannons 23 mm caliber, and its firing power is completely integrated. The mounted radar is employed to detect the target, Target Tracking Air Acquisition. The 4 cannons are capable of firing between 800 - 1000 rounds per minute. Each cannon has a tactical range for air defense that reaches 3000 mm and 2500 range without radar.

It can be employed to counter maneuvering aircrafts, trying to elude low and medium surface-to-air missiles. The rate of perpetual firing power is 300 rounds per minute for each gun barrel.

See figure (49)

Basic features: A total armored vehicle with 6 wheels; the body is similar to a trunk mounted by a square turret with a zigzag pattern on the third wheel. The turret is fitted with four 23 mm caliber anti-aircraft automatic guns.

Utilization: It is used as part of the air defense battery for the tanks and artillery division, and it is crucially employed as part of the anti-aircraft battalion for the maneuvering division because they are always tracking the advanced units of the maneuvering battalion during the offense operation.

Figure (17/49)

2- **Its Features:** It is utilized in the battlefield by the air defense units in the tank divisions. It consists of a modified T-54 tank body fitted with two 57 mm guns mounted on a square turret without a cover, the body has less armors than the T-54 tank, the engine [motor] employs four wheels only, and it weighs [Illegible] Tons. The turret features a big basket fitted in the back that keeps the empty cartridge cases. It is capable of firing between 105 - 120 rounds per minute for each gun with air defense tactical range that reaches 4000 meters.

Figure (18/50)

Personal Hygiene

Preventive Medicine Training

Situation: As a member of a marching group who then participates in an open camp, this activity might be tactical or for administrative matters.

Sample: Prior and during the training on the mission, follow the following measures:

- 1- Take good care of the feet before and during the mission.
- 2- Sterilize the water with iodine pills.
- 3- The appropriate hygienic technique to get rid of human waste during the trip and camping.
- 4- Observe injuries resulting from heat or coldness.

Required Measures:

- (1) Taking good care of the feet.

- a- Before walking, make certain that the shoes is the right style and size and has been used sufficient time to become appropriate for use. For instance, are the shoes soft enough for a long walk? New shoes will cause wounds. The socks should be clean with no holes or thread knot. Do you have sufficient amount of powder for the feet? Don't try to soften new shoes during a walk or while on a mission. Treat and protect the blisters, areas of pressure and infections before walking. See figure (51).

Figure (1/51)

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- b- When walking keep the feet as dry as possible. If the socks become wet or damp, change them with dry ones as soon as you get a chance.
Treat the pressure areas that cause pain at once by replacing the socks, shoes, or any section of the clothing that causes pain or pressure. (Don't wait until you feel pain). Place a piece of cotton on it and tape with a bandage. Sprinkle powder over your feet to prevent fungus (only a small amount for prevention).
- c- Examine your feet, occasionally when at leisure. If possible, wash them during the resting time, at noon after lunch. (Take care of them by washing them at the time of ablution) God is Great! Praise God!
When sitting down, raise your feet, as this will help resting them and minimize swelling or enlargement.

(2) Water purification or sterilization:

- a- Before using the iodine pills, they should be examined first to check for any signs of change as they lose the sterilization effect by time. If the tablets' color is not gray as metal, or if they are crushed or attached to each other they should be discarded:
- b- Follow the codified measures for treating the water in the canteen with iodine
 - 1- Fill the canteen with the most purified and sterilized water that you can find under the circumstances.
 - 2- Add one iodine tablet to each liter of pure water and add two tablets if the water is impure. Double this amount if the jar is filled with 2 liters of water.
 - 3- Cover the lid on the canteen without pressing hard, and leave it a jar a little bit, wait 5 minutes then shake the jar well allowing the water that leaks from the cover to wet the yarn fabric around the jar neck.
 - 4- Close the cover tightly and wait 20 more minutes before using the water for any purpose.

(3) How to get rid of feces:

- a- While walking, every individual should dig one foot deep hole for his own use and cover it securely with dust after use.
 - b- When spending the night at a camp, trenches should be used. See figure (52)
- Figure (2/52)

(4) Heat and cold injuries:

a- Preventing Heat Injuries:

- 1- Water: It is not possible to train your body to live in a good physical condition with less than the amount of water it needs to cool its organs down to the right temperature. Such temperature is

vital to keep the tissues alive and for the body to get rid of the waste and for the tissue to achieve its physiological functions. Any attempt to train the body to do that will be harmful and will lead to heat injuries. It is necessary, indeed, to drink more water than you need to quench your thirst.

2- Salts: When the body loses fluids due to perspiration, good salts in the body are also lost. Ordinary nutrition includes salts to compensate for this deficiency when the individual water intake is less than one gallon a day.

If the daily amount of water increases, you should add a pinch of salt to food.

Comment:

The heat injuries were explained in another codified manual.

b- Prevention form Cold Weather Injuries:

1- Cold weather clothing protects, isolates, and ventilates. It protects by covering most of the body as much as possible. It isolates by keeping the warm air, which warmed up due to the body heat, next to the skin to prevent the body from losing more heat. It ventilates by allowing air circulation through several layers of clothing, which in turn, prevents extreme heat from producing excessive sweat. Therefore, clothes should be dressed loosely for the purpose of free movement and training. Clothes should be clean and dry.

2- The body should have good air circulation by moving the feet and arms from time to time especially during relaxation.

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[TC: This page seems to be the continuation of page 2 of this document]

b- To begin operating the machine, follow the following steps:

1- First Step: Set the operating button number 4 in figure (53) to the U P position.

2- Second Step: Set the optic refraction gauge number 9 to number 5 then adjust the number 10 aiming ring to the sharp image. When these steps are completed, there is no need for any other adjustment by the individual who performed these operations.

Note:

The device operator should press his eyes against the rubbery eyepiece armor to open the rubbery safety valves.

Pvs-2 = Portable Night Vision System.

Figure (1/53)

3- Third Step: Adjust the target scope circle, number 1 of the sharp image and during the reconnaissance mission. The device operator should adjust the target scope to make sure that there is a sharp image at all distances.

c- After operating the device, set the operating button on the (off) position to shut the device.

Note: Do not store the device before removing the battery.

(2) Explore the specific target as required: you will be able to see the movement, observe the ground, and monitor your enemy and your forces; and you will be able to perform with enormous leverage a reconnaissance mission during any operation by employing a AN/PVS2 device, where the vision is defined by the surrounding illuminating power.

Conduct maintenance procedure for the hand-held thermal imaging device.

Situation: You have a PAS-7/AN device with all the parts that include two camel hairbrushes, lens tissue and 3 - 5 pieces of no-fuzz lens cleaning cloth, a diluted soap solution, and the device's technical manual.

Sample: Conduct a precautionary maintenance inspection and service according to the device technical manual.

Required measures:

(1) The Telescope:

- a- Examine the outer surfaces whether they are clean or spoiled with scratches or any other damage.
- b- Inspect the infrared slit [window] and the optic lens surface if it is clean, broken, scratched or damaged.
- c- Examine the rubber armor eyepiece if it is clean and the window safety if it is working properly.
- d- Examine the conductor if it is clean, twisted, torn, broken or and with any other damages.
- e- Examine the neck and hand strap if it is clean, torn or broken and or has any other damages.

(2) Rechargeable batteries and the charger:

- a- Examine the outer surfaces if they are clean, scratched, or with any other damage.
- b- Examine the conductor if it is clean, damaged, or has a spoiled peg or any other damages.

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(3) Connecting wires

- a- Examine the connecting wires for cleanness.
- b- Examine the connecting wires if they are twisted or have spoiled nails and or for any other damage.
- c- Examine if there are any scratches, tear, or any other damage to the wires.

(4) Carrying Case

- a- Open the bag, turn it over and shake it to get rid of any dirt. Wipe it inside out with a fuzz-free, dry linen tissue.
If it is necessary wet a piece of cloth to wipe out any clinging dirt.
- b- Examine if its fabric is torn, ripped or has any other damage.
- c- Check if the zipper is working.

(5) Transport bag

- a- Open the bag, take out all items and tools, turn it around and shake it to get rid of any dirt. Examine the inside cushions for any tear, ripping and or any other damage.
- b- Check the outer surfaces if they are clean, twisted, cracked, and for any other damage.
- c- Make sure that the latch lock is properly working and if its nails or pins are damaged.

(6) Cleaning measures

Caution: Use the lens tissue when cleaning the lens or shutter window. Don't use a tissue that can cause scratches to the outer lens or window.

Note: When the piercing lens surfaces need cleaning, start first by cleaning the outer surfaces and the rubber optic parts before cleaning the lens surfaces.

a- Lens surfaces and windows:

- 1- Gently pull out the rubber armor eyepiece from the lens.
- 2- Wipe out all dirt and dust and any foreign bodies from the lens surface with a clean camel hair- brush.
- 3- In case there is still clinging dirt, use lens tissue and fold it several times and apply it as a small wiper; damp it in lens cleaning solution.

- 4- Use a gentle circular movement to clean the lens, begin with the center and continue to the edge of the lens.
- 5- Dry the lens with dry lens tissue using the same circular motion.

b- Outer surfaces

- 1- Wipe the outer surfaces with a camel hair- brush. (Don't use the same brush that you have previously used for the lens and window cleaning)
- 2- Wipe the surfaces with a no-fuzz linen cloth.
- 3- If there is clinging dirt, wet a piece of cloth with diluted soap solution or with clean water.
- 4- Dry well with a clean linen cloth.

c- Rubber Armor Eyepiece:

- 1- Wipe it with a no-fuzz linen cloth.
- 2- Wet the tissue with water, if there is clinging dirt.
- 3- Dry it with air (hair blow dryer) or with a linen no-fuzz cloth.

d- Conductors and wires:

- 1- Wipe out all the dirt and foreign bodies by a hair camel-brush.
- 2- Use a no-fuzz linen cloth if there is clinging dirt.
- 3- Dry it with air or with a dry no-fuzz linen cloth.

Note: Be certain that all connecting nails are dry before use.

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Place the night vision device in a ready operating position.

Situation: In a battle drill setting when the vision is limited and you have a P A S-7 / A N device, and in front of you a sector where you have to carry out a reconnaissance operation (Surveillance).

Sample: Set out the device in the correct operating position and start surveying the sector in front of you and reconnoiter any intruder in the region.

Required Measures:

(1) Put the device in the operating position:

- a- Put the neck strap around your neck.
- b- Adjust the device comfortably on your chest.

(2) Connect the connecting wires that go to the battery and the scope:

- a- Connect the wire negative end to the scope.
- b- Connect the wire positive end to the battery. (Figure 54)

(3) Switch the power key to (on) position. You should hear a light click of the vibrating mirror, wait half a minute after switching it to the (ON) position to allow the heater to warm up. (The ray tube)

Warning: Before switching the operating button to (ON) position, make sure that the brightness control knob is turned counter clock-wise. Figure (54 B)

(Figure 1/54)

Figure (2/B 54)

(4) Remove the cover from the Infrared Illuminator [window]. (Figure 55)
Figure (3/55)

(5) Groundwork for focusing control:

- a- Adjust the hand belt to be fastened comfortably.
- b- Rest the scope on the palm of your hand in such a manner that the right hand thumb will be able to move the tip of the focus control knob, and the right forefinger to turn the brightness control knob and the left forefinger to turn the control knob for the non-uniform illumination image.
- c- Choose a well-known crucial target, like a human figure at a distance of 10-20 feet.
- d- Lift the scope to your eyes and hold firmly on the rubber armor eyepiece to open the leaf
- e- Adjust the optical focusing knob:

- 1- Rotate the eyepiece knob of the focusing distance until a sharp image is obtained.
- 2- After the adjustment, the device does not need any other modification when it is operating. See (figure 56)

Figure 4/56

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(6) Focusing distance Control:

- a- With the right forefinger, adjust the focus control knob until a sharp image is obtained.
- b- Control the brightness the way it should be utilizing the right forefinger to adjust the brightness control knob.
- c- Adjust the variation control knob to the required variation.

Comment:

Non-adjustment of the focusing distance by using the focus knob will result in one of the images illustrated in figure (58-59). Nonetheless, if the (focus) is accurate and clear, the target will be exact as illustrated above, example number 1, figure (58).

Figure (5/57)