U.S. ARMY CADET COMMAND

CADET HANDBOOK

2015

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This publication is generally comprised of extracts from FM 3-21.8 Infantry Rifle Platoon and Squad, but references multiple sources. It provides the standard operating procedures for infantry platoons and squads and focuses on the needs of the ROTC Cadet. The procedures included in this handbook apply unless leadership makes a decision to deviate from them based on METT-TC. Deviations from this handbook must be narrow and apply only to specific situations.

Chapter 1: THE ARMY LEADER
Section I: 21 CENTURY SOLDIER COMPETENCIES pg. 1-1
Section II: CREEDS AND OATHS pg. 1-4
Section III: DUTIES AND RESPONSIBILITIES pg. 1-5

Chapter 2 RISK MANAGEMENT
Section I: RISK MANAGEMENT PROCESS pg. 2-1

Chapter 3: MISSION COMMAND
Section I: MISSION COMMAND INTRODUCTION pg. 3-1
Section II: TROOP LEADING PROCEDURES pg. 3-3
Section III: ORDERS pg. 3-6

Chapter 4: OPERATIONS
Section I: REPORTS pg. 4-1
Section II: FIRE CONTROL AND DISTRIBUTION pg. 4-2
Section III: WEAPONS pg. 4-3
Section IV: RANGE CARDS AND SECTOR SKETCHES pg. 4-5

Chapter 5: COMMUNICATIONS
Section I: PRO-WORDS, PHONETIC ALPHABET pg. 5-1
Section II: RADIO CALL PROCEDURES pg. 5-5
Section III: BATTERIES, LOADING FREQUENCY pg. 5-9

Chapter 6: FIRST AID
Section I: EVALUATE A CASUALTY pg. 6-1
Section II: PREVENT OR CONTROL SHOCK pg. 6-3
Section III: FIRST AID FOR BLEEDING OF AN EXTREMITY pg. 6-4
Section IV: TRANSPORT A CASUALTY pg. 6-6
Section V: PERFORM FIRST AID FOR BURNS pg. 6-12
Section VI: OPEN AN AIRWAY pg. 6-14
Section VII: REQUEST MEDEVAC pg. 6-16

Chapter 7: TACTICS
Section I: MOVEMENT OVERVIEW pg. 7-1
Section II: MOVEMENT FORMATIONS pg. 7-5
Section III: MOVEMENT TECHNIQUES pg. 7-15
Section IV: PLATOON OPERATIONS pg. 7-20
Section V: OFFENSIVE OPERATIONS pg. 7-22
Section VI: DEFENSIVE OPERATIONS pg. 7-28
Section VII: CORDON AND SEARCH pg. 7-29
Section VIII: BATTLE DRILLS pg. 7-37
Section IX: CALL FOR FIRE pg. 7-50
Chapter 8: OTHER CONSIDERATIONS IN THE OPERATING ENVIRONMENT
Section I: CULTURAL AWARENESS pg. 8-1
Section II: ROE/DETAINEE OPERATIONS pg. 8-3

Chapter 9: QUICK REFERENCE CARDS
Section I: MEDEVAC REQUEST FORM pg. 9-1
Section II: STANDARD RANGE CARD pg. 9-3
Section III: INFANTRY LEADERS REFERENCE CARD pg. 9-4
Section IV: CALL FOR FIRE pg. 9-18
Section V: HAND GRENADE pg. 9-20

Send recommendations for change with a summary letter to:
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CHAPTER 1: THE ARMY LEADER
SECTION I – 21st Century Soldier Competencies
(TRADOC Pam 525-8-2)

1. Character and Accountability
   a. Soldiers and leaders demonstrate Army values, the Soldier’s Creed, and Warrior Ethos through action while also developing character and accountability in subordinates. They accept obligations of service before self and for assigned tasks, missions, their subordinates, and themselves while building confidence in leaders, peers, and subordinates that they can be counted upon to accomplish goals. Soldier and leader actions are guided by the Army Ethic, which consists of the shared values, beliefs, ideals, and principles held by the Army Profession of Arms and embedded in its culture that are taught to, internalized by, and practiced by all Soldiers in full-spectrum operations as well as peacetime.

   b. Adhering to and internalizing the Army Ethic develops strong character, ethical reasoning and decision making, empathy for others, and the self-discipline to always do what is right for fellow Soldiers, the Army, and the Nation. Character enables the Soldier to operate in a complex and uncertain environment with the understanding that the Soldier is individually accountable for not only what is done, but also for what might not be done. The pride, esprit, and ethos required of Soldiers as members of the Profession of Arms may require them to sacrifice themselves willingly to preserve the Nation, accomplish the mission, or protect the lives of fellow Soldiers. Qualities of character and ethical behavior will be stressed at every level.

2. Comprehensive Fitness - Soldiers and leaders develop and maintain individual, as well as that of their subordinates, physical, emotional, social, Family, and spiritual fitness. They display physical, mental, and emotional persistence, quickly recover from difficult situations, and exemplify the resilience necessary to fight and win in any operational situation.

3. Adaptability and Initiative
   a. Soldiers and leaders are comfortable operating in unexpected situations throughout the world. They scan the environment, identify unique or unexpected conditions, and adjust to handle the situation effectively.

   b. Soldiers and leaders recognize when standard procedures are not an effective solution to a situation and use innovation to develop new procedures, devices, and others, that are necessary to handle the situation. Mental agility and a global mindset allow them to anticipate changes in the operational environment, adapt to the changes, and anticipate the second and third order effects of their actions and decisions.

   c. Soldiers and leaders take appropriate action and calculated risks in the absence of orders or in situations that require modifying orders to achieve the commander’s intent while also developing initiative and risk taking in subordinates. They anticipate changes in the operational environment assess the situation and use sound judgment to decide when and how to act. Self-awareness allows Soldiers and leaders to monitor and adjust their actions and those of their teams to constantly assess performance and seek improvement.
4. Lifelong Learner (includes digital literacy)

   a. Soldiers and leaders continually assess themselves, identify what they need to learn and use skills that help them to effectively acquire and update knowledge, skills, and attitudes. Soldiers and leaders value and integrate all forms of learning (formal, informal) on a daily basis to seek improvement of themselves and their organizations continuously.

   b. Soldiers and leaders access, evaluate, and use information from a variety of sources and leverage technology (hardware and software) to improve their effectiveness and that of their teams while executing the Army’s missions. Digital literacy skills are developed at initial entry and increase progressively at each career level.

5. Teamwork and Collaboration – Soldiers and leaders create high-performing formal and informal groups by leading, motivating, and influencing individuals and partners to work toward common goals effectively. They are effective team members, understand team dynamics, and take appropriate action to foster trust, cohesion, communication, cooperation, effectiveness, and dependability within the team. Leaders build teams, seek multiple perspectives, alternative viewpoints, and manage team conflict.

6. Communication and Engagement (oral, written, and negotiation)

   a. Soldiers and leaders express themselves clearly and succinctly in oral, written, and digital communications. They use interpersonal tact, influence, and communication to build effective working relationships and social networks that facilitate knowledge acquisition and provide feedback necessary for continuous improvement.

   b. Soldiers and leaders inform and educate U.S., allied, and other relevant publics and actors to gain and maintain trust, confidence, and support. Engagement is characterized by a comprehensive commitment to transparency, accountability, and credibility, and is an imperative of 21st century operations.

7. Critical Thinking and Problem Solving – Soldiers and leaders analyze and evaluate thinking, with a view to improving it. They solve complex problems by using experiences, training, education, critical questioning, convergent, critical, and creative thinking, and collaboration to develop solutions. Throughout their careers, Soldiers and leaders continue to analyze information and hone thinking skills while handling problems of increasing complexity. Select leaders also develop strategic thinking skills necessary for assignments at the national level.

8. Cultural and Joint, Interagency, Intergovernmental, and multinational competence - Soldiers and leaders use cultural fundamentals, self-awareness skills, and regional competence to act effectively in any situation. They use communication, including foreign language, influence, and relational skills to work effectively in varied cultural and joint, interagency, intergovernmental, and multinational contexts. Soldiers and leaders consider and are sensitive to socially transmitted behavior patterns and beliefs of individuals from other communities and/or
countries and effectively partner, influence, and operate in complex joint, interagency, intergovernmental, and multinational environments.

9. Tactical and Technical Competence (full spectrum capable)

   a. Soldiers and leaders employ tactical and technical skills in full-spectrum operations to accomplish the mission and support the commander’s intent. They are experts on weapons systems, combined arms operations, and train their subordinates to be technically and tactically competent. At lower levels, they are technical experts in their specialty and continue to develop their technical skills and those in their subordinates. As leaders grow, they increase their understanding and application of mission command, operational contexts, systems, and technology while operating in increasingly complex environments.

   b. Soldiers and leaders are prepared to execute offensive, defensive, stability, and civil support missions throughout the continuum of operations and transition between diverse tasks and operational actions as complex and uncertain operational situations are developed through action. Leaders anticipate tactical, operational, and strategic transitions and use mission command to apply lethal and nonlethal effects to achieve the commander's intent.
SECTION II – CREEDS AND OATHS

1. The Soldier's Creed:
I am an American Soldier.
I am a Warrior and a member of a team.
I serve the people of the United States and live the Army Values.
I will always place the mission first.
I will never accept defeat.
I will never quit.
I will never leave a fallen comrade.
I am disciplined, physically and mentally tough, trained and proficient in my warrior
tasks and drills. I always maintain my arms, my equipment and myself.
I am an expert and I am a professional.
I stand ready to deploy, engage, and destroy the enemies of the United States of America
in close combat.
I am a guardian of freedom and the American way of life.
I am an American Soldier.

2. Cadet Creed
I am an Army Cadet. Soon I will take an oath and become an Army Officer committed to
DEFENDING the values which make this Nation great. HONOR is my touchstone. I
understand MISSION first and PEOPLE always.
I am the PAST: the spirit of those WARRIORS who have made the final sacrifice.
I am the PRESENT: the scholar and apprentice Soldier enhancing my skills in the science
of warfare and the art of leadership.
But above all, I am the FUTURE: the future WARRIOR LEADER of the United States
Army. May God give me the compassion and judgment to lead and the gallantry in battle
to WIN.
I WILL do my duty.

3. Oath of Commissioned Officers
I, _____, having been appointed an officer in the Army of the United States, as indicated
above in the grade of _____ do solemnly swear (or affirm) that I will support and defend
the Constitution of the United States against all enemies, foreign and domestic, that I will
bear true faith and allegiance to the same; that I take this obligation freely, without any
mental reservations or purpose of evasion; and that I will well and faithfully discharge the
duties of the office upon which I am about to enter; So help me God."
SECTION III - DUTIES AND RESPONSIBILITIES
(FM 3-21.10 Chap 1, Sect IV JUL06; FM 3-21.8 Chap 1, Sect III MAR07)

1. COMPANY COMMANDER (CO) - leads by personal example and responsible for everything the company does or fails to do. Principle duties include the key areas of tactical employment, training, administration, personnel management, maintenance, force protection, and sustainment of the company. Given the asymmetrical, noncontiguous environment, the commander must now integrate and synchronize a greater mix of forces for full spectrum operations, including other combined arms and combat support elements, civil affairs (CA), psychological operations (PSYOP), interpreters, media, unmanned aerial system (UAS) and robotics teams. Among other things, the commander:
   - Mission Command through subordinate leaders.
   - Employs the company to accomplish its mission according to battalion commander's intent and concept.
   - Selects the best location to maneuver the platoons and other elements.
   - Conducts mission analysis and troop-leading procedures (TLP) and issues operation orders for company tactical operations.
   - Maintains and expresses situation awareness and understanding.
   - Resources the platoons and other elements and requests battalion support when needed.
   - Ensures the company command post (CP) effectively battle tracks the situation and status.
   - Provides timely and accurate tactical picture to battalion commander and subordinate units.
   - Implements measures for force protection, security, and accountability of forces and systems.
   - Develops the leadership and tactical skill of platoon leaders.

2. EXECUTIVE OFFICER (XO) - Second in command. Primary role is to assist the commander in mission planning and accomplishment. Assumes command of the company as required and ensures that tactical reports from platoons are forwarded to battalion tactical operations center (TOC). Locate where to maintain communications with the company commander and battalion. Along with the 1SG, plans and supervises the company's sustainment operations; ensures that pre-combat inspections are complete. Plans and coordinates logistical support with agencies external to the company while the 1SG does the same internally. Prepares, or aids in preparing, paragraph four of the company operation order (OPORD). Assist the company commander in planning the mission. Coordinate with higher headquarters, adjacent and supporting units. May aid in control of critical events of the battle such as a passage of lines, bridging a gap, breaching an obstacle or may assume control of a platoon attached to the company during movement. Might lead a quartering party, an element consisting of representatives of various company elements whose purpose is to precede the company and reconnoiter, secure, and mark an assembly area. The XO might lead a detachment with other tactical tasks, including shaping or sustaining force leader in a company raid, attack, control company machine guns, or mortar section. May also—
   - Lead the reserve. Lead the detachment left in contact during a withdrawal.
   - Control attachments to the company.
– Serve as movement control officer.

3. FIRST SERGEANT (1SG) – leads by personal example and is responsible for everything the company does or fails to do. The senior noncommissioned officer (NCO) and normally the most experienced Soldier in the company. 1SG is the commander's primary tactical advisor and expert on individual and NCO skills. Helps the commander plan, coordinate, and supervise all activities that support the unit mission. Operates where the commander directs or where can best influence a critical point or what is viewed as the unit's decisive point. In addition:

– Supervises routine operations, including enforcing tactical standing operating procedures; planning and coordinating both training and full spectrum operations; and administering replacement operations, logistics, maintenance, communications, field hygiene, and casualty evacuation operations.
– Supervises, inspects, and influences matters designated by the commander as well as areas that depend on expertise such as Soldier care, force protection, security, and accountability.
– Assists the XO and keeps self prepared to assume the XO's duties, if needed
– Leads task-organized elements or subunits for the company's shaping effort or designated missions.

4. PLATOON LEADER (PL) - Responsible for the entire platoon does or fails to do. In the conduct of duties, consults platoon sergeant in all matters related to the platoon. The PL knows Soldiers and therefore how to employ the platoon and its organic and supporting weapons. During operations, the platoon leader—

– Leads platoon in supporting higher headquarters missions. They will base actions on assigned mission and intent and concept of higher commanders.
– Maneuvers squads and fighting elements.
– Synchronizes the efforts of squads.
– Looks ahead to the next “move” for the platoon.
– Requests and controls supporting assets.
– Employs C2 systems available to the squads and platoon.
– Ensures 360-degree, three-dimensional security is maintained
– Controls the emplacement of key weapon systems.
– Issues accurate and timely reports.
– Places self where most needed to accomplish the mission.
– Assigns clear tasks and purposes to squads.
– Understands the mission and commanders’ intent two levels up (the company and battalion).

CST Cadet Platoon Leader

– Coordinate with the CO and XO.
– Control platoon organization.
– Complete all required platoon tasks.
– Establish platoon plan of action.
– Create and issue platoon operations orders (OPORD).
– Conduct platoon inspections and rehearsals.
– Organize physical training activities.
5. PLATOON SERGEANT (PSG) - Senior NCO in the platoon and second in command. The PSG sets the example in everything. He is a tactical expert in Infantry platoon and squad operations, including maneuver of platoon-sized elements and employment of all organic and supporting weapons. The PSG advises the PL in all administrative, logistical, and tactical matters and is responsible for the care of personnel, weapons, and equipment of the platoon. As second in command, assumes duties as assigned by the PL. Traditionally—

- Ensures platoon is prepared to accomplish mission, to include supervising pre-combat checks and inspections.
- Prepares to assume the role and responsibilities of platoon leader.
- Acts where best needed to help mission command the engagement (either in base of fire or with assault element).
- Receives squad leaders’ administrative, logistical, and maintenance reports, and requests for rations, water, fuel, and ammunition.
- Coordinates with higher headquarters to request logistical support (usually 1SG or XO).
- Manages platoon’s combat load prior to operations and monitors logistical status during operations.
- Establishes and operates platoon’s casualty collection point (CCP), including directing platoon medic and aid/litter teams in moving casualties; maintains platoon strength levels information; consolidates and forwards platoon’s casualty reports; receives and orients replacements.
- Employs digital mission command systems available to the squads and platoon.
- Understands the mission and commanders intent two levels up (the company and battalion).

CST Cadet Platoon Sergeant

- Assist the PL.
- Coordinate with Cadet 1SG and Cadet SLs.
- Organize platoon formations.
- Account for platoon attendance.
- Prepare and submit morning reports.
- Control sick call and account for absences.
- Supervise issue/turn in of supplies and equipment.
- Supervise barracks maintenance.
- Control movement of the platoon.

6. SQUAD LEADER (SL) - Senior Infantryman in the squad, is responsible for all the squad does or fails to do. Directs team leaders and leads by personal example. Has authority over subordinates and overall responsibility for those subordinates’ actions. Centralized authority enables the SL to act decisively while maintaining troop discipline and unity. Even in the course of carefully-planned actions, must accomplish assigned missions using initiative without constant guidance from above. Responsible for the care of personnel, weapons, and equipment. During operations, the squad leader—

- Is SME on all battle drills and individual drills?
- Is SME in squad’s organic weapons employment and the employment of supporting assets?
– Knows weapon effects, surface danger zone(s) (SDZ), and risk estimate distance(s) (RED) for all munitions.
– Effectively uses control measures for direct fire, indirect fire, and tactical movement.
– Controls movement of squad and its rate and distribution of fire (including call for and adjust fire).
– Fights the close fight by fire and movement with two fire teams and available supporting weapons.
– Selects the fire team general locations and sectors in the defense.
– Communicates timely and accurate spot reports (SPOTREPs) and status reports, including—
  – Size, activity, location, unit, time, and equipment (SALUTE) SPOTREPs.
  – Status to PL (including squad location and progress, enemy situation, enemy killed in action [KIA], and security posture).
  – Status of ammunition, casualties, and equipment to the PSG.
  – Employs digital C2 systems available to the squad and platoon.
  – Operates in any environment to include the urban environment.
  – Conducts troop-leading procedures (TLP).
  – Assumes duties as the PSG or PL as required.
  – Understands the mission and commander’s intent two levels up (platoon and company).

**CST Cadet Squad Leader**
– Ensure the squad is in proper uniform with proper equipment for training.
– Lead and supervise up to 13 squad members.
– Ensure that the squad draws all necessary equipment and rations required for training.
– Personaly prepare and inspect the squad for all missions.
– Keep squad accountability and report to the PSG.
– Control movement of the squad.
– Prepare and submit reports.
– Prepare and issue the squad operation order (OPORD).

7. **TEAM LEADER (TL)** - Leads team members by personal example. Has authority over subordinates and overall responsibility for their actions. Centralized authority enables the TL to maintain troop discipline and unity and to act decisively. Under the fluid conditions of close combat, the TL must accomplish assigned missions using initiative without needing constant guidance from above. The TL’s position on the battlefield requires immediacy and accuracy in all of his actions. TL is a fighting leader who leads the team by example. Responsible for all the team does or fails to do. Responsible for the care of the team members, weapons, and equipment. During operations, the team leader—

– Is the SME on all of the team’s weapons and duty positions and all squad battle drills.
– Leads his team in fire and movement.
– Controls the movement of the team and its rate and distribution of fire.
– Employs digital C2 systems available to the squad and platoon.
– Ensures security of team’s sector.
– Assists the squad leader as required.
– Is prepared to assume the duties of the squad leader and platoon sergeant.
– Enforces field discipline and preventive medicine measures (PMM).
– Determines team’s combat load and manages its available classes of supply as required.
– Understands the mission two levels up (squad and platoon).
– When maneuvering the team, the team fights using one of three techniques:
  (1) Individual movement techniques (IMT, the lowest level of movement).
  (2) Buddy team fire and movement.
  (3) Fire team fire and movement (maneuver).
– Determines a suitable technique based on the effectiveness of the enemy’s fire and available cover and concealment. The more effective the enemy’s fire, the lower the level of movement. Because the team leader leads his team, he is able to make this assessment firsthand. Other leaders must be sensitive to the team leader’s decision on movement.

**CST Cadet Team Leader**
– Ensure the team is in proper uniform with proper equipment for training.
– Lead and supervise up to 6 team members.
– Ensure that the team draws all necessary equipment and rations required for training.
– Personally prepare and inspect the team for all missions.
– Keep team accountability and report to the SL.
– Control movement of the team.
– Prepare and submit reports.
CHAPTER 2 – RISK MANAGEMENT PROCESS

PRINCIPLES OF RISK MANAGEMENT

1. Risk management is the process of identifying, assessing, and controlling risks arising from operational factors and making decisions that balance risk cost with mission benefits (JP 3-0). The Army uses risk management (RM) to help maintain combat power while ensuring mission accomplishment in current and future operations. RM applies to operations and to nonoperational activities.

Note. For more information on RM application to nonoperational activities, see DA Pam 385-30.

2. The Principles of RM are:
   - Integrate RM into all phases of missions and operations.
   - Make risk decisions at the appropriate level.
   - Accept no unnecessary risk.
   - Apply RM cyclically and continuously.

   a. Integrate Risk Management Into All Phases of Missions and Operations - Army forces must integrate RM throughout planning, preparation, execution, and assessment activities. Army units should use RM for on- and off-duty activities. Commanders must emphasize RM in planning processes; they must dedicate sufficient time and other resources to RM during planning to ensure Army forces manage risk effectively throughout all phases of missions and operations.

   b. Make Risk Decisions at the Appropriate Level - A risk decision is a commander, leader, or individual’s determination to accept or not accept the risk(s) associated with an action he or she will take or will direct others to take. RM is only effective when the specific information about hazards and risks is passed to the appropriate level of command for a risk decision. Subordinates must pass specific risk information up the chain of command. Conversely, the higher command must provide subordinates making risk decisions or implementing controls with the established risk tolerance—the level of risk the responsible commander is willing to accept. RM application must be inclusive; those executing an operation and those directing it participate in an integrated process.

   c. Accept No Unnecessary Risk - An unnecessary risk is any risk that, if taken, will not contribute meaningfully to mission accomplishment or will needlessly endanger lives or resources. Army leaders accept only a level of risk in which the potential benefit outweighs the potential loss. The process of weighing risks against opportunities and benefits helps to maximize unit capability, save lives, and preserve resources. The appropriate level of command makes prudent risk decisions after applying RM and weighing potential gain against potential loss. Commanders need not be risk averse. Forces may undertake even high-risk endeavors when
commanders determine that the sum of the benefits exceeds the sum of the costs. Commanders establish the basis for prudent risk decisions through RM.

d. Apply Risk Management Cyclically and Continuously - RM is a cyclical and continuous five-step process, applied across all Army operations (including training), individual and collective day-to-day activities and events, and base operations functions. Soldiers use this cyclical process (illustrated in figure 1-1) to identify and assess hazards; develop, choose, implement, and supervise controls; and evaluate outcomes as conditions change.

e. Application Levels of Risk Management - Army leaders use judgment to manage risk based on the situation. They approach RM at the appropriate application level, using a deliberate approach or a real-time approach. The main factor that differentiates their approach is the amount of time available for planning. A deliberate approach is more analytical but takes more time; a real-time approach is more intuitive and tends to take less time. Regardless of the amount of time available, Army forces manage risk throughout the operations process using the five steps of RM.

(1) Deliberate Risk Management - Deliberate RM refers to situations in which ample time is available to apply the five-step process as part of detailed planning for an operation. At this level, experienced commanders, staff, Army leaders, and individuals apply RM steps and principles analytically. Deliberate RM is most effective when done in a group. The joint operation planning process illustrates ways to integrate RM into planning at the deliberate application level (see JP 5-0 for more information on joint operation planning). Other examples of deliberate RM include integrated planning of unit missions, tasks, or events; review of standard operating, maintenance, or training procedures; recreational activities; and the development of damage control and emergency response plans. The discussion in this chapter emphasizes deliberate RM.
Real-Time Risk Management

Real-time RM refers to immediate management of hazards as they occur, usually during execution of an operation or performance of a task. In time-constrained conditions, intuitive decisionmaking tends to replace deliberate planning. Soldiers may only have time for a quick mental or verbal assessment of the new or changing situation. Real-time RM and deliberate RM have the same foundation. Leaders must master the principles and steps of RM. They must practice applying them during planning and execution in time-constrained situations so real-time RM becomes second nature.

3. Steps of Risk Management –

- **Step 1—Identify the hazards.**
- **Step 2—Assess the hazards.**
- **Step 3—Develop controls and make risk decisions.**
- **Step 4—Implement controls.**
- **Step 5—Supervise and evaluate.**

![Figure 1-2. Assessment steps and management steps](image)

- **Identify the Hazards** - The mission variables—mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC)—serve as a standard format for identifying hazards, on- or off-duty. The factors of METT-TC are institutionalized in the Army. They are part of the common knowledge imparted through the Army’s professional military education and the civilian education system. Some other resources and tools support the identification of hazards include—
  - Experience and other experts.
  - Regulations, manuals, standard operating procedures (SOPs), and policies.
  - Accident data.
b. **Assess the Hazards** - To assess hazards, RM practitioners consider how identified hazards (conditions) could lead to harmful events and how those events would affect operations. They envision the potential for the events and their predictable effects. Risk levels reflect a combination of the probability of occurrence and the severity of the adverse impact. In the context of RM, **probability** is the likelihood an event will occur; it is assessed as frequent, likely, occasional, seldom, or unlikely. In the context of RM, **severity** is the expected consequences of an event in terms of injury, property damage, or other mission-impairing factors; it is assessed as catastrophic, critical, moderate, or negligible. A risk level is a type of score that assesses the odds (probability) of something going wrong and the effect (severity) of the incident when it occurs.

(1) **Risk Levels** - Planners assess hazards (the conditions and the events that could result)—and assign associated risk levels—during mission analysis; course of action (COA) development; COA analysis; and orders production, dissemination, and transition steps of the MDMP. Commanders and staff must consider aspects directly or indirectly related to the mission that could affect risk during operations. The result of this assessment is an initial estimate of a risk level for each identified hazard, expressed as—

- Extremely high (EH).
- High (H).
- Medium (M).
- Low (L).

(a) Planners determine the level of risk by using the risk assessment matrix (illustrated below).

(b) Planners apply three sub-steps in step 2, using the risk assessment matrix

- Estimate the probability of a harmful event or occurrence from a hazard.
- Estimate the expected severity of an event or occurrence.
- Determine the level of risk for the estimated probability and severity.
### Risk assessment matrix

<table>
<thead>
<tr>
<th>Risk Assessment Matrix</th>
<th>Probability (expected frequency)</th>
<th>Frequent: continuous, regular, or inevitable occurrences</th>
<th>Likely: Several or numerous occurrences</th>
<th>Occasional: Sporadic or intermittent occurrences</th>
<th>Seldom: Infrequent occurrences</th>
<th>Unlikely: Possible occurrences but improbable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Severity (expected consequence)</strong></td>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td><strong>Catastrophic:</strong> Mission failure, unit readiness eliminated, death, unacceptable loss or damage</td>
<td>I</td>
<td>EH</td>
<td>EH</td>
<td>H</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td><strong>Critical:</strong> Significantly degraded unit readiness or mission capability, severe injury, illness, loss or damage</td>
<td>II</td>
<td>EH</td>
<td>H</td>
<td>H</td>
<td>M</td>
<td>L</td>
</tr>
<tr>
<td><strong>Moderate:</strong> Somewhat degraded unit readiness or mission capability, minor injury, illness, loss or damage</td>
<td>III</td>
<td>H</td>
<td>M</td>
<td>M</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td><strong>Negligible:</strong> Little or no impact to unit readiness or mission capability, minimal injury, loss or damage</td>
<td>IV</td>
<td>M</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
</tr>
</tbody>
</table>

**Legend:** EH - Extremely High Risk, H - High Risk, M - Medium Risk, L - Low Risk

(2) Sub-step 1 – Estimate the Probability of an Occurrence - Probability is an estimate, based on the information known about the hazard and on the hazard-related occurrences
experienced by others in similar situations. The RM practitioner estimates the probability levels of harmful events occurring for each hazard, taking into account all relevant factors including the mission, scheme of maneuver, and frequency of similar occurrences. Probability estimates take into account the current situation and previous similar situations. For the purpose of RM, the five levels of probability are –

- Frequent (A).
- Likely (B).
- Occasional (C).
- Seldom (D).
- Unlikely (E).

(3) Sub-step 2 – Estimate the Expected Severity of an Occurrence - A severity level is a prediction of the effects of a harmful event on combat power, mission capability, or readiness. The severity level does not consider probability; severity is an estimate of the loss that would follow the envisioned event. The RM practitioner estimates the level of severity for each anticipated occurrence based on knowledge of the results of similar past occurrences. For the purpose of RM, severity is assessed at one of four levels:

- **Catastrophic (I)** - Severity is estimated as catastrophic when consequences of an event, if it occurs, are expected to include death, unacceptable loss or damage, mission failure, or the loss of unit readiness.

- **Critical (II)** - Severity is estimated as critical if the consequences of an event, if it occurs, are expected to include severe injury, illness, loss, or damage; significantly degraded unit readiness; or significantly degraded mission capability.

- **Moderate (III)** - Severity is estimated as moderate if the consequences of an event, if it occurs, are expected to include minor injury, illness, loss, or damage; degraded unit readiness; or degraded mission capability.

- **Negligible (IV)** - Severity is estimated as negligible if the consequences of an event are expected to include minimal injury, loss, or damage; little or no impact to unit readiness; or little or no impact to mission capability. (Table 1-2 summarizes examples of catastrophic, critical, moderate, and negligible severity.)

<table>
<thead>
<tr>
<th>Level</th>
<th>Sample Consequences</th>
</tr>
</thead>
</table>
| I Catastrophic | • Complete mission failure or the loss of ability to accomplish a mission.  
• Death or permanent total disability.  
• Loss of major or mission-critical systems or equipment.  
• Major property or facility damage.  
• Severe environmental damage.  
• Unacceptable collateral damage. |
| II Critical | • Significantly degraded mission capability or unit readiness.  
• Permanent partial disability or hospitalization of at least 3 personnel.  
• Extensive major damage to equipment or systems.  
• Significant damage to property or the environment. |
Substep 3 – Determine Level of Risk - After identifying and analyzing hazards, RM practitioners determine the level of risk for each hazard. Using the standard risk assessment matrix, practitioners assess the level of risk as extremely high, high, medium, or low. To make this determination, they combine probability and severity levels estimated for each hazard. The vertical axis on the left side of the risk assessment matrix (table 1-1) shows severity, with the Roman numerals I through IV representing severity levels. The horizontal axis across the top of the matrix shows probability, with the capital letters A through E representing probability levels. Where each Roman numeral and capital letter intersects, the combination correlates with one of the four levels of risk. The level of risk is not an absolute measure of the relative danger of a given operation, activity, or event. Moreover, considerations for determining the initial level of risk include effects beyond the immediate situation. The assessment of a level of risk in step 2 is an initial assessment; practitioners will revise the level of risk when they complete step 3.

- **Extremely High Risk** - Extremely high risk refers to expected loss of ability to accomplish the mission if exposure occurs during operations. A determination of extremely high risk (sometimes recorded as EH) results from three possible combinations of probability and severity. The first combination assessed as extremely high risk is a probability estimate of frequent for an envisioned event that would have catastrophic consequences in terms of severity (IA). The next involves a probability estimate of likely for an event that would have catastrophic consequences (IB). The third combination is a probability estimate of frequent for an event expected to be of critical severity (IIA). For an assessment of extremely high risk, the consequences could extend beyond the current operation. When a risk is assessed as extremely high, practitioners carefully weigh the decision to continue against the potential gain from continuing the COA.

- **High Risk** - High risk refers to significant degradation of mission capabilities in terms of the necessary standard, inability to accomplish all parts of the mission, or inability to complete the mission to standard if exposure occurs during operations. A determination of high risk (sometimes recorded as H) results from five possible combinations of probability and severity. The first two combinations assessed as high risk involve envisioned events for which the severity of the consequences would be catastrophic, and probability is estimated to be occasional (IC) or seldom (ID). The next two combinations involve events for which severity would be critical, and probability is estimated to be likely (IIB) or occasional (IIC). The final combination involves events expected to have moderately severe consequences, with a probability estimate of frequent (IIIA). An assessment of high risk implies that serious consequences will follow a hazardous event, if it occurs. Commanders carefully weigh the risk against the potential gain of the COA.
Medium Risk - Medium risk refers to the expectation of degraded mission capabilities in terms of the necessary standard and reduced mission capability if exposure occurs during operations. A determination of medium risk (sometimes recorded as M) results from five possible combinations of probability and severity. The first combination assessed as medium risk involves a probability estimate of unlikely for an event expected to have catastrophic consequences (IE). The second is a probability estimate of seldom for an event expected to have consequences of critical severity (IID). Additional combinations assessed as medium risk involve the expectation of moderately severe consequences for events with probability estimates of likely (IIIB) or occasional (IIIC). Finally, an event that would cause negligible loss with a probability estimate of frequent (IVA) is assessed as medium risk.

Low Risk - Low risk refers to expected losses that would have little or no impact on accomplishing the mission. A determination of low risk (sometimes recorded as L) results from seven possible combinations of probability and severity. The first combination assessed as low risk involves a probability estimate of unlikely for an event that would have consequences of critical severity (IIE). The next combinations are events expected to have consequences of moderate severity, with probability estimates of seldom (IIID) or unlikely (IIIE). Finally, events expected to have consequences of negligible severity, with probability estimates of likely or below (IVB, IVC, IVD, or IVE), are assessed as low risk. Either the event that would cause injury, damage, or illness is not expected, or losses would be minor and would have no long-term effect.

c. Develop Controls and Make Risk Decisions

(1) After assessing each hazard, Army leaders or individuals develop one or more controls that either eliminate the hazard or reduce the risk (probability and severity of loss) from a harmful occurrence. In developing controls, Army leaders must consider the reason for the hazard, not just the hazard in isolation. Controls can take many forms but normally fall into one of three categories:
- Educational controls.
- Physical controls.
- Hazard elimination controls.

(2) Effective controls meet the eight criteria of effectiveness (see descriptions in table 1-3)
- Feasibility.
- Acceptability.
- Suitability.
- Support.
- Explicitness.
- Standards.
- Training.
- Leadership.
- The individual

Table 1-3. Criteria for effective controls
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feasibility</td>
<td>The unit has the capability to implement the control.</td>
</tr>
<tr>
<td>Acceptability</td>
<td>The benefit gained by implementing the control justifies the cost in resources and time. The assessment of acceptability is largely subjective. Past experience, the commander’s guidance, or other external restrictions influence the assessment.</td>
</tr>
<tr>
<td>Suitability</td>
<td>The control removes the hazard or mitigates (reduces) the residual risk to an acceptable level (determined by the responsible individual).</td>
</tr>
<tr>
<td>Support</td>
<td>Adequate personnel, equipment, supplies, and facilities necessary to implement the control are available.</td>
</tr>
<tr>
<td>Explicitness</td>
<td>The control clearly specifies who, what, where, when, why, and how each control will be used.</td>
</tr>
<tr>
<td>Standards</td>
<td>Guidance and procedures for implementing the control are clear, practical, and specific.</td>
</tr>
<tr>
<td>Training</td>
<td>Knowledge and skills of personnel are adequate to implement the control.</td>
</tr>
<tr>
<td>Leadership</td>
<td>Army leaders are ready, willing, and able to enforce standards necessary to implement the control.</td>
</tr>
<tr>
<td>The Individual</td>
<td>Individual personnel are sufficiently self-disciplined and capable of implementing the control.</td>
</tr>
</tbody>
</table>

(3) Examples of Controls - Whether conducting deliberate or hasty risk assessment, RM practitioners identify all essential aspects of controls precisely—including who, what, when, where, and how. Table 1-4 shows examples of preliminary documentation identifying who, what, when, where, and how for sample hazards and controls. RM practitioners completing DD Form 2977 must, at a minimum, document the what, who, and how aspects on the form.

**Table 1-4. Examples of hazards and controls**

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsecured or unstable loads</td>
<td><strong>Who:</strong> Supervisors, Army leaders, drivers, operators. <strong>What:</strong> Ensure loads are secured in accordance with loads plans and applicable manuals or publications. <strong>Where:</strong> In the assembly area. <strong>When:</strong> Before vehicle is allowed to leave. <strong>How:</strong> Emphasize cargo center of gravity, ammunition, and pyrotechnics.</td>
</tr>
<tr>
<td>Unsecured hatches or ramps</td>
<td><strong>Who:</strong> Supervisors, Army leaders, drivers, operators. <strong>What:</strong> Inspect and correct unsafe conditions. <strong>Where:</strong> In the assembly area. <strong>When:</strong> Before executing operations (during preparation). <strong>How:</strong> Secure with locking pin or latch devices.</td>
</tr>
<tr>
<td>Unsecured crew and passengers exposed during operations on rough terrain (tracked vehicles)</td>
<td><strong>Who:</strong> Supervisors, Army leaders, drivers, operators. <strong>What:</strong> Position is no higher than nametag defilade unless engaging targets; all persons wear seatbelts or</td>
</tr>
</tbody>
</table>
| Improper passing | harnesses as appropriate; equipment is stowed and secured according to load plans.  
**Where:** In the assembly area or motor park.  
**When:** Before and during operations (preparation and execution).  
**How:** Spot-check vehicles and crews |  
| Improper ground guiding | Who: Supervisors, Army leaders, drivers, operators.  
What: Establish and enforce standards; train vehicle operators to pass other vehicles only at safe places and times while considering road visibility and traffic conditions.  
Where: In assembly areas and vehicle staging lanes.  
When: Train operators and drivers before licensing; brief operators and drivers during preparation (before execution).  
How: Verify training and licensing of drivers and operators; enforce standards. |  
| Improper passing | Who: Supervisors, Army leaders, drivers, operators.  
What: Establish and enforce standards; train vehicle operators to pass other vehicles only at safe places and times while considering road visibility and traffic conditions.  
Where: In assembly areas and vehicle staging lanes.  
When: Train operators and drivers before licensing; brief operators and drivers during preparation (before execution).  
How: Verify training and licensing of drivers and operators; enforce standards. |  
| Improper ground guiding | Who: Supervisors, Army leaders, drivers, operators.  
What: Establish and enforce standards for operation of vehicles in congested areas (bivouac sites, forward operating bases, maintenance areas, assembly areas and battle positions).  
Where: Assembly areas, motor parks.  
When: Before licensing drivers and operators; before deployments or exercises.  
How: Require use of ground guides while operating in limited visibility, backing vehicles, moving vehicles in bivouac, and conducting maintenance; and during assembly and battle positions. |  

(4) Residual Level of Risk - After RM practitioners identify effective controls, they return to the risk assessment matrix (see table 1-1) to determine the residual level of risk for each hazard and the overall residual risk for the operation. They should continue analyzing the hazards and proposing options to reduce or eliminate them until they have identified the most effective controls (see criteria in table 1-3). The appropriate level of command must approve the mission, making a final risk decision based on the residual level of risk. Planners should sort hazards and controls under consideration according to residual risk, placing the highest-risk hazards first. This allows decision makers at the appropriate level of command to identify the highest-risk hazards easily. Decision makers should keep in mind that the residual level of risk is valid (true) only if forces implement the controls.

(5) Make Risk Decisions - The purpose of RM is to provide a basis for individuals and leaders to make sound and informed risk decisions. To make those decisions, they must know the established risk tolerance and the potential gain. Ultimately, commanders are responsible for determining the risk tolerance within the command and for making risk decisions for operations, missions, or tasks. The appropriate level of command or leadership must make risk decisions
about specific hazards and controls, consistent with the risk tolerance guidance. Decision makers must balance risk against expected gains. When Soldiers are off-duty, a risk decision may be a personal one. Individuals use RM to evaluate hazards, mitigate risks, and weigh costs versus benefits of an action both on- and off-duty. (For further guidance on the appropriate risk acceptance authority and nonoperational RM integration, see DA Pam 385-30. In addition, Soldiers should consult local regulations, SOPs, or other command policy.)

d. Implement Controls - Soldiers normally implement controls during the preparation activities of the operations process. Army leaders establish how the controls will be implemented and who will manage them. They ensure selected controls are translated into briefings and curricula and then integrated with training. They direct trainers to develop practical training solutions. They ensure units receive safety equipment and instructions on its use. Army leaders ensure subordinates fully understand and implement the controls. They ensure the implemented controls are maintained to standard. Examples of ways to disseminate guidance and ensure implementation of controls include—

- Overlays and graphics.
- Drills for vehicle and aircraft silhouette identification.
- Rehearsals and battle drills.
- Refresher training on intensive threat and friendly vehicle identification for all anti-armor and air defense weapons crews.
- Installation and maintenance of communications links for key civilian organizations.
- Operation of convoys with a prescribed minimum number of vehicles.
- Provisions to carry weapons and wear body armor and helmets when outside secure compounds.
- Accident awareness, safety briefings, and warnings.

e. Supervise and Evaluate - Primarily, step 5 involves ensuring that controls are implemented and performed to standard. RM practitioners apply this step to validate that selected controls support achieving the end state. They identify weaknesses of controls and make changes or adjustments based on performance or changing situations, conditions, or events. However, supervision and evaluation are not limited to controls. Like other steps of RM, supervision and evaluation must occur throughout all phases of any operation or activity. RM practitioners supervise and evaluate all aspects of RM continuously.
CHAPTER 3 MISSION COMMAND
SECTION I: MISSION COMMAND INTRODUCTION

1. **Mission Command** is the exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander’s intent to empower agile and adaptive leaders in the conduct of unified land operations.

   a. Mission Command is exercised by Army commanders; it blends the art of command and the science of control while integrating the war fighting functions to conduct the tasks of decisive action. Mission command has six fundamental principles:

      - Build cohesive teams through mutual trust.
      - Create shared understanding.
      - Provide a clear commander’s intent.
      - Exercise disciplined initiative.
      - Use mission orders.
      - Accept prudent risk.

   b. The exercise of mission command is based on mutual trust, shared understanding, and purpose. Commanders understand that some decisions must be made quickly at the point of action. Therefore, they concentrate on the objectives of an operation, not how to achieve it. Commanders provide subordinates with their intent, the purpose of the operation, the key tasks, the desired end state, and resources. Subordinates then exercise disciplined initiative to respond to unanticipated problems. Every Soldier must be prepared to assume responsibility, maintain unity of effort, take prudent action, and act resourcefully within the commander’s intent. Mutual trust is shared confidence among commanders, subordinates, and partners.

   c. Effective commanders build cohesive teams in an environment of mutual trust. There are few shortcuts to gaining the trust of others. Trust takes time and must be earned. Commanders earn trust by upholding the Army values and exercising leadership, consistent with the Army’s leadership principles.

2. **Unified Land Operations** is the Army’s operational concept. This concept is based on the central idea that Army units seize, retain, and exploit the initiative to gain a position of relative advantage over the enemy. This is accomplished through decisive action—the simultaneous combination of offensive, defensive, and stability operations (or defense support of civil authorities) that set the conditions for favorable conflict resolution.
The Exercise of Mission Command

**Unified Land Operations**
How the Army seizes, retains, and exploits the initiative to gain and maintain a position of relative advantage in sustained land operations through simultaneous offensive, defensive, and stability operations in order to prevent or deter conflict, prevail in war, and create the conditions for favorable conflict resolution.

One of the foundations is...

**Nature of Operations**
Military operations are human endeavors. They are contests of wills characterized by continuous and mutual adaptation by all participants.

Army forces conduct operations in complex, ever-changing, and uncertain operational environments.

**Mission Command Philosophy**
Exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander’s intent to empower agile and adaptive leaders in the conduct of unified land operations.

**Guided by the principles of...**
- Build cohesive teams through mutual trust
- Create shared understanding
- Provide a clear commander’s intent
- Exercise disciplined initiative
- Use mission orders
- Accept prudent risk

The principles of mission command assist commanders and staff in balancing the art of command with the science of control.

**Mission Command Warfighting Function**
The related tasks and systems that develop and integrate those activities enabling a commander to balance the art of command and the science of control in order to integrate the other warfighting functions.

A series of mutually supported tasks...

<table>
<thead>
<tr>
<th>Commander Tasks:</th>
<th>Staff Tasks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Drive the operations process through the activities of understand, visualize, describe, direct, lead, and assess</td>
<td>• Conduct the operations process (plan, prepare, execute, and assess)</td>
</tr>
<tr>
<td>• Develop teams, both within their own organizations and with unified action partners</td>
<td>• Conduct knowledge management and information management</td>
</tr>
<tr>
<td>• Inform and influence audiences, inside and outside their organizations</td>
<td>• Conduct inform and influence activities</td>
</tr>
</tbody>
</table>

**Additional Tasks:**
- Conduct military deception
- Conduct civil affairs operations
- Conduct airspace control
- Install, operate, and maintain the network
- Conduct information protection

**Enabled by a system...**
- Personnel
- Networks
- Information systems
- Processes and procedures
- Facilities and equipment

**Mission Command System:**
Together, the mission command philosophy and warfighting function guide, integrate, and synchronize Army forces throughout the conduct of unified land operations.
Troop leading procedures provide small-unit leaders with a framework for planning and preparing for operations. Leaders of company and smaller units use troop leading procedures to develop plans and orders. This chapter describes the eight steps of troop leading procedures and their relationship to the military decision making process (MDMP). While this chapter explains troop leading procedures from a ground-maneuver perspective, it applies to all types of small units.

**TROOP LEADING PROCEDURES**

1. **Receive the Mission**
   a. Give confirmation brief to higher CDR.
      (1) Brief the higher CDR’s intent, mission, the Concept of the Operation (COO), and assigned tasks.
      (2) Obtain clarification on any portions of plan
   b. Perform Initial assessment of situation and allocate time available for planning and prep (METT-TC)

2. **Issue a Warning Order**
   a. Contains as much detail as possible.
   b. Follows the 5-para OPORD format.
   c. Initial WARNORD normally includes: mission; time and place for issuing OPORD; elements participating in the operation; specific tasks not addressed in SOPs; timeline.

3. **Make a Tentative Plan.** Conduct Mission Analysis following the METT-TC format:
   - **Mission**- Analyze highers’ missions/intent, COO, Tasks/your mission, Constraints.
   - **Enemy**- Analyze enemy situation. (composition, disposition, strengths, Course of Action (COA)s).
   - **Terrain and Weather.** Analyze military aspects of terrain and weather:
     - **Terrain:**
       - Observation and Fields of Fire
       - Avenues of Approach
       - Key Terrain
       - Obstacles
       - Cover and Concealment
     - **Weather:**
       - Visibility
       - Winds
       - Precipitation
       - Cloud cover
       - Temperature/humidity
   - **Troops Available.** Determine combat potential.
➢ Time Available- Analyze avail. time through mission accomplishment. Monitor, assess, and update throughout.
➢ Civil considerations- Analyze ASCOPE: areas, structures, capabilities, organizations, people, and events. How may these affect your mission?

4. Initiate Movement
5. Conduct Reconnaissance
   a. Personally observe the AO if possible
   b. Minimum action is a thorough map/aerial imagery recon
6. Complete the Plan
   a. Incorporate results of recon into OPORD
   b. Prepare overlays, refine IDF target list, coordinate sustainment with signal requirements, update tentative plan.
   c. At lower levels, may entail only confirming/updating info in tentative plan.
   d. If time allows, make final coordination with adjacent units and Higher HQ prior to issuing the order.
7. Issue the Operation Order
   a. Small-unit orders normally issued verbally and supplemented by graphics
   b. Follows the standard 5-paragraph OPORD format
   c. Typically, leaders below company level do not issue a commander’s intent. They reiterate the intent of their higher and next higher commanders
   d. Issued ideally with a view of the Obj. If not feasible, use sand table, detailed sketch, maps, and other products to depict the AO and situation.
8. Supervise and Refine
   a. Throughout TLP, monitor mission prep., refine plan, coordination with adjacent units, supervise and assess preparation.
   b. Conduct Confirmation brief with subordinates. Ensure subordinates know the mission, the commander’s intent, the concept of the operation, and their assigned tasks
   c. Crucial component is Rehearsals. (NOTE: Security must be maintained during rehearsals.)
      (1) Leaders conduct rehearsals to:
         – Practice essential tasks
         – Identify weaknesses or problems in the plan
         – Coordinate subordinate element actions
         – Improve soldier understanding of the COO
         – Foster confidence among Soldiers
      (2) Rehearsal Types [Chap 12, FM 6-0]
         – Back-brief (Given to Cdr after subordinates given time to complete plan)
         – Combined arms
         – Support
– Battle drill or SOP (Most common for PLTs, SQDs, Sections)

(3) Rehearsal Techniques:
– Full-Dress (preferred if time permits)
– Reduced Force (key leaders)
– Terrain Model
– Sketch Map
– Map
– Network

(4) The leader should establish a priority for rehearsals based on available time. The priority of rehearsals flows from the decisive point of the operation. Thus the order of precedence is:
– Actions on the objective
– Actions on enemy contact
– Special teams
– Movement techniques
– Others as required

d. Inspect personnel and equipment.
   (1) SLs should conduct initial inspections shortly after receipt of the WARNORD
   (2) A leader (TL/APL/PSG) should conduct spot checks throughout the preparation
   (3) The unit leader(s) (SL/PL/APL/PSG) conduct final inspections
   (4) Inspections should include:
   (5) Weapons and ammunition
   (6) Uniforms and Equipment
   (7) Mission-essential equipment
   (8) Soldier understands the mission and their specific responsibilities
   (9) Communications
   (10) Rations and water
   (11) Camouflage
   (12) Deficiencies noted during earlier inspections
SECTION III – ORDERS
(ATTP 5-0.1 SEP11)

Commanders direct operations and communicate their vision, commander’s intent, and decisions through plans and orders. Effective plans and orders clearly describe how the commander intends to combine offensive, defensive, and stability or civil support operations throughout the conduct of operations. They synchronize subordinate activities in time, space, and purpose to achieve objectives and accomplish missions. Plans and orders not only direct subordinate units but provide information to facilitate coordination among organizations outside the command. Effective plans and orders account for those joint, interagency, intergovernmental, multinational, and host-nation organizations involved in the operation.

Effective plans and orders encourage subordinate’s initiative by providing the “what” and “why” of tasks to subordinate units, and leave the “how” to perform the tasks to subordinates. To maintain clarity and simplicity, the base plan or order is kept as short and concise as possible. Detailed information and instructions are addressed in annexes as required.

1. ORDERS GROUP
   a. Platoon Orders – at a minimum, the following individuals will attend platoon orders:
      (1) Platoon leader
      (2) Platoon sergeant
      (3) Squad leaders
      (4) Platoon Forward Observer (FO)
      (5) PLT Medic
      (6) Attachment leaders
   b. Squad Orders – at a minimum, the following individuals will attend squad orders:
      (1) Squad leader
      (2) Team leaders

2. ORDERS FORMATS
   a. Warning Order (WARNORD)
      (1) Contains as much detail as possible.
      (2) Follows the 5-para OPORD format.
      (3) Initial WARNORD normally includes: mission; time and place for issuing OPORD; elements participating in the operation; specific tasks not addressed in SOPs; timeline.
   b. Fragmentary Order (FRAGORD) - Include all five OPORD paragraph headings and differ from OPORDs only in the degree of detail provided.
   c. Operation Orders (OPORD) – The following are adjusted OPORD formats to accommodate the CST training environment.
      (1) Situation
      (2) Mission
      (3) Execution
      - Commander’s Intent
      - Concept of Operation
– Scheme of Movement and Maneuver
– Scheme of Fires
– Tasks to Subordinate Units

(4) Sustainment
(5) Command and Signal

d. Performance Steps

3. Develop the SITUATION paragraph.

a. Weather and light data.

(1) Light conditions:
– Begin morning nautical twilight (BMNT).
– Sunrise.
– Sunset.
– End evening nautical twilight (EENT).
– Moonrise.
– Moonset.
– Percent of illumination.

(2) Weather forecast for the operation.

(3) Effects of the weather and light conditions on the operation.

(a) Trafficability.

(b) Visibility.

(c) Effect on the lasers and the thermals.

b. Terrain.

(1) Obstacles, hills, valleys, road types and conditions, streams, rivers, bridges, and built-up areas.

(2) Avenues of approach.

(a) Size of unit that can be supported.

(b) Start and end point.

(c) Objective.

(3) Key terrain (discuss how friendly and / or threat forces may attempt to use it to their advantage).

(4) Observation and fields of fire.

(5) Cover and concealment.

(6) Engagement areas (EA).

(7) Overall effect of terrain on the operation

g. Enemy forces.

Note: In this subparagraph, it should be noted that there will be groups or individuals in the area of operations (AO) that present a threat or may be hostile to friendly forces, but are not included as the enemy. Criminal gangs, religious factions, desperate refugees, or those inhabitants upset with the local situation, present circumstances that will complicate operations, but do not warrant the same response as enemy combatants.
(1) Identification.
(2) Activity.
(3) Location.
(4) Disposition.
(5) Strength.
(6) Composition, to include type and capabilities of equipment.
(7) Other threat information critical to the upcoming operation, to include:
   (a) Chemical, nuclear, field artillery, and obstacle capabilities.
   (b) Air defense artillery (ADA).
   (c) Aviation, including helicopters.
   (d) Electronic warfare.
(8) Most probable threat courses of action (COA).
(9) Most dangerous threat COA.

h. Friendly forces
   (1) Mission of higher headquarters (company team / troop) including commander’s intent and scheme of maneuver.
   (2) Combat Identification (CID) equipment or procedures / mission of adjacent units (left, right, front, rear)
   (3) ID - mission of reserves in higher headquarters.
   (4) ID - mission of supporting units with a direct support (DS) / reinforcing (R) role to higher headquarters (field artillery, engineer, ADA).
   (5) Which higher headquarters element has priority of fires.
   (6) Close air support (CAS) allocated to higher headquarters, including number of sorties available.

  i. Attachments and detachments to the platoon and higher

4. Develop the MISSION paragraph

   Note: This is the WHO, WHAT, WHEN, WHERE, and WHY which states essential task(s) to be accomplished by the entire unit, to include on-order missions, and clearly defines the platoon’s objective.

5. Develop the EXECUTION paragraph

   a. Commander’s intent
   b. Concept of the operation; the sequence of subparagraphs is:

   Note: The concept statement further explains and expands on your (and / or the commander’s) intent, particularly his vision of HOW he will conduct the operation and WHO he will assign to execute it.

   (1) Scheme of maneuver.
   (2) Fires, as follows:
      (a) Purpose for field artillery and mortar fires or aviation fires (how fires will be used to support the maneuver).
      (b) Priority of fires within the unit.
(c) Allocation of final protective fires (FPF).
(d) Preparation starting time and duration of fires.
(e) Triggers (trigger line / point or event).
(f) Description of threat fires in the AO.
(g) Special fire allocation / use (smoke, illumination, and CAS.
(h) Restrictions.

(3) Engineer support (obstacles, mines, and fortifications), as follows:
(a) Priority of engineer effort (mobility, counter-mobility, survivability).
(b) Priority of engineer support.
(c) Obstacle overlay and obstacle list.
(d) Logistical constraints.
(e) On-order missions.

**c. Specific instructions.**

**d. Coordinating instructions, as follows:**

(1) Time schedule for critical events, including:
(a) Rehearsals confirmation briefing (back briefs).
(b) Pre-combat inspection.
(c) First movement.
(d) Arrival of any attachments / detachments.
(e) Bore sighting.

(2) Movement instructions.

(3) Passage of lines, including:
(a) Contact points.
(b) Passage points.
(c) Lanes, to include identification / markings.

(4) Actions at danger areas.

(5) Actions on expected contact.

(6) Rally points.

(7) Rules of engagement (ROE) / rules of interaction (ROI).

(8) Intelligence requirements, to include priority intelligence requirements (PIR).

(9) Air defense warning and weapons control status.

(10) Mission-oriented protective posture (MOPP) level and operational exposure guidance (OEG) data.

(11) Be-prepared tasks or other general information not provided in concept of the operation or specific instructions.

**4. Develop the SUSTAINMENT paragraph.**

**a. Location and movement plan of the company / troop trains (initial and subsequent grids).**

**b. Material and services.**

(1) Supply.
(a) Priorities of supply.
(b) Resupply points and pre-stock sites.
(c) Ration cycle.
(d) Location of task force trains.

(2) Transportation.
(a) Supply routes.
(b) Logistics release points (LRP).
(c) Priorities established on the main supply route (MSR).

(3) Services: handling of killed in action (KIA).

(4) Maintenance.
(a) Maintenance procedures.
(b) Vehicle evacuation.
(c) Task force unit maintenance collection point (UMCP) location.

c. Medical evacuation and treatment.
(1) Location of company / troop medics.
(2) Location of battalion / squadron aid station.
(3) Procedures for treatment and evacuation of wounded.
(4) Aero medical evacuation information.
(5) Location of the ambulance exchange points.
(6) Handling of contaminated wounded.

d. Personnel.
(1) Handling and disposition instructions for enemy prisoners of war (EPW).
(2) EPW guard instructions.
(3) Location of EPW collection point.
(4) Instructions for ROI.
(5) Number of expected replacements.
(6) Cross-leveling procedures.

e. Miscellaneous.

5. Develop the COMMAND AND SIGNAL paragraph.

a. Command.
   a. Location of:
      (a) Phase line (PL) during the operation.
      (b) Commander.
      (c) Executive officer (XO).
      (d) Tactical operations center (TOC).
      (e) Tactical command post (TAC CP).
   b. Succession of command.

b. Control - Command Posts Describe the employment of command posts (CPs), including the location of each CP and its time of opening and closing, as appropriate. State the
primary controlling CP for specific tasks or phases of the operation (for example, “The division tactical command post will control the air assault”)

c. Signal.
   (1) Signal operating instructions (SOI) index and edition in effect.
       (a) Key frequencies.
       (b) Key call signs.
       (c) Current item number identifier.
   (2) Appropriate fills, time, and change over data.
   (3) Listening silence instructions.
   (4) Challenge and password.
   (5) Special signals, to include use of pyrotechnics.
   (6) Code words.
CHAPTER 4 – OPERATIONS

SECTION I - REPORTS

1. SALUTE -
   a. Size
   b. Activity
   c. Location
   d. Unit/Uniform
   e. Time
   f. Equipment

2. SITREP - (situation report) given IAW OPORD

3. Spot Reports (FM 6-99 AUG13) - normally, team leaders gives an Ammunition, Casualty, Equipment (ACE) report (a common spot report) to the squad leader and the squad leaders give them to the platoon sergeant after contact with the enemy.
   a. Ammunition (GREEN, AMBER, BLACK)
   b. Casualty (UP or # OF CASUALTIES)
   c. Equipment (UP or NAME OF MISSING EQUIPMENT)

4. Logistics - team leaders and squad leaders report twice daily up the chain of command.

5. Sensitive item - status reported by team leaders and squad leaders up the chain of command twice daily.

6. Personnel status - team leaders and squad leaders report twice daily. Normally, reports are given at stand-to and before nightfall.

UNEXPLODED ORDNANCE/IED 9 LINE REPORT
(FM 3-21.10 Pgs G-13, G-14 JUL06)

Many areas, especially previous battlefields, might be littered with a wide variety of sensitive and deadly Un-exploded Ordnance (UXO). Soldiers need to follow these precautions on discovering a suspected UXO:

1. Do not move toward the UXO. Some types of ordnance have a magnetic or motion-sensitive fuse.
2. Never approach or pick up UXO even if identification is impossible from a distance. Observe the UXO with binoculars if available.
3. Send a UXO report to higher HQ. Use radios at least 100 meters away from the ordnance. Some UXO fuses might be set off by radio transmissions.
   a. DTG: Date and time UXO was discovered.
   b. Reporting Unit or Activity, and UXO Location: Grid coordinates.
   c. Contact Method: How EOD team can contact the reporting unit.
   d. Discovering Unit POC: phone number and unit frequency or call sign.
e. **Type of UXO:** Dropped, projected, thrown, or placed, and number of items discovered.

f. **Hazards Caused by UXO:** Report the nature of perceived threats such as a possible chemical threat or a limitation of travel over key routes.

g. **Resources Threatened:** Report any equipment, facilities, or other assets threatened by the UXO.

h. **Impact on Mission:** Your current situation and how the UXO affects your status.

i. **Protective Measures:** Describe what you have done to protect personnel and equipment such as marking the area and informing local civilians.

4. Mark the area with mine tape or other obvious material at a distance from the UXO to warn others of the danger. Proper markings will also help Explosive Ordnance Disposal (EOD) personnel find the hazard in response to the UXO report.

5. Evacuate the area while carefully scanning for other hazards.

6. Take protective measures to reduce the hazard to personnel and equipment. Notify local people in the area.

### SECTION II – FIRE CONTROL AND DISTRIBUTION

1. **Fire control measures** Fire control measures are the means by which the company commander or subordinate leaders control direct fires. Helps the unit acquires the enemy, focus fires, distribute the effects, and prevent fratricide.

<table>
<thead>
<tr>
<th>Terrain-Based Fire-Control Measures</th>
<th>Threat-Based Fire-Control Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target reference point</td>
<td>Fire patterns</td>
</tr>
<tr>
<td>Engagement area</td>
<td>Target array</td>
</tr>
<tr>
<td>Sector of fire</td>
<td>Engagement priorities</td>
</tr>
<tr>
<td>Direction of fire</td>
<td>Weapons ready posture</td>
</tr>
<tr>
<td>Terrain-based quadrant</td>
<td>Engagement criteria</td>
</tr>
<tr>
<td>Friendly based quadrant</td>
<td>Weapons control status</td>
</tr>
<tr>
<td>Maximum engagement line</td>
<td>Rules of engagement</td>
</tr>
<tr>
<td>Restrictive fire line</td>
<td>Weapons safety posture</td>
</tr>
<tr>
<td>Final protective line</td>
<td>Engagement techniques</td>
</tr>
</tbody>
</table>

2. **Engagement Techniques** – Effects-oriented direct-fire distribution measures.
   a. Point Fire
   b. Area Fire
   c. Volley Fire
   d. Alternating Fire
   e. Sequential Fire
   f. Observed Fire
   g. Time of Suppression
   h. Reconnaissance by Fire

3. **Fire Commands** – Oral orders issued by leader to focus and distribute fires as required in order to achieve desired effects. The elements of a Fire Command include:
   a. **Alert**. The leader designates which weapon(s) is to fire by weapon type, Soldier’s position, or Soldier’s name. (Ex: GUIDONS (all subordinate elements), RED (1st Plt only))
   b. **Weapon or Ammunition (Optional)**. Identifies weapon or ammunition to be employed. May designate type or number of rounds to limit ammo expenditure. (Ex: JAVELIN, MACHINE GUN)
c. **Target Description.** The leader identifies the target. For multiple targets, he also tells which target to engage first. (Ex: TROOPS IN TRENCH, BUNKER, PCs)

d. **Orientation.** Identifies location or vicinity of target. (Ex: Target Reference Point (TRP)13, ONE O’CLOCK, LEFT FRONT, ON MY TRACER)

e. **Range (Optional).** Distance to target.

f. **Control (Optional).** Used to direct desired target effects, distribution methods, or engagement techniques. (Ex: JAVELIN ENGAGE VEHICLE, MACHINE GUNS ENGAGE TROOPS)

g. **Execution (Time).** Specifies when direct fires should be initiated. (Ex: FIRE, AT MY COMMAND, AT YOUR COMMAND, AT PHASE LINE ORANGE)

**SECTION III – WEAPONS**

1. **Basic Safety:**
   a. Weapons on safe until target is identified and acquired
   b. Muzzle Awareness
   c. Finger outside of trigger well until sights are on the target
   d. Every weapon is ALWAYS treated as loaded

2. **Weapons Readiness**
   a. **GREEN:**
      – Weapon on Safe
      – **Empty Magazine** inserted in weapon
      – Bolt forward, ejection port cover closed
   b. **AMBER:**
      – Weapon on Safe
      – **Magazine with ammunition** inserted in weapon
      – Bolt forward, **NO round in chamber**, ejection port cover closed.
   c. **RED:**
      – Weapon on safe
      – **Magazine with ammunition** inserted in weapon
      – **Round chambered**, ejection port cover closed.

3. **Clearing the M16/A1, M16/A2, or M4 Rifle** -
   a. Point the weapon in a safe direction. Place the selector lever on safe.
   b. Remove the magazine
   c. Lock the bolt to the rear
   d. Inspect the chamber and receiver areas for ammunition
   e. With the selector switch on safe, allow the bolt to go forward.

**INFANTRY PLATOON WEAPONS GUIDE (FM 3-21.8 Pgs 2-5, 2-8, App A MAR07)**

1. **TYPES OF INFANTRY PLATOON WEAPONS** – There are five types: small arms; machine guns; grenade launchers; shoulder-launched munitions (SLM) i.e. AT4 / Close Combat Missile System (CCMS) i.e. Javelin; and mortars.
2. FIRE TEAM WEAPONS – The rate of fire is the number of rounds fired in a minute by a particular weapon system. The leader dictates the rate of fire for each weapon system under his control. There are two factors that contribute to leader decisions about rates of fire: achieving fire superiority; and ammunition constraints.

   a. RIFLE - Rifleman and Infantry leaders are currently armed with the M4 rifle. The M4 rifle is a direct fire weapon that fires ball and tracer 5.56-mm ammunition. The rifleman’s primary role is to kill the enemy with precision fire. In this capacity, the rate of fire for the M4 rifle is not based on how fast the Soldier can pull the trigger. Rather, it is based on how fast the Soldier can accurately acquire and engage the enemy. The second role of the rifleman is to engage likely or suspected enemy targets with suppressive fire.

   b. M249 MACHINE GUN - The automatic rifleman is currently armed with an M249 machine gun. The M249 is a direct-fire, low trajectory weapon that is primarily used to fire ball tracer 5.56-mm ammunition linked at area targets. The M249 also has the ability to fire unlinked 5.56-mm ammunition in 30-round magazines, but reliability is greatly reduced. Firing with a magazine should be limited to emergency situations.

   c. M240B MACHINE GUN - Two medium machine guns and crews are found in the Infantry platoon’s weapons squad. Machine gunners are a self-contained support by fire element or with a rifle squad to provide long range, accurate, sustained fires against enemy Infantry and apertures in fortifications, buildings, and lightly-armored vehicles. Machine gunners also provide a high volume of short-range fire in self defense against aircraft. The M240B fires 7.62-mm ammunition.

   d. SHOULDER-LAUNCHED MUNITIONS - Shoulder-launched munitions (SLM) are lightweight, self-contained, single-shot, disposable weapons that consist of unguided free flight, fin-stabilized, rocket-type cartridges packed in launchers. SLM provide the Soldier a direct fire capability to defeat enemy personnel within field fortifications, bunkers, caves, masonry structures, and lightly armored vehicles. Soldiers use SLM to engage enemy combatants at very close ranges—across the street or from one building to another. Likewise, SLM may be fired at
long distances to suppress the enemy or kill him. Soldiers may employ the SLM as a member of a support-by-fire element to incapacitate enemy forces that threaten the friendly assault element. When the assault element clears a building, the leader may reposition the SLM gunner inside to engage a potential counterattack force.

SECTION IV – RANGE CARDS AND SECTOR SKETCHES
(STP 7-11B1-SM-TG Pg 218; ATTP 3-21.71 NOV10)

1. RANGE CARDS
   a. The marginal information at the top of the card is listed as follows

      (1) SQD, PLT, CO. The squad, platoon, and company designations are listed. Units higher than company are not listed.
      (2) MAGNETIC NORTH. The range card is oriented with the terrain and the direction of magnetic north arrow is drawn.

   b. The gunner's sector of fire is drawn in the sector sketch section. It is not drawn to scale, but the data referring to the targets must be accurate.

      (1) The weapon symbol is drawn in the center of the small circle.
      (2) Left and right limits are drawn from the position. A circled "L" and "R" are placed at the end of the appropriate limit lines.
      (3) The value of each circle is determined by using a terrain feature farthest from the position that is within the weapons capability. The distance to the terrain is determined and rounded off to the next even hundred. The maximum number of circles that will divide evenly into the distance is determined and divided. The result is the value for each circle. The terrain feature is then drawn on the appropriate circle.
      (4) All TRPs and reference points in sector are drawn, numbered consecutively and circled.
      (5) Dead space is drawn in the sector.
      (6) A maximum engagement line is drawn on range cards for anti-armor weapons.
      (7) Weapon reference point is numbered last. Location uses a six-digit grid coordinate. When there is no terrain feature to be designated, the location is shown as an eight-digit grid coordinate.

   c. The data section is filled in as follows:

      (1) POSITION IDENTIFICATION. Identified as Primary, Alternate, or Supplementary.
      (2) DATE. Date and time the range card was completed.
      (3) WEAPON. Indicates the weapons used.
      (4) EACH CIRCLE EQUALS ______ METERS. Write distance in meters between circles.
      (5) NO. Starting with left and right limits, TRPs and reference points listed in numerical order.
      (6) DIRECTION/DEFLECTION. The direction listed in degrees, deflection listed in mils.
      (7) ELEVATION. The elevation listed in mils.
      (8) RANGE. Distance in meters to left and right limits, TRPs, and reference points.
      (9) AMMO. Type of ammunition used.
      (10) DESCRIPTION. Name of the object (e.g., FARMHOUSE, WOODLINE, HILLTOP).
(11) REMARKS. Record weapon reference point data and any additional information.
2. **SECTOR SKETCHES**

1. Squad sector - Squad leaders prepare an original and one copy of the sector sketch. The original remains in the squad CP, and the copy is turned in to the platoon leader. As a minimum, include:
   (1) Key terrain within the squad sector.
   (2) Each individual fighting position and its primary and secondary sectors of fire.
   (3) Key weapons positions, primary and secondary sectors of fire, and fire control measures.
   (4) All CP and OP locations.
   (5) All dead space within squad sector.
   (6) All obstacles and mines within squad sector.

2. Platoon sector - Platoon leader prepares an original and one copy of the sector sketch. The original remains in the platoon CP, and the copy is turned in to the company commander. As a minimum, include:
   (1) Squad positions and sectors of fire.
   (2) Key weapons positions, sectors of fire, and fire control measures.
   (3) CPs (Command Post), OPs (Observation Post), and patrol routes.
   (4) Platoon maximum engagement lines.
   (5) All dead space within platoon sector.
(6) All mines and obstacles within platoon sector.

(7) Any TRPs or FPFs (Final Protective Fires) within platoon sector.
AR = Automatic Rifleman
SL = Squad Leader
MG = Machine Gun
TL = Team Leader
PL = Platoon Leader
△ = OP
CHAPTER 5 – COMMUNICATIONS
(FM 6-02.53; FM 3-21.10 Pg 4-51 JUL06; FM 3-21.8 Pg 2-12 MAR07; FM 21-60 SEP87)

SECTION I – PROCEDURE WORDS (PROWORDS)

1. PROWORDS
   a. Speed up communications
   b. Add a degree of security
   c. Help with mission command
   d. Pro-words are established during tactical operations to describe objectives, phase lines, check points and link ups and to keep voice transmission as short and clear as possible; radio operators use them to take the place of long sentences.

2. Signals - Signals can be used in many forms during an operation. Signals are usually either audio or visual. The key to the use of signals is ensuring everyone is aware of the signal and its meaning.

<table>
<thead>
<tr>
<th>PROWORD</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL AFTER</td>
<td>The portion of the message to which I have reference is all that which follows ______.</td>
</tr>
<tr>
<td>ALL BEFORE</td>
<td>The portion of the message to which I have reference is all that which precedes ______.</td>
</tr>
<tr>
<td>AUTHENTICATE</td>
<td>The station called is to reply to the challenge which follows</td>
</tr>
<tr>
<td>AUTHENTICATION IS</td>
<td>The transmission authentication of this message is ______.</td>
</tr>
<tr>
<td>BREAK</td>
<td>I hereby indicate the separation of the text from other portions of the message.</td>
</tr>
<tr>
<td>CALL SIGN</td>
<td>The group that follows is a call sign.</td>
</tr>
<tr>
<td>CORRECT</td>
<td>You are correct, or what you have transmitted is correct.</td>
</tr>
<tr>
<td>CORRECTION</td>
<td>An error has been made in this transmission. Transmission will continue with the last word correctly transmitted.</td>
</tr>
<tr>
<td></td>
<td>An error has been made in this transmission (or message indicated). The correct version is ______.</td>
</tr>
<tr>
<td></td>
<td>That which follows is a corrected version in answer to your request for verification.</td>
</tr>
<tr>
<td>DISREGARD THIS</td>
<td>This transmission is in error. Disregard it. This</td>
</tr>
<tr>
<td><strong>TRANSMISSION -- OUT</strong></td>
<td>PROWORD shall not be used to cancel any message that has been completely transmitted and for which receipt or acknowledgement has been received.</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>DO NOT ANSWER</strong></td>
<td>Stations called are not to answer this call, receipt for this message, or otherwise to transmit in connection with this transmission. When this PROWORD is employed, the transmission shall be ended with the PROWORD &quot;OUT&quot;.</td>
</tr>
<tr>
<td><strong>EXECUTE</strong></td>
<td>Carry out the purpose of the message or signal to which this applies. To be used only with the executive mode.</td>
</tr>
<tr>
<td><strong>EXECUTE TO FOLLOW</strong></td>
<td>Action on the message or signal which follows is to be carried out upon receipt of the PROWORD &quot;EXECUTE&quot;. To be used only with the delayed executive method.</td>
</tr>
<tr>
<td><strong>FLASH</strong></td>
<td>Precedence FLASH</td>
</tr>
<tr>
<td><strong>FROM</strong></td>
<td>The originator of this message is indicated by the address designator immediately following.</td>
</tr>
<tr>
<td><strong>I AUTHENTICATE</strong></td>
<td>The group that follows is the reply to your challenge to authenticate.</td>
</tr>
<tr>
<td><strong>IMMEDIATE</strong></td>
<td>Precedence IMMEDIATE.</td>
</tr>
<tr>
<td><strong>IMMEDIATE EXECUTE</strong></td>
<td>Action on the message or signal following is to be carried out on receipt of the word EXECUTE. To be used only with the Immediate Executive Method.</td>
</tr>
<tr>
<td><strong>I READ BACK</strong></td>
<td>The following is my response to your instructions to read back.</td>
</tr>
<tr>
<td><strong>I SAY AGAIN</strong></td>
<td>I am repeating transmission or portion indicated.</td>
</tr>
<tr>
<td><strong>I SPELL</strong></td>
<td>I shall spell the next word phonetically</td>
</tr>
<tr>
<td><strong>I VERIFY</strong></td>
<td>That which follows has been verified at your request and is repeated. To be used only as a reply to VERIFY.</td>
</tr>
<tr>
<td><strong>MORE TO FOLLOW</strong></td>
<td>Transmitting station has additional traffic for the receiving station.</td>
</tr>
<tr>
<td><strong>OUT</strong></td>
<td>This is the end of my transmission to you and no answer is required or expected.</td>
</tr>
<tr>
<td><strong>OVER</strong></td>
<td>This is the end of my transmission to you and a response is necessary. Go ahead, transmit</td>
</tr>
<tr>
<td><strong>PRIORITY</strong></td>
<td><strong>Precedence</strong></td>
</tr>
<tr>
<td>--------------</td>
<td>----------------</td>
</tr>
<tr>
<td>READ BACK</td>
<td>Precedence PRIORITY</td>
</tr>
<tr>
<td>ROGER (Use instead of “copy”)</td>
<td></td>
</tr>
<tr>
<td>ROUTINE</td>
<td>Precedence ROUTINE</td>
</tr>
<tr>
<td>SAY AGAIN</td>
<td></td>
</tr>
<tr>
<td>SILENCE(Repeated three or more times)</td>
<td></td>
</tr>
<tr>
<td>SILENCE LIFTED</td>
<td></td>
</tr>
<tr>
<td>SPEAK SLOWER</td>
<td></td>
</tr>
<tr>
<td>STOP REBROADCASTING</td>
<td></td>
</tr>
<tr>
<td>THIS IS</td>
<td></td>
</tr>
<tr>
<td>TIME</td>
<td></td>
</tr>
<tr>
<td>UNKNOWN STATION</td>
<td></td>
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<tr>
<td>VERIFY</td>
<td></td>
</tr>
<tr>
<td>WAIT</td>
<td></td>
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<tr>
<td>WAIT -- OUT</td>
<td></td>
</tr>
<tr>
<td>WILCO</td>
<td></td>
</tr>
</tbody>
</table>
The word of the message to which I have reference is that which follows ______.

The word of the message to which I have reference is that precedes ______.

**PHONETIC ALPHABET**

<table>
<thead>
<tr>
<th>A</th>
<th>ALFA</th>
<th>AL FAH</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>BRAVO</td>
<td>BRAH VOH</td>
</tr>
<tr>
<td>C</td>
<td>CHARLIE</td>
<td>CHAR LEE or SHAR LEE</td>
</tr>
<tr>
<td>D</td>
<td>DELTA</td>
<td>DELL TAH</td>
</tr>
<tr>
<td>E</td>
<td>ECHO</td>
<td>ECK OH</td>
</tr>
<tr>
<td>F</td>
<td>FOXTROT</td>
<td>FOKS TROT</td>
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<td>G</td>
<td>GOLF</td>
<td>GOLF</td>
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<tr>
<td>H</td>
<td>HOTEL</td>
<td>HOH TELL</td>
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<td>IN DEE AH</td>
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<td>JULIETT</td>
<td>JEW LEE ETT</td>
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<td>K</td>
<td>KILO</td>
<td>KEY LOH</td>
</tr>
<tr>
<td>L</td>
<td>LIMA</td>
<td>LEE MAH</td>
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<tr>
<td>M</td>
<td>MIKE</td>
<td>MIKE</td>
</tr>
<tr>
<td>N</td>
<td>NOVEMBER</td>
<td>NO VEM BER</td>
</tr>
<tr>
<td>O</td>
<td>OSCAR</td>
<td>OSS CAH</td>
</tr>
<tr>
<td>P</td>
<td>PAPA</td>
<td>PAH PAH</td>
</tr>
<tr>
<td>Q</td>
<td>QUEBEC</td>
<td>KEH BECK</td>
</tr>
<tr>
<td>R</td>
<td>ROMEO</td>
<td>ROW ME OH</td>
</tr>
<tr>
<td>S</td>
<td>SIERRA</td>
<td>SEE AIR RAH</td>
</tr>
<tr>
<td>T</td>
<td>TANGO</td>
<td>TANG GO</td>
</tr>
<tr>
<td>U</td>
<td>UNIFORM</td>
<td>YOU NEE FORM or OO NEE FORM</td>
</tr>
<tr>
<td>V</td>
<td>VICTOR</td>
<td>VIK TAH</td>
</tr>
<tr>
<td>W</td>
<td>WHISKEY</td>
<td>WISS KEY</td>
</tr>
<tr>
<td>X</td>
<td>XRAY</td>
<td>ECKS RAY</td>
</tr>
<tr>
<td>Y</td>
<td>YANKEE</td>
<td>YANG KEY</td>
</tr>
<tr>
<td>Z</td>
<td>ZULU</td>
<td>ZOO LOO</td>
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Number pronunciation guide

<table>
<thead>
<tr>
<th>Numeral</th>
<th>Spoken As</th>
<th>Numeral</th>
<th>Spoken As</th>
</tr>
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<tbody>
<tr>
<td>0</td>
<td>ZE RO</td>
<td>5</td>
<td>FIFE</td>
</tr>
<tr>
<td>1</td>
<td>WUN</td>
<td>6</td>
<td>SIX</td>
</tr>
<tr>
<td>2</td>
<td>TOO</td>
<td>7</td>
<td>SEV EN</td>
</tr>
<tr>
<td>3</td>
<td>TREE</td>
<td>8</td>
<td>AIT</td>
</tr>
<tr>
<td>4</td>
<td>FOW ER</td>
<td>9</td>
<td>NIN ER</td>
</tr>
</tbody>
</table>
SECTION II – RADIO CALL PROCEDURES

A preliminary call will be transmitted when the sending station wishes to know if the receiving station is ready to receive a message. When communications reception is good and contact has been continuous, a preliminary call is optional. The following is an example of a preliminary call—
A1D THIS IS B6T, OVER.
B6T THIS IS A1D, OVER.
A1D THIS IS B6T (sends message), OVER.
B6T THIS IS A1D, ROGER OUT.

1. JULIAN DATE – The SINCGARS uses a special two-digit form of the Julian date as part of the sync time. The two digit Julian date begins with 01 on 1 January and continues through 00, repeating as necessary to cover the entire year.

2. SYNC TIME – To maintain proper sync time, the SINCGARS uses seven internal clocks: a base clock, plus one for each of the six FH channels. Manual and cue settings will display the base clock time.

3. Very High Frequency Radio Systems - SINCGARS provide interoperable communications between C2 assets and have the capability to transmit and receive secure voice and data. SINCGARS is secured with electronic attack (EA) security features (such as frequency hopping [FH]) that enable the United States (US) Army, United States Navy (USN), United States Air Force (USAF), and United States Marine Corps (USMC) communications interoperability. This interoperability ensures successful communications for joint and single component combat operations.

4. Single-Channel Ground Radio System Characteristics and Capabilities
   a. The SINCGARS family is designed on a modular basis to achieve maximum commonality among various ground and airborne configurations. A common RT is used in the man pack and all vehicle configurations. These individual components are totally interchangeable from one configuration to the next. Additionally, the modular design reduces the burden on the logistics system to provide repair parts.
   b. SINCGARS operates in either the SC or FH mode. It is compatible with all current US and multinational VHF radios in the SC non-secure mode. SINCGARS is compatible with other USAF, USMC, and USN SINCGARS in the FH mode. SINCGARS stores eight SC frequencies, including the cue and manual frequencies and six separate hopsets.
   c. SINCGARS accepts either digital or analog input and imposes the signal onto a SC or FH output signal. In FH, the input changes frequency about 100 times per second over portions of the tactical VHF range. This hinders threat intercept and jamming units from locating or disrupting friendly communications.
GROUND VERSION RECEIVER/TRANSMITTER
Either the RT-1523/A/B/C/D (refer to Figure 6-1) or the RT-1523E (refer to Figure 6-2) comprise the core component of all ground-based radio sets. The RT-1523 series has internal COMSEC circuits (source of the ICOM designation). The ground versions are equipped with a whisper mode for noise restriction during patrolling or while in defensive positions. The RTO whispers into the handset and is heard at the receiver in a normal voice.

Figure 6-1 Front panel ICOM radio RT-1523/A/B/C/D

Figure 6-2. Front panel ICOM radio RT-1523E

ADVANCED SYSTEM IMPROVEMENT PROGRAM
The SINCGARS ASIP increases the performance of the SINCGARS SIP (RT-1523 C/D models). It also increases its operational capability in support of the tactical Internet, specifically improved data capability, manpower and personnel integration requirement compliance, and flexibility in terms of interfaces with other systems. Figure 6-3 is an example of the SINCGARS ASIP radio.
Table 6-2 outlines a comparison of the SINCGARS ICOM, SINCGARS SIP, and the SINCGARS ASIP. All ASIP radios can be physically remoted by another ASIP radio up to 4 km (2.4 miles) away, via a two-wire twisted pair (typically WD-1 or WF-16). To remote a radio, an external two-wire adapter is used as the interface between the radio and the wires. This remote control feature can be performed between the dismounted RT and the VAA, or between two dismounted RTs. Another host controller can control the ASIP radio via the external control interface when the ASIP radio system is integrated as part of a larger system.

<table>
<thead>
<tr>
<th><strong>ICOM capabilities (RT-1523A/B)</strong></th>
<th><strong>SIP capabilities (RT-1523C/D)</strong></th>
<th><strong>ASIP capabilities (RT 1523E/F)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Point-to-point communications</strong></td>
<td><strong>Point-to-point communications</strong></td>
<td><strong>Point-to-point communications</strong></td>
</tr>
</tbody>
</table>
| 1. FH per MIL-STD-188-241.  
2. SC per STANAG 4204.  
3. Mode 1, 2, 3 fill.  
2. SC per STANAG 4204.  
3. Mode 1, 2, 3 fill.  
4. ERF. | 1. Same as SIP. |
| **Plain text (PT) and cipher text (CT) mode** | **Circuit switching and packet network communications** | **Circuit switching and packet network communications** |
| 1. Railman COMSEC.  
2. Seville advanced remote keying. | 1. CSMA protocol.  
2. Railman COMSEC.  
3. Seville advanced remote keying. | 1. Same as SIP. |

Table 6-2. SINCGARS enhancements comparison
Table 6-2. SINCGARS enhancements comparison (continued)

<table>
<thead>
<tr>
<th>Point-to-point data</th>
<th>Point-to-point data</th>
<th>Point-to-point data</th>
</tr>
</thead>
</table>
| 1. 600 to 4,800 bps standard data mode.  
2. Tactical Fire Direction System (TACFIRE), analog data.  
3. Transparent 16 kbps data. | 1. 600 to 4,800 bps standard data mode.  
2. TACFIRE, analog data.  
3. Transparent 16 kbps data.  
4. 1,200 to 9,600 bps EDM data.  
5. Recommended standard-232 EDM data.  
6. Packet data.  
7. External control interface. | 1. Same as SIP. |

<table>
<thead>
<tr>
<th>Other features</th>
<th>Other features</th>
<th>Other features</th>
</tr>
</thead>
</table>
| 1. Noisy channel avoidance.  
2. Enhanced message completion. | 1. Noisy channel avoidance.  
2. Enhanced message completion.  
3. External global positioning system (GPS) interface.  
4. Embedded GPS hooks.  
5. Remote control unit (RCU). | 1. Same as SIP plus—  
- Enhanced system improvement program (ESIP) waveform.  
- Faster channel access to reduce net fragmentation.  
- Enhanced noisy channel avoidance algorithm to improve FH sync probability.  
- Improved time of day tracking and adjustments.  
- Extra end of message hops to improve sync detection and reduce fade bridging.  
- Embedded battery. |

<table>
<thead>
<tr>
<th>VAA (AM-7239B):</th>
<th>VAA (AM-7239C):</th>
<th>VAA (AM-7239E):</th>
</tr>
</thead>
</table>
| 1. Dual transmit power supply.  
2. Host interface.  
2. Host interface.  
4. MIL-STD-188-220A. | 1. Same as SIP plus—  
- More powerful 860 microprocessor.  
- Ethernet interface.  
- Enhanced protocols.  
- Increased memory and buffer size. |
Batteries

WARNING

1. LITHIUM NON-RECHARGEABLE BATTERIES
   a. Lithium Non-Rechargeable Batteries contain a great deal of energy. They must never be charged or abused. Attempting to do so could result in leakage, fire or even an explosion.
   b. Lithium-Sulfur Dioxide (Li-SO2) batteries, such as BA-5590, contain a toxic, pressurized, and liquefied gas. It has a strong pungent odor. Lithium-Manganese Dioxide (Li-MnO2) batteries such as BA-5372 (HUB or Hold-Up battery) and BA-5390 contain a flammable electrolyte. Both types of batteries contain pure Lithium which reacts violently with water.

   DO NOT heat, incinerate short circuit, puncture, mutilate or attempt to disassemble any battery.
   DO NOT USE any battery which shows signs of damage, such as bulging, swelling, disfigurement, leaking or staining inside the plastic packaging. Keep all batteries in their original packaging until ready for use.
   DO NOT test Lithium batteries for capacity with a test set. No external test set exists that provides a reliable result.
   DO NOT store batteries in unused equipment for more than 30 days.
   If a battery compartment becomes hot to the touch, if it hisses or makes a burping sound, or if you smell irritating pungent Sulfur Dioxide gas:
     • Turn off the equipment immediately and clear the area.
     • Let the equipment cool for at least an hour.
     • After the equipment is cool and the odor has cleared, remove the battery or batteries.
     • Install new battery or batteries and resume operation.

   c. If the equipment again becomes hot to the touch, go through the above steps but do not install new batteries. Turn in the equipment for maintenance.

   DO NOT place Lithium batteries in ordinary trash; turn them in for disposal in accordance with local regulations.
   DO NOT store Lithium batteries with other hazardous materials and keep them away from open flame or heat.
   DO NOT use water to fight a Lithium battery fire. This is an extremely intense fire frequently characterized by a bright red flame. Carbon Dioxide or dry chemical fire extinguishers are effective in fighting fires of other combustibles and in keeping the batteries cool when exposed to fires in the vicinity. Sprinklers are recommended for storage areas to douse fires of other combustible materials and to keep batteries cool.

   d. NEVER use a Halon type fire extinguisher on a Lithium battery fire. This will only increase the intensity of the fire.
e. In the event of a Lithium fire, immediately **EVACUATE THE AREA** and contact the appropriate emergency authorities. Class D fire extinguishers are to be used only by professional fire fighters.

**WARNING**

2. **RECHARGEABLE BATTERIES**
   a. This includes BB-390/U Nickel-Metal Hydride (Ni-MH) and BB-2590/U Lithium-Ion (Li-Ion) batteries.

**DO NOT** leave batteries in equipment for long term storage (more than 30 days).

b. Charge batteries in long term storage at least annually, and charge them before inserting in equipment.
   c. Before opening original packaging always examine the package for signs of leakage, staining or other indications of battery damage.

**DO NOT** use a damaged battery.

a. Always charge a rechargeable battery on the appropriate charger according to the dictates of the manufacturer.
   **NEVER** disassemble, heat, burn, or incinerate these or any batteries.

b. CO2 or Dry Chemical fire extinguishers are suggested for fires involving these batteries. Turn in batteries for disposal. Dispose of them in accordance with local regulations.

**WARNING**

3. **NON-RECHARGEABLE ZINC-AIR BATTERIES**
   a. This includes BA-8180/U and BA-8140/U Zinc-Air (Zn-Air) batteries.

**DO NOT** leave batteries in equipment for long term storage (more than 30 days).

b. Before opening original packaging always examine the package for signs of leakage, staining or other indications of battery damage.

**DO NOT** use a damaged battery.

   c. Zn-Air batteries contain gelled Potassium Hydroxide (KOH) as an electrolyte. This is corrosive and will burn the skin. If it comes in contact with the skin, wash thoroughly with soap and water. If it comes in contact with the eyes, flush with copious amounts of water and seek immediate medical attention.

   **NEVER** disassemble, heat, burn, or incinerate these or any batteries.
   d. CO2 or Dry Chemical fire extinguishers are suggested for fires involving these batteries.
   e. Turn in batteries for disposal. Dispose of them in accordance with local regulations.
LOADING FREQUENCIES

1. SINCGARS is a "single channel" radio in that it can transmit or receive on only one channel at a time. Single channel or the SC mode of operation, refers to the fact that only one frequency is being used for communications.

2. FREQUENCIES The SINCGARS radio will operate on 2320 different frequencies in the range of 30.000 to 87.975 MHz, with a 25 KHz separation between frequencies.

3. CHANNELS Eight single channel frequencies can be loaded into a SINCGARS RT: one in each numbered channel 1-6, plus one each in the CUE and MAN channels.

4. LOADING SC frequencies are loaded via the RT keypad. Although a matter of command policy, operators are normally required to load only those SC frequencies they are expected to need during mission operations. To load SC frequencies, use the procedure shown in Figure 4.2, below. (Also, see Primary Operator Task 1, "Load Single Channel Frequencies into SINCGARS RT."

   (1) Set FCTN switch to LD; MODE to SC.
   (2) Select CHAN 1-6, CUE, or MAN.
   (3) Press FREQ, then CLR.
   (4) Enter 5-digit frequency.
   (5) Press STO.
   (6) Repeat for each channel to be loaded.

Figure 4-2. HOW TO LOAD SC FREQUENCIES

<table>
<thead>
<tr>
<th>PRIMARY TASK 1: Load Single Channel Freq in SINCGARS RT</th>
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<tbody>
<tr>
<td>SUBTASKS</td>
</tr>
<tr>
<td>a. Prepare to perform task</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>b. Load SC Freq</td>
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*In units using secure, FH nets, operators normally load on a routine basis only a MANSC frequency. CUE and CHAN 1-6 SC frequencies are loaded only as needed or directed

**Only NCS and Alt NCS routinely load a CUE frequency

***RT settings for RT-1523E are set via MENU
CHAPTER 6 FIRST AID
(STP 21-1-SMCT APR14; STP 21-24 SEP08)

BATTLEFIELD CASUALTY ASSESSMENT
SECTION I – EVALUATE A CASUALTY

NOTE: This section is not ALM 2015 compliant and does not utilize the ASALTE methodology. It utilizes the current published Army doctrine and will be updated as required IOT reflect current doctrine.

TASK: Evaluate a Casualty (081-COM-1001)

WARNING
If a broken neck or back is suspected, do not move the casualty unless to save his/her life.

1. Perform care under fire.
   a. Return fire as directed or required before providing medical treatment.
   b. Determine if the casualty is alive or dead.

Note: In combat, the most likely threat to the casualty’s life is from bleeding. Attempts to check for airway and breathing will expose the rescuer to enemy fire. Do not attempt to provide first aid if your own life is in imminent danger. In a combat situation, if you find a casualty with no signs of life--no pulse, no breathing--do NOT attempt to restore the airway. Do NOT continue first aid measures.

   c. Provide care to the live casualty. Direct the casualty to return fire, move to cover, and administer self-aid (stop bleeding), if possible.

Note: Reducing or eliminating enemy fire may be more important to the casualty’s survival than the treatment you can provide. If the casualty is unable to move and you are unable to move the casualty to cover and the casualty is still under direct enemy fire, have the casualty "play dead."

Cue: Enemy fire has been suppressed

   d. In a battle-buddy team, approach the casualty (use smoke or other concealment if available using the most direct route possible.
   e. Administer life-saving hemorrhage control.
      (1) Determine the relative threat of enemy fire versus the risk of the casualty bleeding to death.
      (2) If the casualty has severe, life-threatening bleeding from an extremity or has an amputation of an extremity, administer life-saving hemorrhage control by applying a tourniquet from the casualty's IFAK before moving the casualty. (See task 081-COM-1032.)

Note: The only treatment that should be given at the point of injury is a tourniquet to control life-threatening extremity bleeding.
f. Move the casualty, his weapon, and mission-essential equipment when the tactical situation permits.

g. Recheck bleeding control measures (tourniquet) as soon as behind cover and not under enemy fire.

**Cue: You are now behind cover and are not under hostile fire**

2. Perform tactical field care.

**Note:** When evaluating and/or treating a casualty, seek medical aid as soon as possible. Do NOT stop treatment. If the situation allows, send another person to find medical aid.

a. Form a general impression of the casualty as you approach (extent of injuries, chance of survival).

**Note:** If a casualty is being burned, take steps to remove the casualty from the source of the burns before continuing evaluation and treatment. (See task 081-COM-1007.)

1. Ask in a loud, but calm, voice: "Are you okay?" Gently shake or tap the casualty on the shoulder.

2. Determine the level of consciousness by using AVPU: A = Alert; V = responds to Voice; P = responds to Pain; U = Unresponsive.

**Note:** To check a casualty’s response to pain, rub the breastbone briskly with a knuckle or squeeze the first or second toe over the toenail. If casualty is wearing IBA, pinch his nose or his earlobe for responsiveness.

3. If the casualty is conscious, ask where his body feels different than usual, or where it hurts.

**Note:** If the casualty is conscious but is choking and cannot talk, stop the evaluation and begin treatment. (See task 081-COM-1003.)

b. Identify and control bleeding.

1. Check for bleeding.
   a. Reassess any tourniquets placed during the care under fire phase to ensure they are still effective.
   b. Perform a blood sweep of the extremities, neck, axillary, inguinal and extremity areas. Exposure is only necessary if bleeding is detected.
      - Place your hands behind the casualty's neck and pass them upward toward the top of the head. Note whether there is blood or brain tissue on your hands from the casualty's wounds.
      - Place your hands behind the casualty's shoulders and pass them downward behind the back, the thighs, and the legs. Note whether there is blood on your hands from the casualty's wounds.

**Note:** If life-threatening bleeding is present, stop the evaluation and control the bleeding. (See task 081-COM-1032.)
Once bleeding has been controlled, continue to step 2d.

c. Position the casualty and open the airway. (See task 081-COM-1023.)

d. Assess for breathing and chest injuries.
   (1) Expose the chest and check for equal rise and fall and for any wounds.
   (2) Look, listen, and feel for respiration. (See task 081-COM-1023.)

Note: If the casualty is breathing, insert a nasopharyngeal airway (see task 081-COM-1023.) and place the casualty in the recovery position. Only in the case of non-traumatic injuries such as hypothermia, near drowning, or electrocution should CPR be considered when in a tactical environment prior to the CASEVAC phase.

(3) If in a non-tactical environment, begin rescue breathing as necessary to restore breathing and/or pulse (See tasks 081-COM-1023 and 081-COM-0046.).
   (a) If the casualty has a penetrating chest wound and is breathing or attempting to breathe, stop the evaluation to apply an occlusive dressing (See task 081-COM-1026.).
   (b) Position or transport with the affected side down, if possible.
   (c) Check for an exit wound. If found, apply an occlusive dressing.
   e. Dress all non-life threatening injuries and any bleeding that has not been addressed earlier with appropriate dressings. (See task 081-COM-1032.)

3. Determine the need to evacuate the casualty and supply information for lines 3-5 of the 9-Line MEDEVAC request to your tactical leader. (See task 081-COM-0101.)
4. Check the casualty for burns.
   a. Look carefully for reddened, blistered, or charred skin. Also check for singed clothes.
   b. If burns are found, stop the evaluation and begin treatment. (See task 081-COM-1007.)
5. Administer pain medications and antibiotics (the casualty's combat pill pack) if available.

Note: Each Soldier will be issued a combat pill pack before deploying on tactical missions.

6. Document the injuries and the treatment given on the casualty's own Tactical Combat Casualty Care Card (found in IFAK), if applicable.

Note: The FMC is usually initiated by the combat medic. However, a certified combat lifesaver can initiate the FMC if a combat medic is not available or if the combat medic directs the combat lifesaver to initiate the card. A pad of FMCs is part of the combat lifesaver medical equipment set.
7. Transport the casualty to the evacuation site. (See task 081-COM-1046.)
8. Monitor the patient for shock and treat as appropriate. (See task 081-COM-1005.) Continually reassess casualty until a medical person arrives or the patient arrives at a military treatment facility (MTF).

SECTION II – PREVENT OR CONTROL SHOCK

TASK: Perform First Aid to Prevent or Control Shock (081-COM-1005)

1. Check the casualty for signs and symptoms of shock.
   a. Sweaty but cool skin.
b. Pale skin.
c. Restlessness or nervousness.
d. Thirst.
e. Severe bleeding.
f. Confusion.
g. Rapid breathing.
h. Blotchy blue skin.
i. Nausea and/or vomiting.

2. Position the casualty.
   a. Move the casualty under a permanent or improvised shelter to shade him from direct sunlight.
   b. Lay the casualty on his back unless a sitting position will allow the casualty to breathe easier.
   c. Elevate the casualty's feet higher than the heart using a stable object so the feet will not fall.

   **WARNING**
   Do not loosen clothing if in a chemical area

3. Loosen clothing at the neck, waist, or anywhere it is binding.
4. Prevent the casualty from getting chilled or overheated. Using a blanket or clothing, cover the casualty to avoid loss of body heat by wrapping completely around the casualty.

   **Note:** Ensure no part of the casualty is touching the ground, as this increases loss of body heat.

5. Calm and reassure the casualty.
   a. Take charge and show self-confidence.
   b. Assure the casualty that he/she is being taken care of.
6. Watch the casualty closely for life-threatening conditions and check for other injuries, if necessary. Seek medical aid.
7. Seek medical aid.

**SECTION III – PERFORM FIRST AID FOR BLEEDING OF AN EXTREMITY**

**TASK:** Perform First Aid for Bleeding of an Extremity (081-COM-1032)

   **CAUTION**
   All body fluids should be considered potentially infectious. Always observe body substance isolation (BSI) precautions by wearing gloves and eye protection as a minimal standard of protection. In severe cases, you should wear gloves, eye protection, gown and shoe covers to protect yourself of splashes, projectile fluids, spurting fluids or splashes onto your clothing and foot wear.

1. Determine if the bleeding is life threatening. If bleeding is life threatening, immediately apply a CAT tourniquet. See step #4.
NOTE: If in a tactical environment, evaluate a casualty (See task 081-COM-1001). The three methods of controlling external bleeding are direct pressure, pressure dressing, and tourniquet.

CAUTION
Once bleeding has been controlled, it is important to check a distal pulse to make sure that the dressing has not been applied too tightly. If a pulse is not palpable, adjust the dressing to re-establish circulation.

2. If bleeding is not life threatening, apply direct pressure.
   a. Expose the wound.
   b. Place sterile gauze or dressing over the injury site and apply fingertips, palm or entire surface of one hand and apply direct pressure.
   c. Pack large, gaping wounds with sterile gauze and apply direct pressure

WARNING
The emergency bandage must be loosened if the skin distal to the injury becomes cool, blue, numb, or pulseless.

3. Apply the pressure dressing (casualty's emergency bandage).
   a. Open the plastic dressing package.
   b. Apply the dressing, white (sterile, non-adherent pad) side down, directly over the wound.
   c. Wrap the elastic tail (bandage) around the extremity and run the tail through the plastic pressure bar.
   d. Reverse the tail while applying pressure and continue to wrap the remainder of the tail around the extremity, continuing to apply pressure directly over the wound.
   e. Secure the plastic closure bar to the last turn of the wrap.
   f. Check the emergency bandage to make sure that it is applied firmly enough to prevent slipping without causing a tourniquet-like effect.

CAUTION
In combat, while under enemy fire, a tourniquet is the primary means to control bleeding. It allows the individual, his battle buddy, or the combat medic to quickly control life threatening hemorrhage until the casualty can be moved away from the firefight. Always treat life threatening hemorrhage while you and the casualty are behind cover.

4. Apply a Combat Application Tourniquet (C-A-T).
   a. Pull the free end of the self-adhering band through the buckle and route through the friction adapter buckle.
   b. Place combat application tourniquet (C-A-T), 2-3 inches above the wound on the injured extremity.
   c. Pull the self-adhering band tight around the extremity and fasten it back on itself as tightly as possible.
   d. Twist the windlass until the bleeding stops.
   e. Lock the windlass in place within the windlass clip.
   f. Secure the windlass with the windlass strap.
g. Assess for absence of a distal pulse.

h. Place a “T” and the time of the application on the casualty with a marker.

i. Secure the C-A-T in place with tape.

5. Initiate treatment for shock as needed. (See task 081-COM-1005).

6. Record treatment given on the DD Form 1380, US Field Medical Card (FMC) or DA Form 7656, Tactical Combat Casualty Care.

7. Seek medical aid.

**SECTION IV – TRANSPORT A CASUALTY**

**TASK:** Transport a Casualty (081-COM-1046)

---

**WARNING**

If the casualty was involved in a vehicle crash you should always consider that he/she may have a spinal injury. Unless there is an immediate life-threatening situation (such as fire, explosion), do NOT move the casualty with a suspected back or neck injury. Seek medical personnel for guidance on how to transport the casualty.

---

1. Remove a casualty from a vehicle, if necessary.

   a. Laterally.

      (1) With the assistance of another Soldier grasp the casualty's arms and legs.

      (2) While stabilizing the casualty's head and neck as much as possible, lift the casualty free of the vehicle and move him/her to a safe place on the ground.

   

   **Note:** If medical personnel are available, they may stabilize the casualty’s head, neck, and upper body with a special board or splint.

   b. Upward.

   

   **Note:** You may have to remove a casualty upward from a vehicle; for example, from the passenger compartment of a wheeled vehicle lying on its side or from the hatch of an armored vehicle sitting upright.

      (1) You may place a pistol belt or similar material around the casualty's chest to help pull him/her from the vehicle.

      (2) With the assistance of another Soldier inside the vehicle, draw the casualty upward using the pistol belt or similar material or by grasping his/her arms.

      (3) While stabilizing the casualty's head and neck as much as possible, lift the casualty free of the vehicle and place him/her on the topmost side of the vehicle.

   

   **Note:** If medical personnel are available, they may stabilize the casualty’s head, neck, and upper body with a special board or splint.

      (4) Depending on the situation, move the casualty from the topmost side of the vehicle to a safe place on the ground.
2. Select an appropriate method to transport the casualty.

Note: The fireman's carry is the typical one-man carry practiced in training. However, in reality, with a fully equipped casualty, it is nearly impossible to lift a Soldier over your shoulder and move to cover quickly. It should be discouraged from being practiced and used.

   a. Fireman's carry. Use for an unconscious or severely injured casualty.

   c. Cradle-drop drag. Use to move a casualty who cannot walk when being moved up or down stairs.
   d. Use litters if materials are available, if the casualty must be moved a long distance, or if manual carries will cause further injury.

Cue: The appropriate type of carry has been selected.

3. Evacuate the casualty using a manual carry.
   a. Fireman's carry.
      (1) Kneel at the casualty's uninjured side.
      (2) Place casualty's arms above his/her head.
      (3) Cross the ankle on the injured side over the opposite ankle.
      (4) Place one of your hands on the shoulder farther from you and your other hand on his/her hip or thigh.
      (5) Roll the casualty toward you onto his/her abdomen.
      (6) Straddle the casualty.

Note: This method is used if the rescuer believes that it is safer than the regular method due to the casualty’s wounds. Care must be taken to keep the casualty’s head from falling backward, resulting in a neck injury.

      (7) Place your hands under the casualty's chest and lock them together.
      (8) Lift the casualty to his/her knees as you move backward.
      (9) Continue to move backward, thus straightening the casualty's legs and locking the knees.
      (10) Walk forward, bringing the casualty to a standing position but tilted slightly backward to prevent the knees from buckling.

WARNING
If the casualty was involved in a vehicle crash you should always consider that he/she may have a spinal injury. Unless there is an immediate life-threatening situation (such as fire, explosion), do NOT move the casualty with a suspected back or neck injury. Seek medical personnel for guidance on how to transport the casualty.

CAUTION
Do NOT use the neck drag if the casualty has a broken arm or a suspected neck injury.

CAUTION
Do NOT use the neck drag if the casualty has a broken arm or a suspected neck injury.
(11) Maintain constant support of the casualty with one arm. Free your other arm, quickly grasp his/her wrist, and raise the arm high.
(12) Instantly pass your head under the casualty's raised arm, releasing it as you pass under it.
(13) Move swiftly to face the casualty.
(14) Secure your arms around his/her waist.
(15) Immediately place your foot between his/her feet and spread them (approximately 6 to 8 inches apart).
(16) Again grasp the casualty’s wrist and raise the arm high above your head.
(17) Bend down and pull the casualty's arm over and down your shoulders bringing his/her body across your shoulders. At the same time pass your arm between the legs.
(18) Grasp the casualty's wrist with one hand while placing your other hand on your knee for support.
(19) Rise with the casualty correctly positioned.

*Note:* Your other hand is free for use as needed.

**WARNING**
Do NOT use the neck drag if the casualty has a broken and/or fractured arm or a suspected neck injury. If the casualty is unconscious, protect his/her head from the ground.

b. Neck drag.
   (1) Place the casualty on his back, if not already there. [See steps 3a (1)-(5)].
   (2) Tie the casualty's hands together at the wrists. (If conscious, the casualty may clasp his/her hands together around your neck.)
   (3) Straddle the casualty in a kneeling face-to-face position.
   (4) Loop the casualty's tied hands over and/or around your neck.
   (5) Crawl forward, looking ahead, dragging the casualty with you.

c. Cradle-drop drag.
   (1) With the casualty lying on his/her back, kneel at the head.
   (2) Slide your hands, palms up, under the casualty's shoulders.
   (3) Get a firm hold under his/her armpits.
   (4) Partially rise, supporting the casualty's head on one of your forearms.

*Note:* You may bring your elbows together and let the casualty’s head rest on both of your forearms.

   (5) With the casualty in a semi-sitting position, rise and drag the casualty backwards.
   (6) Back down the steps (or up if appropriate), supporting the casualty's head and body and letting the hips and legs drop from step to step.

4. Evacuate the casualty using a SKED litter.
   a. Prepare the SKED litter for transport.
      (1) Remove the SKED from the pack and place on the ground.
      (2) Unfasten the retainer strap.
      (3) Step on the foot end of the SKED litter and unroll the SKED completely.
b. Place and secure a casualty to a SKED litter.
   1. Place the SKED litter next to the casualty so that the head end of the litter is next to the casualty's head.
   2. Place the cross straps under the SKED litter.
   3. Log roll the casualty onto his side in a steady and even manner.
   4. Slide the SKED litter as far under the casualty as possible.
   5. Gently roll the casualty until he is again lying on his back with the litter beneath him.
   6. Slide the casualty to the middle of the SKED litter, keeping his spinal column as straight as possible.
   7. Pull out the straps from under the SKED litter.
   8. Bring the straps across the casualty.
   9. Lift the sides of the SKED litter and fasten the four cross straps to the buckles directly opposite the straps.
   10. Lift the foot portion of the SKED litter.
   11. Feed the foot straps over the casualty's lower extremities and through the unused grommets at the foot end of the SKED litter.
   12. Fastens the straps to the buckles.
   13. Check to make sure the casualty is secured to the SKED litter.

c. Lift the casualty.

**Note:** For a SKED litter, lift the sides of the SKED and fasten the four cross straps to the buckles directly opposite the straps. Lift the foot portion of the SKED and feed the foot straps through the unused grommets at the foot end of the SKED and fasten to the buckles.

5. Evacuate the casualty using a Talon litter.
   a. Prepare a Talon litter for use.
      1. Remove the litter from the bag.
      2. Stand the litter upright and release buckles from the litter.
      3. Place the litter on the ground and completely extend it with the fabric side facing up.
      4. Keeping the litter as straight as possible, grab the handles and rotate them inward until all the hinges rotate and lock.

**Note:** This action is done best using two individuals on each end of the litter executing this step simultaneously.

   5. While maintaining the hinges in the locked position, apply firm, steady pressure on the spreader bar with your foot. Increase pressure with your foot until the spreader bar locks into place.
   b. Place the casualty on the litter.
(1) Place the litter next to the casualty. Ensure that the head end of the litter is beside the head of the casualty.
(2) Log roll the casualty and slide the litter as far under him/her as possible. Gently roll the casualty down onto the litter.
(3) Slide the casualty to the center of the litter. Be sure to keep the spinal column as straight as possible.
c. Secure the casualty to the litter using litter straps or other available materials.
6. Evacuate the casualty using an improvised litter.
a. Use the poncho and two poles or limbs.
   (1) Open the poncho and lay the two poles lengthwise across the center, forming three equal sections.
   (2) Reach in, pull the hood up toward you, and lay it flat on the poncho.
   (3) Fold one section of the poncho over the first pole.
   (4) Fold the remaining section of the poncho over the second pole to the first pole.
b. Use shirts or jackets and two poles or limbs.
   (1) Zipper close two uniform jackets and turn them inside out, leaving the sleeves inside.
   (2) Lay the jackets on the ground and pass the poles through the sleeves, leaving one at the top and one at the bottom of the poles to support the casualty's whole body.
c. Place the casualty on the improvised litter.
   (1) Lift the litter.
   (2) Place the litter next to the casualty. Ensure the head end of the litter is adjacent to the head of the casualty.
   (3) Slide the casualty to the center of the litter. Be sure to keep the spinal column as straight as possible.
   (4) Secure the casualty to the litter using litter straps or other available materials.
7. Load casualties onto a military vehicle.
a. Ground ambulance.

**Note:** Ground ambulances have combat medics to take care of the casualties during evacuation. Follow any special instructions that they give for loading, securing, or unloading casualties.

   (1) Make sure each litter casualty is secured to his litter. Use the litter straps when available.
   (2) Load the most serious casualty last.
   (3) Load the casualty head first (head in the direction of travel) rather than feet first.
   (4) Make sure each litter is secured to the vehicle.

**Note:** Unload casualties in reverse order, most seriously injured casualty first.

b. Air ambulance.

**Note:** Air ambulances have combat medics to take care of the casualties during evacuation. Follow any special instructions that they give for loading, securing, or unloading casualties.
(1) Remain 50 yards from the helicopter until the litter squad is signaled to approach the aircraft.

**WARNING**

Never go around the rear of the UH-60 or UH-1 aircraft

(2) Approach the aircraft in full view of the aircraft crew, maintaining visual confirmation that the crew is aware of the approach of the litter party. Ensure that the aircrew can continue to visually distinguish friendly from enemy personnel at all times. Maintain a low silhouette when approaching the aircraft.

(a) Approach UH-60/UH-1 aircraft from sides. Do not approach from the front or rear. If you must move to the opposite side of the aircraft, approach from the side to the skin of the aircraft. Then hug the skin of the aircraft, and move around the front of the aircraft to the other side.

(b) Approach CH-47/CH-46 aircraft from the rear.

(c) Approach MH-53 aircraft from the sides to the rear ramp, avoiding the tail rotor.

(d) Approach nonstandard aircraft in full view of the crew, avoiding tail rotors, main rotors, and propellers.

(e) Approach high performance aircraft (M/C-130/-141B/-17/-5B) from the rear, under the guidance of the aircraft loadmaster or the ground control party.

(3) Load the most seriously injured casualty last.

(4) Load the casualty who will occupy the upper berth first, and then load the next litter casualty immediately under the first casualty.

*Note:* This is done to keep the casualty from accidentally falling on another casualty if his litter is dropped before it is secured.

(5) When casualties are placed lengthwise, position them with their heads toward the direction of travel.

(6) Make sure each litter casualty is secured to his litter.

(7) Make sure each litter is secured to the aircraft.

*Note:* Unload casualties in reverse order, most seriously injured casualty first.

c. Ground military vehicles.

*Note:* Nonmedical military vehicles may be used to evacuate casualties when no medical evacuation vehicles area available.

*Note:* If medical personnel are present, follow their instructions for loading, securing, and unloading casualties.

(1) When loading casualties into the vehicle, load the most seriously injured casualty last.

(2) When a casualty is placed lengthwise, load the casualty with his head pointing forward, toward the direction of travel.

(3) Ensure each litter casualty is secured to the litter. Use litter straps, if available.
(4) Secure each litter to the vehicle as it is loaded into place. Make sure each litter is secured.

**Note:** Unload casualties in reverse order, most seriously injured casualty first

**SECTION V – PERFORM FIRST AID FOR BURNS**

**TASK:** Perform First Aid for Burns (081-COM-1007)

1. Eliminate the source of the burn.

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic materials, such as nylon, may melt and cause further injury.</td>
</tr>
</tbody>
</table>

   a. Thermal burns. Remove the casualty from the source of the burn. If the casualty's clothing is on fire, cover the casualty with a field jacket or any large piece of non-synthetic material and roll him/her on the ground to put out the flames.

<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not touch the casualty or the electrical source with your bare hands. You will be injured too!</td>
</tr>
<tr>
<td><strong>WARNING:</strong> High voltage electrical burns from an electrical source or lightning may cause temporary unconsciousness, difficulties in breathing, or difficulties with the heart (irregular heartbeat).</td>
</tr>
</tbody>
</table>

   b. Electrical burns. If the casualty is in contact with an electrical source, turn the electricity off, if the switch is nearby. If the electricity cannot be turned off, use any nonconductive material (rope, clothing, or dry wood) to drag the casualty away from the source.

<table>
<thead>
<tr>
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<tr>
<td><strong>WARNING:</strong> High voltage electrical burns from an electrical source or lightning may cause temporary unconsciousness, difficulties in breathing, or difficulties with the heart (irregular heartbeat).</td>
</tr>
</tbody>
</table>

   c. Chemical burns.
      1. Remove liquid chemicals from the burned casualty by flushing with as much water as possible.
      2. Remove dry chemicals by carefully brushing them off with a clean, dry cloth. If large amounts of water are available, flush the area. Otherwise, do not apply water.
      3. Smother burning white phosphorus with water, a wet cloth, or wet mud. Keep the area covered with the wet material.
   d. Laser burns. Move the casualty away from the source while avoiding eye contact with the beam source. If possible, wear appropriate laser eye protection.

**Note:** After the casualty has been removed from the source of the burn, continually monitor the casualty for conditions that may require basic lifesaving measures.
2. Uncover the burn.

   WARNING
   Do NOT uncover the wound in a chemical environment. Exposure could cause additional harm.

   a. Cut clothing covering the burned area.

   WARNING
   Do NOT attempt to remove clothing that is stuck to the wound. Additional harm could result.

   b. Gently lift away clothing covering the burned area.
   c. If the casualty's hand(s) or wrist(s) have been burned, remove jewelry (rings, watches) and place them in his/her pockets.

3. Apply the casualty's dry, sterile dressing directly over the wound.

   Note: If the burn is caused by white phosphorus, the dressing must be wet.

   CAUTION:
   • Do not place the dressing over the face or genital area.
   • Do not break the blisters.
   • Do not apply grease or ointments to the burns.

   a. Apply the dressing/pad, white side down, directly over the wound.
   b. Wrap the tails (or the elastic bandage) so that the dressing/pad is covered.
   c. For a field dressing, tie the tails into a nonslip knot over the outer edge of the dressing, not over the wound. For an emergency bandage, secure the hooking ends of the closure bar into the elastic bandage.
   d. Check to ensure that the dressing is applied lightly over the burn but firmly enough to prevent slipping.

   Note: If the casualty is conscious and not nauseated, give him/her small amounts of water to drink.

4. Watch the casualty closely for life-threatening conditions, check for other injuries (if necessary), and treat for shock. Seek medical aid.

5. Seek medical aid.
SECTION VI – OPEN AN AIRWAY

TASK: Open An Airway (081-COM-1023)

WARNING
The casualty should be carefully rolled as a whole, so the body does not twist.

1. Roll the casualty onto his/her back, if necessary, and place him/her on a hard, flat surface.
   a. Kneel beside the casualty.
   b. Raise the near arm and straighten it out above the head.
   c. Adjust the legs so they are together and straight or nearly straight.
   d. Place one hand on the back of the casualty's head and neck.
   e. Grasp the casualty under the arm with the free hand.
   f. Pull steadily and evenly toward yourself, keeping the head and neck in line with the torso.
   g. Roll the casualty as a single unit.
   h. Place the casualty's arms at his/her sides.

Cue: Casualty is unconscious, does not appear to be breathing, and is lying on his or her back.

2. Open the airway.

Note: If foreign material or vomit is in the mouth, remove it as quickly as possible.

CAUTION
Do NOT use this method if a spinal or neck injury is suspected

   a. Head-tilt/chin-lift method.
      (1) Kneel at the level of the casualty's shoulders.
      (2) Place one hand on the casualty's forehead and apply firm, backward pressure with the palm to tilt the head back.
      (3) Place the fingertips of the other hand under the bony part of the lower jaw and lift, bringing the chin forward.

Note: Do NOT use the thumb to lift.

Note: Do NOT completely close the casualty's mouth. CAUTION: Do NOT press deeply into the soft tissue under the chin with the fingers.

CAUTION
Use this method if a spinal or neck injury is suspected. Note: If you are unable to maintain an airway after the second attempt, use the head-tilt/chin-lift method.

      (1) Kneel above the casualty's head (looking toward the casualty's feet).
      (2) Rest your elbows on the ground or floor.
      (3) Place one hand on each side of the casualty's lower jaw at the angle of the jaw, below the ears.
      (4) Stabilize the casualty's head with your forearms.
(5) Use the index fingers to push the angles of the casualty's lower jaw forward.

**Note:** If the casualty's lips are still closed after the jaw has been moved forward, use your thumbs to retract the lower lip and allow air to enter the casualty's mouth.

**CAUTION:** Do not tilt or rotate the casualty's head.

3. Check for breathing.
   a. While maintaining the open airway position, place an ear over the casualty's mouth and nose, looking toward the chest and stomach.
   b. Look for the chest to rise and fall.
   c. Listen for air escaping during exhalation.
   d. Feel for the flow of air on the side of your face.
   e. Count the number of respirations for 15 seconds.
   f. Take appropriate action.

<table>
<thead>
<tr>
<th><strong>CAUTION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Do NOT use the NPA if there is clear fluid (cerebrospinal fluid-CSF) coming from the ears or nose. This may indicate a skull fracture.</td>
</tr>
</tbody>
</table>

(1) If the casualty is unconscious, if respiratory rate is less than 2 in 15 seconds, and/or if the casualty is making snoring or gurgling sounds, insert an NPA.
   a. Keep the casualty in a face-up position.
   b. Lubricate the tube of the NPA with water.
   c. Push the tip of the casualty's nose upward gently.
   d. Position the tube of the NPA so that the bevel (pointed end) of the NPA faces toward the septum (the partition inside the nose that separates the nostrils).

| **Note:** Most NPAs are designed to be placed in the right nostril. |
| **CAUTION** |
| Never force the NPA into the casualty’s nostril. If resistance is met, pull the tube out and attempt to insert it in the other nostril. If neither nostril will accommodate the NPA, place the casualty in the recovery position. |

   e. Insert the NPA into the nostril and advance it until the flange rests against the nostril.
   f. Place the casualty in the recovery position by rolling him/her as a single unit onto his/her side, placing the hand of his/her upper arm under his/her chin, and flexing his/her upper leg.
   g. Watch the casualty closely for life-threatening conditions and check for other injuries, if necessary. Seek medical aid.

(2) If the casualty is not breathing seek medical aid.

| **Note:** If the casualty resumes breathing at any time during this procedure, the airway should be kept open and the casualty should be monitored. If the casualty continues to breathe, he/she should be transported to medical aid in accordance with the tactical situation.
SECTION VII – REQUEST MEDICAL EVACUATION

TASK: Request Medical Evacuation (081-831-0101)

1. Collect all applicable information needed for the MEDEVAC request.
   a. Determine the grid coordinates for the pickup site. (See STP 21-1- SMCT, task 071-329-1002.)
   b. Obtain radio frequency, call sign, and suffix.
   c. Obtain the number of patients and precedence.
   d. Determine the type of special equipment required.
   e. Determine the number and type (litter or ambulatory) of patients.
   f. Determine the security of the pickup site.
   g. Determine how the pickup site will be marked.
   h. Determine patient nationality and status
   i. Obtain pickup site nuclear, biological, and chemical (NBC) contamination information, normally obtained from the senior person or medic.

   Note: NBC line 9 information is only included when contamination exists.

2. Record the gathered MEDEVAC information using the authorized brevity codes. (See table 7-1)

   Note: Unless the MEDEVAC information is transmitted over secure communication systems, it must be encrypted, except as noted in step 3b(1).

   a. Location of the pickup site (line 1).
   b. Radio frequency, call sign, and suffix (line 2).
   c. Numbers of patients by precedence (line 3).
   d. Special equipment required (line 4).
   e. Number of patients by type (line 5).
   f. Security of the pickup site (line 6).
   g. Method of marking the pickup site (line 7).
   h. Patient nationality and status (line 8).
   i. NBC contamination (line 9).

3. Transmit the MEDEVAC request. (See STP 21-1-SMCT, task 113-571-1022.)
   a. Contact the unit that controls the evacuation assets.
      (1) Make proper contact with the intended receiver.
      (2) Use effective call sign and frequency assignments from the SOI.
      (3) Give the following in the clear "I HAVE A MEDEVAC REQUEST;" wait one to three seconds for a response. If no response, repeat the statement.
   b. Transmit the MEDEVAC information in the proper sequence.
      (1) State all line item numbers in clear text. The call sign and suffix (if needed) in line 2 may be transmitted in the clear.
Note: Line numbers 1 through 5 must always be transmitted during the initial contact with the evacuation unit. Lines 6 through 9 may be transmitted while the aircraft or vehicle is en route.

(2) Follow the procedure provided in the explanation column of the MEDEVAC request format to transmit other required information.
(3) Pronounce letters and numbers according to appropriate radio/telephone procedures.
(4) Take no longer than 25 seconds to transmit.
(5) End the transmission by stating "Over."
(6) Keep the radio on and listen for additional instructions or contact from the evacuation unit.
<table>
<thead>
<tr>
<th>LINE</th>
<th>ITEM</th>
<th>EXPLANATION</th>
<th>WHERE/HOW OBTAINED</th>
<th>WHO NORMALLY PROVIDES</th>
<th>REASON</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Location of Pickup Site</td>
<td>Encrypt the grid coordinates of the pickup site. When using the DRYAD Numerical Cipher, the same &quot;SET&quot; line will be used to encrypt the grid zone letters and the coordinates. To preclude misunderstanding, a statement is made that grid zone letters are included in the message (unless unit SOP specifies its use at all times).</td>
<td>From Map</td>
<td>Unit Leader(s)</td>
<td>Required so evacuation vehicle knows where to pick up patient. Also so that the unit coordinating the evacuation mission can plan the route for the evacuation vehicle (if the evacuation vehicle must pick up from more than one location).</td>
</tr>
<tr>
<td>2</td>
<td>Radio Frequency, Call Sign, and Suffix</td>
<td>Encrypt the frequency of the radio at the pickup site, not a relay frequency. The call sign (and suffix if used) of the person to be contacted at the pickup site may be transmitted in the clear.</td>
<td>From SOI</td>
<td>RTO</td>
<td>Required so that the evacuation vehicle can contact the requesting unit while enroute (obtain additional information or change in situation or directions).</td>
</tr>
<tr>
<td>3</td>
<td>Number of Patients by Precedence</td>
<td>Report only applicable information and encrypt the brevity codes. A - URGENT B - URGENT-SURG. C - PRIORITY. D - ROUTINE. E - CONVENIENCE. If two or more categories must be reported in the same request, insert the word &quot;BREAK&quot; between each category.</td>
<td>From Evaluation of Patient(s)</td>
<td>Medic or Senior Person Present</td>
<td>Required by the unit controlling the evacuation vehicles to assist in prioritizing missions.</td>
</tr>
<tr>
<td>4</td>
<td>Special Equipment Required</td>
<td>Encrypt the applicable brevity codes. A - None. B - Holst. C - Extraction equipment. D - Ventilator.</td>
<td>From Evaluation of the Patient/ Situation</td>
<td>Medic or Senior Person Present</td>
<td>Required so that the equipment can be placed on board the evacuation vehicle prior to the start of the mission.</td>
</tr>
<tr>
<td>5</td>
<td>Number of Patients by Type</td>
<td>Report only applicable information and encrypt the brevity code. If requesting MEDEVAC for both types, insert the word &quot;BREAK&quot; between the litter entry and ambulatory entry. L = # of Pnt - Litter. A = # of Pnt - Ambulatory (sitting)</td>
<td>From Evaluation of Patient(s)</td>
<td>Medic or Senior Person Present</td>
<td>Required so that the appropriate number of evacuation vehicles may be dispatched to the pickup site. They should be configured to carry the patients requiring evacuation.</td>
</tr>
<tr>
<td>6</td>
<td>Security of the Pickup Site (Wartime)</td>
<td>N - No enemy troops in the area. P - Possibly enemy troops in the area (approach with caution). E - Enemy troops in the area (approach with caution). X - Enemy troops in the area (armed escort required).</td>
<td>From Evaluation of the Situation</td>
<td>Unit Leader</td>
<td>Required to assist the evacuation crew in assessing the situation and determining if assistance is required. More definitive guidance can be furnished to the evacuation vehicle while it is en route (specific location of the enemy to assist an aircraft in planning its approach).</td>
</tr>
<tr>
<td>LINE</td>
<td>ITEM</td>
<td>EXPLANATION</td>
<td>WHERE/HOW OBTAINED</td>
<td>WHO NORMALLY PROVIDES</td>
<td>REASON</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------------------------------</td>
<td>-----------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>Number and Type of Wound, Injury, or Illness (Peacetime)</td>
<td>Specific information regarding patient wounds by type (gunshot or shrapnel). Report serious bleeding, along with patient blood type, if known.</td>
<td>From Evaluation of Patient</td>
<td>Medic or Senior Person Present</td>
<td>Required to assist evacuation personnel in determining treatment and special equipment needed.</td>
</tr>
<tr>
<td>7</td>
<td>Method of Marking Pickup Site</td>
<td>Encrypt the brevity codes.</td>
<td>Based on the Situation and Availability of Materials</td>
<td>Medic or Senior Person Present</td>
<td>Required to assist the evacuation crew in identifying the specific location of the pickup. Note that the color of the panels or smoke should not be transmitted until the evacuation vehicle contacts the unit (just prior to its arrival). For security, the crew should identify the color and the unit verify it.</td>
</tr>
<tr>
<td>8</td>
<td>Patient Nationality and Status</td>
<td>The number of patients in each category need not be transmitted. Encrypt only the applicable brevity codes.</td>
<td>From Evaluation of Patient</td>
<td>Medic or Senior Person Present</td>
<td>Required to assist in planning for destination facilities and need for guards. Unit requesting support should ensure that there is an English-speaking representative at the pickup site.</td>
</tr>
<tr>
<td>9</td>
<td>CBRN Contamination (Wartime)</td>
<td>Include this line only when applicable. Encrypt the applicable brevity codes.</td>
<td>From the Situation</td>
<td>Medic or Senior Person Present</td>
<td>Required to assist in planning for the mission. (Determine which evacuation vehicle will accomplish the mission and when it will be accomplished.)</td>
</tr>
<tr>
<td>10</td>
<td>Terrain Description (Peacetime)</td>
<td>Include details of terrain features in and around the proposed landing site. If possible, describe relationship of the site to prominent terrain feature (lake, mountain, tower).</td>
<td>From an Area Survey</td>
<td>Personnel at Site</td>
<td>Required to allow evacuation personnel to assess route/avenue of approach into the area. Of particular importance if host operation is required.</td>
</tr>
</tbody>
</table>
NOTES
CHAPTER 7 TACTICS
(FM 3-21.8 MAR07)

SECTION I – MOVEMENT OVERVIEW

Tactical movement is the movement of a unit assigned a tactical mission under combat conditions when not in direct ground contact with the enemy. Tactical movement is based on the anticipation of early ground contact with the enemy, either en route or shortly after arrival at the destination. Movement ends when ground contact is made or the unit reaches its destination. Movement is not maneuver. Maneuver happens once a unit has made contact with the enemy. Because tactical movement shares many of the characteristics of an offensive action, the battlefield is organized in a manner similar to other offensive actions. This chapter discusses the basics and formations of tactical movement.

1. Movement refers to the shifting of forces on the battlefield. The key to moving successfully involves selecting the best combination of movement formations and movement techniques for each situation. Leaders consider the factors of METT-TC in selecting the best route and the appropriate formation and movement technique. The leader's selection must allow the moving platoon to—
   a. Maintain cohesion.
   b. Maintain communication.
   c. Maintain momentum.
   d. Provide maximum protection.
   e. Make enemy contact in a manner that allows them to transition smoothly to offensive or defensive action.

2. Careless movement usually results in contact with the enemy at a time and place of the enemy’s choosing. To avoid this, leaders must understand the constantly-changing interrelationship between unit movement, terrain, and weapon systems within their area of operations. This understanding is the basis for employing movement formations, movement techniques, route selection and navigation, crossing danger areas, and security (Figure 8-1).

![Figure 8-1. Basics of tactical movement](image-url)
3. Leaders executing tactical movement have three primary goals:
   a. Avoid surprise by the enemy.
   b. When necessary, transition quickly to maneuver while minimizing enemy effects.
   c. Get to the right place, at the right time, ready to fight.

4. Units moving behind enemy lines seek to avoid enemy contact. They choose the movement that allows them to retain security and control. To avoid loss of surprise and initiative, casualties, and mission failure, platoons normally—
   a. Avoid chance enemy contact, if possible.
   b. Move on covered and concealed routes.
   c. Avoid likely ambush sites and other danger areas.
   d. Practice camouflage, noise, and light discipline.
   e. Maintain 360-degree security.
   f. Make contact with the smallest element if enemy contact is unavoidable.
   g. Retain the initiative to attack at the time and place of the unit's choice.
   h. Take active countermeasures such as using smoke and direct and indirect fire to suppress or obscure suspected enemy positions.

5. Infantry platoons primarily move on foot. However, there are circumstances when they will move, and even fight, mounted. Because their units may operate with vehicle support, leaders must be comfortable employing tactical movement with a variety of vehicle platforms.

6. In selecting formations and movement techniques, leaders must consider other requirements such as speed and control as well as security. When conducting tactical movement, leaders must be prepared to quickly transition to maneuver and fight while minimizing the effects of the enemy. This requirement calls for the leader to determine which formation or combination of formations best suits the situation.

7. MOVEMENT FORMATIONS - Movement formations are the ordered arrangement of forces that describes the general configuration of a unit on the ground. They determine the distance between Soldiers, sectors of fire, and responsibilities for 360-degree security. Movement formations are used in combination with movement techniques (and other security measures), immediate action drills, and enabling tasks. Movement techniques define the level of security one subordinate provides another within a formation. Immediate action drills are those combat actions that enable the unit to quickly transition to maneuver during unexpected enemy contact. Enabling tasks facilitate transitions between other combat tasks. See Section II of this chapter for more on movement formations.

8. Movement techniques describe the position of squads and fire teams in relation to each other during movement. Platoons and squads use three movement techniques: traveling, traveling over-watch, and bounding over-watch.

9. Like formations, movement techniques provide varying degrees of control, security, and flexibility. Movement techniques differ from formations in two ways:
a. Formations are relatively fixed; movement techniques are not. The distance between moving units or the distance that a squad bounds away from an over-watching squad varies based on factors of METT-TC.

b. Formations allow the platoon to weight its maximum firepower in a desired direction; movement techniques allow squads to make contact with the enemy with the smallest element possible. This allows leaders to establish a base of fire, initiate suppressive fires, and attempt to maneuver without first having to disengage or be reinforced.

10. Leaders base their selection of a particular movement technique on the likelihood of enemy contact and the requirement for speed. See Section III of this chapter for more on movement techniques.

11. **ROUTE AND NAVIGATION** – Planning and selecting a route is a critical leader skill. One of the keys to successful tactical movement is the ability to develop routes that increase the unit’s security, decrease the Soldier’s effort, and get the unit to the objective on time in a manner prepared to fight. Good route selection begins with a thorough terrain analysis and ends with superior navigation. Planning and preparation are worthless if a unit cannot find its way to the objective, or worse, stumbles onto it because of poor navigation. See Section IV of this chapter for more on route and navigation.

12. **DANGER AREAS** – When analyzing the terrain (in the METT-TC analysis) during the troop-leading procedures (TLP), the platoon leader may identify danger areas. The term danger area refers to any area on the route where the terrain would expose the platoon to enemy observation, fire, or both. If possible, the platoon leader should plan to avoid danger areas. However, there are times when he cannot. When the unit must cross a danger area, it should do so as quickly and as carefully as possible. See Section V of this chapter for more information on danger areas.

13. **SECURITY** – Security during movement includes the actions that units take to secure themselves and the tasks given to units to provide security for a larger force. Platoons and squads enhance their own security during movement through the use of covered and concealed terrain; the use of the appropriate movement formation and technique; the actions taken to secure danger areas during crossing; the enforcement of noise, light, and radiotelephone discipline; and the use of proper individual camouflage techniques. See Section VII of this chapter for more on security.

14. Formations and movement techniques provide security by:
   a. Positioning each Soldier so he can observe and fire into a specific sector that overlaps with other sectors.
   b. Placing a small element forward to allow the platoon to make contact with only the lead element and give the remainder of the platoon freedom to maneuver.
   c. Providing over-watch for a portion of the platoon.

15. In planning tactical movement, leaders should also consider the requirements for—
   • Terrain.
   • Planning.
   • Direct fires.
• Fire support.
• Control.

  a. **TERRAIN** – The formations and techniques shown in the illustrations in this chapter are examples only. They are generally depicted without terrain considerations (which are usually a critical concern in the selection and execution of a formation). Therefore, in both planning and executing tactical movement, leaders understand that combat formations and movement techniques require modification in execution. Spacing requirements and speed result from a continuous assessment of terrain. Leaders must stay ready to adjust the distance of individuals, fire teams, squads, and individual vehicles and vehicle sections based on terrain, visibility, and other mission requirements.

  (1) While moving, individual Soldiers and vehicles use the terrain to protect themselves during times when enemy contact is possible or expected. They use natural cover and concealment to avoid enemy fires.
  (2) The following guidelines apply to Soldiers and vehicle crews using terrain for protection:
     • Do not silhouette yourself against the skyline.
     • Avoid possible kill zones because it is easier to cross difficult terrain than fight the enemy on unfavorable terms.
     • Cross open areas quickly.
     • Avoid large, open areas, especially when they are dominated by high ground or by terrain that can cover and conceal the enemy.
     • Do not move directly forward from a concealed firing position.

  b. **PLANNING** – One of the leader’s primary duties is to develop a plan that links together route selection and navigation, combat formations, and appropriate security measures with enabling tasks that moves the unit from its current location to its destination. This plan must take into account the enemy situation and control during movement.

  c. **DIRECT FIRES** – While moving or when stationary, each Soldier (or vehicle) has a sector to observe and engage enemy soldiers in accordance with the unit’s engagement criteria (see Chapter 2). Individual and small unit sectors are the foundation of the unit’s area of influence. Pre-assigned sectors are inherent in combat formations. When formations are modified, leaders must reconfirm their subordinates’ sectors. Leaders have the added responsibility of ensuring their subordinates’ sectors are mutually supporting and employing other security measures that identify the enemy early and allow the leader to shape the fight.

  d. **FIRE SUPPORT** – Planning should always include arranging for fire support (mortars, artillery, CAS, attack helicopters, naval gunfire), even if the leader thinks it unnecessary. A fire plan can be a tool to help navigate and gives the leader the following options:
     • Suppressing enemy observation posts or sensors.
     • Creating a distraction.
     • Achieving immediate suppression.
     • Covering withdrawal off of an objective.
     • Breaking contact.

  e. **CONTROL** – Controlling tactical movement is challenging. The leader must be able to start, stop, shift left or right, and control the unit’s direction and speed of movement while navigating, assessing the terrain, and preparing for enemy contact. Determining the proper movement formations and techniques during planning is important, but the leader must be able to
assess his decision during execution and modify or change his actions based on the actual situation.

f. Without adequate procedural and positive control, it is difficult for the leader to make decisions and give orders, lead an effective response to enemy contact, or accurately navigate. Leaders exercise procedural control by unit training and rehearsals in the basics of tactical movement. The better trained and rehearsed subordinates are, the more freedom leaders have to concentrate on the situation, particularly the enemy and the terrain. Leaders exercise positive control by communicating to subordinates. They do so using hand-and-arm signals as a method of communication. They also use the other means of communication (messenger, visual, audio, radio, and digital) when appropriate.

g. All available communication is used (consistent with OPSEC and movement security) to assist in maintaining control during movement. March objectives, checkpoints, and phase lines may be used to aid in control. The number of reports is reduced as normally only exception reports are needed. The leader should be well forward in the formation but may move throughout as the situation demands. Communications with security elements are mandatory. Operations security often prevents the use of radios, so connecting files, runners, and visual signals can be used. Detailed planning, briefing, rehearsals, and control are valuable if there is enemy contact. Alternate plans are made to cover all possible situations.

SECTION II MOVEMENT FORMATIONS

1. This section discusses movement formations of Infantry fire teams, squads, and platoons. The platoon leader uses formations for several purposes: to relate one squad to another on the ground; to position firepower to support the direct-fire plan; to establish responsibilities for sector security among squads; or to aid in the execution of battle drills. Just as they do with movement techniques, platoon leaders plan formations based on where they expect enemy contact, and on the company commander’s plans to react to contact. The platoon leader evaluates the situation and decides which formation best suits the mission and situation.

2. Every squad and Soldier has a standard position. Soldiers can see their team leaders. Fire team leaders can see their squad leaders. Leaders control their units using hand-and-arm signals.

3. Formations also provide 360-degree security and allow units to give the weight of their firepower to the flanks or front in anticipation of enemy contact.

4. Formations do not demand parade ground precision. Platoons and squads must retain the flexibility needed to vary their formations to the situation. The use of formations allows Soldiers to execute battle drills more quickly and gives them the assurance that their leaders and buddy team members are in the expected positions and performing the right tasks.

5. Sometimes platoon and company formations differ due to METT-TC factors. For example, the platoons could move in wedge formations within a company vee. It is not necessary for the platoon formation to be the same as the company formation unless directed by the company commander. However, the platoon leader must coordinate his formation with other elements moving in the main body team’s formation. Figure 8-2 illustrates platoon symbols.
NOTE: The formations shown in the illustrations are examples only. They generally are depicted without METT-TC considerations, which are always the most crucial element in the selection and execution of a formation. Leaders must be prepared to adapt their choice of formation to the specific situation.

PRIMARY FORMATIONS

1. Combat formations are composed of two variables: lateral frontage, represented by the line formation; and depth, represented by the column formation. The advantages attributed to any one of these variables are disadvantages to the other. Leaders combine the elements of lateral frontage and depth to determine the best formation for their situation. In addition to the line and column/file, the other five types of formations—box; vee; wedge; diamond; and echelon—combine these elements into varying degrees. Each does so with different degrees of emphasis which result in unique advantages and disadvantages (Table 8-1).

2. The seven formations can be grouped into two categories: formations with one lead element, and formations with more than one lead element. The formations with more than one lead element, as a general rule, are better for achieving fire superiority to the front, but are more difficult to control. Conversely, the formations with only one lead element are easier to control but are not as useful for achieving fire superiority to the front.

3. Leaders attempt to maintain flexibility in their formations. Doing so enables them to react when unexpected enemy actions occur. The line, echelon, and column formations are the least flexible of the seven formations. The line mass to the front has vulnerable flanks. The echelon is optimized for a flank threat—something that units want to avoid. The column has difficulty
reinforcing an element in contact. Leaders using these formations should consider ways to reduce the risks associated with their general lack of flexibility.

<table>
<thead>
<tr>
<th>Name/Formation/Signal (if applicable)</th>
<th>Characteristics</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
</table>
| **Line Formation**                 | - All elements arranged in a row  
- Majority of observation and direct fires oriented forward; minimal to the flanks  
- Each subordinate unit on the line must clear its own path forward  
- One subordinate designated as the base on which the other subordinates cue their movement | Ability to:  
- Generate fire superiority to the front  
- Clear a large area  
- Disperse  
- Transition to bounding overwatch, base of fire, or assault | - Control difficulty increases during limited visibility and in restrictive or close terrain  
- Difficult to designate a maneuver element  
- Vulnerable assailable flanks  
- Potentially slow  
- Large signature |
| **Column/File Formation**          | - One lead element  
- Majority of observation and direct fire directed toward the flanks; minimal to the front  
- One route means unit only influenced by obstacles on that one route | - Easiest formation to control (as long as leader can communicate with lead element)  
- Ability to generate a maneuver element  
- Secure flanks  
- Speed | - Reduced ability to achieve fire superiority to the front  
- Clear a limited area and concentrates the unit  
- Transitions poorly to bounding overwatch, base of fire, and assault  
- Column’s depth makes it a good target for close air attacks and a machine gun beaten zone |
| **Vee Formation**                 | - Two lead elements  
- Trail elements move between the two lead elements  
- Used when contact to the front is expected  
- “Reverse wedge”  
- Unit required to two lanes/routes forward | Ability to:  
- Generate fire superiority to the front  
- Generate a maneuver element  
- Secure flanks  
- Clear a large area  
- Disperse  
- Transition to bounding overwatch, base of fire, or assault | - Control difficulty increases during limited visibility and in restrictive or close terrain  
- Potentially slow |
| **Box Formation**                 | - Two lead elements  
- Trail elements follow lead elements  
- All-around security | See vee formation advantages | See vee formation disadvantages |
| **Wedge Formation**              | - One lead element  
- Trail elements paired off abreast of each other on the flanks  
- Used when the situation is uncertain | Ability to:  
- Control, even during limited visibility, in restrictive terrain, or in close terrain  
- Transition trail elements to base of fire or assault  
- Secure the front and flanks  
- Transition the line and column | - Trail elements are required to clear their own path forward  
- Frequent need to transition to column in restrictive, close terrain |
| **Diamond Formation**            | - Similar to the wedge formation  
- Fourth element follows the lead element | See wedge formation advantages | See wedge formation disadvantages |
| **Echelon Formation (Right)**     | - Elements deployed diagonally left or right  
- Observation and fire to both the front and one flank  
- Each subordinate unit on the line clears its own path forward | Ability to assign sectors that encompass both the front and flank | Difficult to maintain proper relationship between subordinates  
- Vulnerable to the opposite flanks |

Table 8-1 Primary formations
PLATOON FORMATIONS
The actual number of useful combinations of squad and fire team combat formations within the platoon combat formations is numerous, creating a significant training requirement for the unit. Add to that the requirement to modify formations with movement techniques, immediate action drills, and other techniques, and it is readily apparent that what the platoon leader needs is a couple of simple, effective strategies. These strategies should be detailed in the unit’s SOPs. For a full description of each combat formation and advantages and disadvantages refer again to Table 8-1.

PLATOON LEADER RESPONSIBILITIES
1. Like the squad leader, the platoon leader exercises command and control primarily through his subordinates and moves in the formation where he can best achieve this. The squad and team leader execute the combat formations and movement techniques within their capabilities based on the platoon leader’s guidance.

2. The platoon leader is responsible for 360-degree security, for ensuring that each subordinate unit’s sectors of fire are mutually supporting, and for being able to rapidly transition the platoon upon contact. He adjusts the platoon’s formation as necessary while moving, primarily through the three movement techniques (see Section III). Like the squad and team, this determination is a result of the task, the nature of the threat, the closeness of terrain, and the visibility.

3. The platoon leader is also responsible for ensuring his squads can perform their required actions. He does this through training before combat and rehearsals during combat. Well-trained squads are able to employ combat formations, movement techniques, actions on contact, and stationary formations.

4. The platoon leader designates one of the squads as the base squad. He controls the platoon’s speed and direction of movement through the base squad, while the other squads and any attachments cue their movement off of the base squad.

PRIMARY FORMATIONS
1. Platoon formations include the column, the line (squads on line or in column), the vee, the wedge, and the file. The leader should weigh these carefully to select the best formation based on his mission and on METT-TC analysis. A comparison of the formations is in Table 8-4.

2. Within these platoon formations, the rifle squads are either in a column or a line. Within the rifle squad formations, the teams are in one of the six formations. Normally the platoon leader does not personally direct fire team formations, but he can do so if the situation dictates. He should at a minimum know the formation of the base fire team of the base squad. The weapons squad travels separately or attached to the rifle squads.
<table>
<thead>
<tr>
<th>Movement Formation</th>
<th>When Most Often Used</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platoon column</td>
<td>Platoon primary movement formation</td>
<td>Control: Good for maneuver (fire and movement)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flexibility: Provides good dispersion laterally and in depth.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fire Capability/Restrictions: Allows limited firepower to the front and rear, but high volume to the flanks.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Security: Extremely limited overall security</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Movement: Good</td>
</tr>
<tr>
<td>Platoon line, squads on line</td>
<td>When the leader wants all Soldiers forward for maximum firepower to the front and the enemy situation is known</td>
<td>Control: Difficult</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flexibility: Minimal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fire Capability/Restrictions: Allows maximum firepower to the front, little to flanks and rear.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Security: Less secure than other formations because of the lack of depth, but provides excellent security for the higher formation in the direction of the echelon.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Movement: Slow</td>
</tr>
<tr>
<td>Platoon line, squads in column</td>
<td>May be used when the leader does not want everyone on line; but wants to be prepared for contact; when crossing the LD when LD is near the objective</td>
<td>Control: Easier than platoon line, squads on line, but more difficult than platoon column</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flexibility: Greater than platoon column, squads on line, but less than platoon line</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fire Capability/Restrictions: Good firepower to the front and rear, minimum fires to the flanks; not as good as platoon column, better than platoon line.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Security: Good security all around</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Movement: Slower than platoon column, faster than platoon line, squads on line.</td>
</tr>
<tr>
<td>Platoon vee</td>
<td>When the enemy situation is vague, but contact is expected from the front.</td>
<td>Control: Difficult</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flexibility: Provides two squads up front for immediate firepower and one squad to the rear for movement (fire and movement) upon contact from the flank.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fire Capability/Restrictions: Immediate heavy volume of firepower to the front or flanks.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Security: Good security to the front</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Movement: Slow</td>
</tr>
<tr>
<td>Platoon wedge</td>
<td>When the enemy situation is vague, but contact is not expected</td>
<td>Control: Difficult but better than platoon vee and platoon line, squads on line.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flexibility: Enables leader to make contact with a small element and still have two squads to maneuver.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fire Capability/Restrictions: Provides heavy volume of firepower to the front or flanks.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Security: Good security to the flanks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Movement: Slow, but faster than platoon vee.</td>
</tr>
<tr>
<td>Platoon file</td>
<td>When visibility is poor due to terrain, vegetation, or light</td>
<td>Control: Easiest</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flexibility: Most difficult formation from which to maneuver.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fire Capability/Restrictions: Allows immediate fires to the flanks, masks most fires to front and rear.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Security: Extremely limited overall security</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Movement: Fastest for dismounted movement.</td>
</tr>
</tbody>
</table>

Table 8-4. Comparison of platoon formations
PLATOON COLUMN
In the platoon column formation, the lead squad is the base squad (Figure 8-8). It is normally used for traveling only.

Figure 8-8. Platoon column
NOTE: METT-TC considerations determine where the weapons squad or machine gun teams locate in the formation. They normally move with the platoon leader and /or PSG so he can establish a base of fire quickly.

Platoon Line, Squads on Line
1. In the platoon line, squads on line formation, when two or more platoons are attacking, the company commander chooses one of them as the base platoon. The base platoon’s center squad is its base squad. When the platoon is not acting as the base platoon, its base squad is its flank squad nearest the base platoon. The weapons squad may move with the platoon, or it can provide the support-by-fire position. This is the basic platoon assault formation (Figure 8-9).

2. The platoon line with squads on line is the most difficult formation from which to make the transition to other formations.

3. It may be used in the assault to maximize the firepower and shock effect of the platoon. This normally is done when there is no more intervening terrain between the unit and the enemy, when antitank systems are suppressed, or when the unit is exposed to artillery fire and must move rapidly.

Platoon Line, Squads in Column
When two or more platoons are moving, the company commander chooses one of them as the base platoon. The base platoon’s center squad is its base squad. When the platoon is not the base platoon, its base squad is its flank squad nearest the base platoon (Figure 8-10). The platoon line with squads in column formation is difficult to transition to other formations.
Figure 8-10. Platoon line, squads in column.

Platoon Vee
This formation has two squads up front to provide a heavy volume of fire on contact (Figure 8-11). It also has one squad in the rear that can either over-watch or trail the other squads. The platoon leader designates one of the front squads to be the platoon’s base squad.

Figure 8-11. Platoon vee.
**Platoon Wedge**

1. This formation has two squads in the rear that can over-watch or trail the lead squad (Figure 8-12). The lead squad is the base squad. The wedge formation—
   a. Can be used with the traveling and traveling over-watch techniques.
   b. Allows rapid transition to bounding over-watch.

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**Platoon File**

This formation may be set up in several methods (Figure 3-13). One method is to have three-squad files follow one another using one of the movement techniques. Another method is to have a single platoon file with a front security element (point) and flank security elements. The distance between Soldiers is less than normal to allow communication by passing messages up and down the file. The platoon file has the same characteristics as the fire team and squad files. It is normally used for traveling only.
Figure 8-13. Platoon file
SECTION III MOVEMENT TECHNIQUES

1. Movement techniques are not fixed formations. They refer to the distances between Soldiers, teams, and squads that vary based on mission, enemy, terrain, visibility, and any other factor that affects control. There are three movement techniques: traveling; traveling over-watch; and bounding over-watch. The selection of a movement technique is based on the likelihood of enemy contact and the need for speed. Factors to consider for each technique are control, dispersion, speed, and security (Table 8-5).

<table>
<thead>
<tr>
<th>Movement Techniques</th>
<th>When Normally Used</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traveling</td>
<td>Contact not likely</td>
<td>Control</td>
</tr>
<tr>
<td>Traveling overwatch</td>
<td>Contact possible</td>
<td>Less</td>
</tr>
<tr>
<td>Bounding overwatch</td>
<td>Contact expected</td>
<td>Most</td>
</tr>
</tbody>
</table>

Table 8-5. Movement techniques and characteristics.

2. From these movement techniques, leaders are able to conduct actions on contact, making natural transitions to fire and movement as well as to conducting tactical mission tasks. When analyzing the situation, some enemy positions are known. However, most of the time enemy positions will only be likely (called templated positions). Templated positions are the leader’s “best guess” based on analyzing the terrain and his knowledge of the enemy. Throughout the operation, leaders are continuously trying to confirm or deny both the known positions as well as the likely positions.

PLATOON MOVEMENT TECHNIQUES

1. The platoon leader determines and directs which movement technique the platoon will use. While moving, leaders typically separate their unit into two groups: a security element and the main body. In most scenarios, the Infantry platoon is not large enough to separate its forces into separate security forces and main body forces. However, it is able to accomplish these security functions by employing movement techniques. A movement technique is the manner a platoon uses to traverse terrain.

2. As the probability of enemy contact increases, the platoon leader adjusts the movement technique to provide greater security. The key factor to consider is the trail unit’s ability to provide mutual support to the lead element. Soldiers must be able to see their fire team leader. The squad leader must be able to see his fire team leaders. The platoon leader should be able to see his lead squad leader.
TRAVELING
The platoon often uses the traveling technique when contact is unlikely and speed is needed (Figure 8-19). When using the traveling technique, all unit elements move continuously. In continuous movement, all Soldiers travel at a moderate rate of speed, with all personnel alert. During traveling, formations are essentially not altered except for the effects of terrain.

Figure 8-19. Platoon traveling
TRAVELING OVER-WATCH
1. Traveling over-watch is an extended form of traveling in which the lead element moves continuously but trailing elements move at varying speeds, sometimes pausing to over-watch movement of the lead element (Figure 3-20). Traveling over-watch is used when enemy contact is possible but not expected. Caution is justified but speed is desirable.

2. The trail element maintains dispersion based on its ability to provide immediate suppressive fires in support of the lead element. The intent is to maintain depth, provide flexibility, and sustain movement in case the lead element is engaged. The trailing elements cue their movement to the terrain, over-watching from a position where they can support the lead element if needed. Trailing elements over-watch from positions and at distances that will not prevent them from firing or moving to support the lead element. The idea is to put enough distance between the lead unit and the trail unit(s) so if the lead unit comes into contact, the trail unit(s) will be out of contact but have the ability to maneuver on the enemy.

3. Traveling over-watch requires the leader to control his subordinate’s spacing to ensure mutual support. This involves a constant process of concentrating (close it up) and dispersion (spread it out). The primary factor is mutual support, with its two critical variables being weapon ranges and terrain. Infantry platoon’s weapon range limitations dictate that units should not generally get separated by more than 300 meters. In compartmentalized terrain this distance is obviously closer while in open terrain this distance is greater.
Figure 8-20. Platoon traveling over-watch
BOUNDING OVER-WATCH
Bounding over-watch is similar to fire and movement in which one unit over-watches the movement of another (Figure 3-21). The difference is there is no actual enemy contact. Bounding over-watch is used when the leader expects contact. The key to this technique is the proper use of terrain. Subordinate units fall into one of three categories: bounding, over-watching, or awaiting orders.

Figure 8-21. Platoon bounding over-watch

Command and Control of the Bounding Element
Ideally, the over-watch element maintains visual contact with the bounding element. However, the leader of the over-watch element may have the ability to digitally track the location of the bounding element without maintaining visual contact. This provides the bounding element more freedom in selecting covered and concealed routes to its next location. Before a bound, the platoon leader gives an order to his squad leaders from the over-watch position. He tells and shows them the following:

- The direction or location of the enemy (if known).
- The positions of the over-watching squad.
- The next over-watch position.
- The route of the bounding squad.
- What to do after the bounding squad reaches the next position.
- What signal the bounding squad will use to announce it is prepared to over-watch.
- How the squad will receive its next orders.
**SECTION IV – Platoon Operations**  
*(FM 3-21.8 MAR07; TC 3-21.8 AUG13)*

The unit task list (UTL) shown in Table A-1 identifies collective tasks that the unit is organized, manned and equipped to conduct according to their Tables of Organization & Equipment (TOE). The platoon leader uses this list to select those tasks that support the company Mission Essential Tasks List (METL). The platoon leader may accept risk and not train the entire UTL. The task numbers and task titles are listed under each of the six warfighting functions.

<table>
<thead>
<tr>
<th>Task Number</th>
<th>Task Title</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mission Command</strong></td>
<td></td>
</tr>
<tr>
<td>07-2-5081</td>
<td>Conduct Troop-Leading Procedures (Platoon-Company)</td>
</tr>
<tr>
<td>55-2-4806</td>
<td>Prepare Equipment for Deployment</td>
</tr>
<tr>
<td>55-2-4828</td>
<td>Plan Unit Deployment Activities Upon Receipt of a Warning Order</td>
</tr>
<tr>
<td><strong>Movement &amp; Maneuver</strong></td>
<td></td>
</tr>
<tr>
<td>07-2-1090</td>
<td>Conduct a Movement to Contact (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-9001</td>
<td>Conduct an Attack (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-1256</td>
<td>Conduct an Attack by Fire (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-1261</td>
<td>Conduct an Attack in an Urban Area (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-9008</td>
<td>Conduct a Raid (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-1477</td>
<td>Breach an Obstacle (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-9002</td>
<td>Conduct a Bypass (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-9003</td>
<td>Conduct a Defense (Platoon-Company)</td>
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<tr>
<td>07-2-1378</td>
<td>Defend in an Urban Area (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-9004</td>
<td>Conduct a Delay (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-9009</td>
<td>Conduct a Withdrawal (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-9012</td>
<td>Conduct a Relief in Place (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-3000</td>
<td>Conduct Support by Fire (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-1387</td>
<td>Employ a Reserve Force (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-3027</td>
<td>Integrate Direct Fires (Platoon-Company)</td>
</tr>
<tr>
<td>17-2-0320</td>
<td>Conduct Infiltration (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-1324</td>
<td>Conduct Area Security (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-1396</td>
<td>Employ Obstacles (Platoon-Company)</td>
</tr>
<tr>
<td>07-3-9018</td>
<td>Enter and Clear a Building (Section-Platoon)</td>
</tr>
<tr>
<td>17-2-9225</td>
<td>Conduct a Screen (Platoon-Company)</td>
</tr>
<tr>
<td>17-2-4010</td>
<td>Conduct Zone Reconnaissance</td>
</tr>
<tr>
<td>17-2-4011</td>
<td>Conduct Area Reconnaissance (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-9006</td>
<td>Conduct a Passage of Lines as the Passing Unit (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-9007</td>
<td>Conduct a Passage of Lines as the Stationary Unit (Platoon-Company)</td>
</tr>
<tr>
<td>19-3-2406</td>
<td>Conduct Roadblock and Checkpoint Operations</td>
</tr>
<tr>
<td>07-2-5027</td>
<td>Conduct Consolidation and Reorganization (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-9014</td>
<td>Occupy an Assembly Area (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-5009</td>
<td>Conduct a Rehearsal (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-1405</td>
<td>Establish an Outpost (Platoon-Company)</td>
</tr>
<tr>
<td>Code</td>
<td>Task Description</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>44-3-3220</td>
<td>Perform Passive Air Defense Measures</td>
</tr>
<tr>
<td>44-3-3221</td>
<td>Perform Active Air Defense Measures</td>
</tr>
<tr>
<td>07-2-1189</td>
<td>Conduct a Dismounted Tactical Road March (Platoon-Company)</td>
</tr>
<tr>
<td>07-3-9016</td>
<td>Establish an Observation Post</td>
</tr>
<tr>
<td>07-2-6063</td>
<td>Maintain Operations Security (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-1198</td>
<td>Conduct a Mounted Tactical Road March (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-1450</td>
<td>Cross a Water Obstacle (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-1342</td>
<td>Conduct Tactical Movement (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-1369</td>
<td>Secure Routes (Platoon-Company)</td>
</tr>
<tr>
<td>17-2-3070</td>
<td>Breach an Obstacle (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-5036</td>
<td>Conduct Coordination (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-6045</td>
<td>Employ Camouflage, Concealment, and Deception Techniques (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-9005</td>
<td>Conduct a Linkup (Platoon-Company)</td>
</tr>
<tr>
<td>07-3-9013</td>
<td>Conduct Action on Contact</td>
</tr>
<tr>
<td>07-2-9011</td>
<td>Conduct Tactical Movement in an Urban Area (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-9051</td>
<td>Conduct a Cordon and Search (Platoon-Company)</td>
</tr>
<tr>
<td>07-2-1495</td>
<td>Conduct an Air Assault (Platoon-Company)</td>
</tr>
<tr>
<td>07-3-1072</td>
<td>Conduct a Disengagement</td>
</tr>
<tr>
<td>07-3-1333</td>
<td>Knock Out a Bunker</td>
</tr>
<tr>
<td>07-3-9017</td>
<td>Conduct Actions at Danger Areas</td>
</tr>
<tr>
<td>17-2-4000</td>
<td>Conduct Route Reconnaissance (Platoon-Company)</td>
</tr>
<tr>
<td>19-3-2007</td>
<td>Conduct Convoy Security</td>
</tr>
<tr>
<td>03-2-9226</td>
<td>Cross a Chemically Contaminated Area</td>
</tr>
<tr>
<td></td>
<td><strong>Intelligence</strong></td>
</tr>
<tr>
<td>34-2-0010</td>
<td>Report Tactical Information</td>
</tr>
<tr>
<td>34-3-0001</td>
<td>Monitor Platoon Operational Status</td>
</tr>
<tr>
<td>34-3-0003</td>
<td>Maintain Operations Security</td>
</tr>
<tr>
<td></td>
<td><strong>Fires</strong></td>
</tr>
<tr>
<td>07-2-3036</td>
<td>Integrate Indirect Fire Support (Platoon-Company)</td>
</tr>
<tr>
<td></td>
<td><strong>Sustainment</strong></td>
</tr>
<tr>
<td>63-2-4546</td>
<td>Conduct Logistics Package (LOGPAC) Support</td>
</tr>
<tr>
<td>08-2-0003</td>
<td>Treat Casualties</td>
</tr>
<tr>
<td>08-2-0004</td>
<td>Evacuate Casualties</td>
</tr>
<tr>
<td></td>
<td><strong>Protection</strong></td>
</tr>
<tr>
<td>03-2-9224</td>
<td>Conduct Operational Decontamination</td>
</tr>
<tr>
<td>07-2-4054</td>
<td>Secure Civilians During Operations (Platoon-Company)</td>
</tr>
<tr>
<td>03-2-9201</td>
<td>Implement CBRNE Protective Measures</td>
</tr>
<tr>
<td>07-2-5063</td>
<td>Conduct Composite Risk Management (Platoon-Company)</td>
</tr>
</tbody>
</table>
Section V – Introduction to Offensive Operations

1. CHARACTERISTICS OF OFFENSIVE OPERATIONS

   a. Surprise - Platoons achieve surprise by attacking the enemy at a time or place he does not expect or in a manner for which he is unprepared. Unpredictability and boldness, within the scope of the commander’s intent, help the platoon gain surprise. Total surprise is rarely essential; simply delaying or disrupting the enemy’s reaction is usually effective. Surprise also stresses the enemy’s command and control and induces psychological shock in his Soldiers and leaders. The platoon’s ability to infiltrate during limited visibility and to attack are often key to achieving surprise.

   b. Concentration - Platoons achieve concentration by massing the effects of their weapons systems and rifle squads to achieve a single purpose. Massing effects does not require all elements of the platoon to be co-located; it simply requires the effects of the weapons systems to be applied at the right place and time. Because the attacker moves across terrain the enemy has prepared, he may expose himself to the enemy’s fires. By concentrating combat power, the attacker can reduce the effectiveness of enemy fires and the amount of time he is exposed to those fires. Modern navigation tools such as global positioning systems (GPSs) allow the platoon leader to disperse, while retaining the ability to quickly mass the effects of the platoon’s weapons systems whenever necessary.

   c. Tempo - Tempo is the rate of speed of military action. Controlling or altering that rate is essential for maintaining the initiative. While a fast tempo is preferred, the platoon leader must remember that synchronization sets the stage for successful accomplishment of the platoon’s mission. To support the commander’s intent, the platoon leader must ensure his platoon’s movement is synchronized with the company’s movement and with the other platoons. If the platoon is forced to slow down because of terrain or enemy resistance, the commander can alter the tempo of company movement to maintain synchronization. The tempo may change many times during an offensive operation. The platoon leader must remember that it is more important to move using covered and concealed routes (from which he can mass the effects of direct fires), than it is to maintain precise formations and predetermined speeds.

   d. Audacity - Audacity is a simple plan of action, boldly executed. It is the willingness to risk bold action to achieve positive results. Knowledge of the commander’s intent one and two levels up allows the platoon leader to take advantage of battlefield opportunities whenever they present themselves. Audacity enhances the effectiveness of the platoon’s support for the entire offensive operation. Marked by disciplined initiative, audacity also inspires Soldiers to overcome adversity and danger.

2. TYPES OF OFFENSIVE OPERATIONS

   a. The four types of offensive operations, described in FM 3-90, are movement to contact, attack, exploitation, and pursuit. Companies can execute movements to contact and attacks. Platoons generally conduct these forms of the offense as part of a company. Companies and platoons participate in an exploitation or pursuit as part of a larger force. The nature of these
operations depends largely on the amount of time and enemy information available during the planning and preparation for the operation phases. All involve designating decisive points, maintaining mutual support, gaining fire superiority over the enemy, and seizing positions of advantage without prohibitive interference by the enemy.

b. MOVEMENT TO CONTACT - Movement to contact is a type of offensive operation designed to develop the situation and establish or regain contact. The platoon will likely conduct a movement to contact as part of a company when the enemy situation is vague or not specific enough to conduct an attack.

c. ATTACK - An attack is an offensive operation that destroys enemy forces, seizes, or secures terrain. An attack differs from a movement to contact because the enemy disposition is at least partially known. Movement supported by fires characterizes an attack. The platoon will likely participate in a synchronized company attack. However, the platoon may conduct a special purpose attack as part of or separate from a company offensive or defensive operation. Special purpose attacks consist of ambush, spoiling attack, counterattack, raid, feint, and demonstration.

d. EXPLOITATION - All commanders are expected to exploit successful attacks. In the exploitation, the attacker extends the destruction of the defending force by maintaining constant offensive pressure. Exploitations are conducted at all command levels, but divisions and brigades are the echelons that conduct major exploitation operations. The objective of exploitation is to disintegrate the enemy to the point where they have no alternative but surrender or fight following a successful attack. Indicators such as increased enemy prisoners of war (EPW), lack of organized defense, loss of enemy unit cohesion upon contact, and capture of enemy leaders indicate the opportunity to shift to an exploitation. Companies and platoons may conduct movements to contact or attacks as part of a higher unit’s exploitation.

e. PURSUIT - Pursuits are conducted at the company level and higher. A pursuit typically follows a successful exploitation. The pursuit is designed to prevent a fleeing enemy from escaping and to destroy him. Companies and platoons may conduct pursuits as part of a higher unit’s exploitation.

3. PLATOON ATTACKS

a. Platoons and squads normally conduct an attack as part of the Infantry company. An attack requires detailed planning, synchronization, and rehearsals to be successful. The company commander designates platoon objectives with a specific mission for his assault, support, and breach elements. To ensure synchronization, all leaders must clearly understand the mission, with emphasis on the purpose, of peer and subordinate elements. Leaders must also know the location of their subordinates and adjacent units during the attack. In addition to having different forms based on their purposes, attacks are characterized as hasty, or deliberate. The primary difference between the hasty and deliberate attack is the planning and coordination time available to allow the full integration and synchronization of all available combined arms assets. Attacks may take the form of one of the following:

- Enemy-oriented attacks against a stationary force.
- Enemy-oriented attacks against a moving force.
• Terrain-oriented attacks.

b. Additionally, some attacks may be significantly focused on executing a select task by a certain date/time group. Attacks will either be daylight attacks or limited visibility attacks. Limited visibility attacks are further divided into illuminated and non-illuminated attacks. Leaders must always plan on non-illuminated attacks becoming illuminated at some point, whether due to friendly or enemy efforts.

4. TYPES OF ATTACK
   a. A Deliberate Attack - a type of offensive action characterized by preplanned coordinated employment of firepower and maneuver to close with and destroy the enemy. The deliberate attack is a fully coordinated operation that is usually reserved for those situations in which the enemy defense cannot be overcome by a hasty attack. Commanders may order a deliberate attack when the deployment of the enemy shows no identifiable exposed flank or physical weakness, or when a delay will not significantly improve the enemy’s defenses. The deliberate attack is characterized by detailed intelligence concerning a situation that allows the leader to develop and coordinate detailed plans. The leader task-organizes his forces specifically for the operation to provide a fully synchronized combined arms team. Time taken to prepare a deliberate attack is also time during which the enemy can continue defensive improvements, disengage, or launch a spoiling attack. The phases of the deliberate attack are reconnaissance, move to the objective, isolate the objective, seize a foothold and exploit the penetration (actions on the objective), and consolidate and reorganize.

   (1) Reconnaissance
      (a) Before a deliberate attack, the platoon and company should gain enemy, terrain, and friendly information from the reconnaissance conducted by the battalion reconnaissance platoon. However, this may not always occur. The platoon and company should be prepared to conduct their own reconnaissance of the objective to confirm, modify, or deny their tentative plan.

      (b) Platoons should not conduct reconnaissance unless specifically tasked to do so in a consolidated reconnaissance plan. If possible, the company should determine the enemy’s size, location, disposition, most vulnerable point, and most probable course of action. At this point, and with permission from battalion, the company should direct the platoon to conduct a reconnaissance patrol. This element conducts a reconnaissance of the terrain along the axis of advance and on the objective. It determines where the enemy is most vulnerable to attack and where the support element can best place fires on the objective.

      (c) The tentative plan may change as a result of the reconnaissance if the platoon or squad discovers that terrain or enemy dispositions are different than determined earlier in the TLP. The platoon or squad leader may modify control measures based on the results of the reconnaissance, and must send these adjustments to their leader as soon as possible. For example, the platoon may discover the weapons squad cannot suppress the enemy from the north side of the objective as originally planned because of terrain limitations. Therefore, the platoon leader moves the support-by-fire positions to the south side of the objective, adjusts the tentative plan’s control measures, and radios the control measures to his commander for approval. The graphics are subsequently disseminated throughout the company and to adjacent units as needed.
(2) **Advance to the Objective** - The attacking element advances to within assault distance of the enemy position under supporting fires using a combination of traveling, traveling overwatch, or bounding overwatch. Platoons advance to successive positions using available cover and concealment. The company commander may designate support-by-fire positions to protect friendly elements with suppressive direct fires. As the company maneuvers in zone, it employs fires to suppress, neutralize, and obscure the enemy positions. The support-by-fire elements may need to occasionally change locations to maintain the ability to support the advancing assault element.

(3) **Assembly Area to the Line of Departure**
   (a) The line of departure is normally a phase line where elements of the attacking element transition to secure movement techniques in preparation for contact with the enemy. Platoons may maneuver from the line of departure to designated support-by-fire positions, assault positions, and breach or bypass sites. Before leaving the assembly area, the platoon leader should receive an update of the location of forward and adjacent friendly elements. He should also receive updated enemy locations. The platoon leader then disseminates these reports to each squad leader.

   (b) The platoon moves forward from the assembly area to the line of departure, usually as part of a company formation along a planned route. The platoon leader should have reconnoitered the route to the line of departure and specifically to the crossing point. During the planning stage, he plots a waypoint on the line of departure at the point he intends to cross. The platoon navigates to the waypoint during movement. The move from the assembly area is timed during the reconnaissance so the lead section crosses the line of departure at the time of attack without halting in the attack position. If the platoon must halt in the attack position, the squads establish security and take care of last minute coordination.

(4) **Line of Departure to Assault Position** - The platoon moves from the line of departure to the assault position. The platoon leader plots waypoints to coincide with checkpoints along the route. During movement, he ensures the platoon navigates from checkpoint to checkpoint or phase line by using basic land navigation skills supplemented by precision navigation.

(5) **Assault Position to the Objective**
   (a) The assault position is the last covered and concealed position before reaching the objective. Ideally, the platoon occupies the assault position without the enemy detecting any of the platoon’s elements. Preparations in the assault position may include preparing bangalores, other breaching equipment or demolitions, fixing bayonets, ceasing or shifting fires, or preparing smoke pots. The platoon may halt in the assault position if necessary to ensure it is synchronized with friendly forces. Once the assault element moves forward of the assault position, the assault must continue. If stopped or turned back, the assault element could sustain unnecessary casualties.

   (b) Supporting fire from the weapons squad must continue to suppress the enemy and must be closely controlled to prevent fratricide. At times, the assault element may mark each Soldier or just the team on the flank nearest the support element. The key is to ensure the support-by-fire element knows the location of the assault element at all times. The assaulting Soldiers and the support element sustain a high rate of fire to suppress the enemy.
(c) When the assault element moves to the breach point, the base-of-fire leader verifies the assault element is at the right location. The base-of-fire leader is responsible for tracking the assault element as it assaults the objective. The company commander shifts or ceases indirect fire when it endangers the advancing Soldiers and coordinates this with the platoon’s assault. As the fire of the platoon’s support is masked, the platoon leader shifts or ceases it or displaces the weapons squad to a position where continuous fire can be maintained.

(6) Isolate the Objective
(a) The goals of isolation are to prevent the enemy from reinforcing the objective and to prevent enemy forces on the objective from leaving. Infantry platoons will probably be an isolating element within a company.
(b) The platoon leader often designates assault, support, and breach elements within his platoon to conduct a deliberate attack. One technique is to designate the weapons squad as the support element, an Infantry squad as the breach element, and the remainder of the platoon as the assault element.
(c) The supporting elements assist the breach element’s initial breach of the objective by placing suppressive fires on the most dangerous enemy positions. As the breach is being established, the weapons squad shifts fires (or local self-defense weapons) to allow the breach element to penetrate the objective and avoid fratricide. Visual observation and information provided through the radio are vital to maintain suppressive fires just forward of the breach and assault elements.
(d) The supporting elements monitor the forward progress of the assault element and keep shifting suppressive fire at a safe distance in front of them. The weapons squad positions itself to provide continual close-in suppressive fire to aid the actions of the assault squad(s) as it moves across the objective.
(e) Once the breach element has seized the initial foothold on the objective, the assault element may then move through the breach lane to assault the objective. As this occurs, the platoon leader closely observes the progress of the breach and assault elements to ensure there is no loss in momentum, and that assault and breach elements do not cross in front of the supporting elements.
(f) All communication from the support element to the breach, assault, and weapons support is by frequency modulated (FM) radio or signals. If the platoon sergeant or squad leader observes problems, they radio the platoon leader. The platoon leader uses this information and what he personally sees on the objective to control the assault.

(7) Consolidate and Reorganize
(a) Once enemy resistance on the objective has ceased, the platoon quickly consolidates to defend against a possible counterattack and prepares for follow-on missions.
(b) Consolidation consists of actions taken to secure the objective and defend against an enemy counterattack.
(c) Reorganization, normally conducted concurrently with consolidation, consists of preparing for follow-on operations. As with consolidation, the platoon leader must plan and prepare for reorganization as he conducts his TLP.

(8) Site Exploitation - Once the sensitive site is secure, enemy resistance eliminated, and safe access established, exploitation of the site begins. Subject matter experts and teams
carefully enter and exploit every structure, facility, and vehicle on the site and determine its value and its hazard to the platoon. The security force continues to secure the site. Leaders may elect to rotate the assault, support, and security forces if the site exploitation lasts for a prolonged period of time.

b. Hasty Attack - The platoon normally participates in a hasty attack as part of a larger unit, during movement to contact, as part of a defense, or whenever the commander determines that the enemy is vulnerable. A hasty attack is used to—

- Exploit a tactical opportunity.
- Maintain the momentum.
- Regain the initiative.
- Prevent the enemy from regaining organization or balance.
- Gain a favorable position that may be lost with time.

Because its primary purpose is to maintain momentum or take advantage of the enemy situation, the hasty attack is normally conducted with only the resources that are immediately available. Maintaining constant pressure through hasty attacks keeps the enemy off balance and makes it difficult for him to react effectively. Rapidly attacking before the enemy can act often results in success even when the combat power ratio is not as favorable as desired. With its emphasis on agility and surprise, however, this type of attack may cause the attacking element to lose a degree of synchronization. To minimize this risk, the commander should maximize use of standard formations, well-rehearsed, thoroughly-understood battle and crew drills, and SOPs. The hasty attack is often the preferred option during continuous operations. It allows the commander to maintain the momentum of friendly operations while denying the enemy the time needed to prepare his defenses and to recover from losses suffered during previous action. Hasty attacks normally result from a movement to contact, successful defense, or continuation of a previous attack.

b. Conduct of the Hasty Attack

(1) By necessity, hasty attacks are simple and require a minimum of coordination with higher and adjacent leaders. Leaders, however, still take the necessary measures to assess the situation, decide on an appropriate course of action, and direct their subordinates in setting conditions and execution.

(2) Execution begins with establishment of a base of fire, which then suppresses the enemy force. The maneuver element uses a combination of techniques to maintain its security as it advances in contact to a position of advantage. These techniques include:

- Use of internal base-of-fire and bounding elements.
- Use of covered and concealed routes.
- Use of indirect fires and smoke grenades or pots to suppress or obscure the enemy or to screen friendly movement.
- Execution of bold maneuver that initially takes the maneuver element out of enemy direct fire range.
SECTION VI – DEFENSIVE OPERATIONS
(FM 3-21.8 MAR07)

Though the outcome of decisive combat derives from offensive actions, leaders often find it is necessary, even advisable, to defend. The general task and purpose of all defensive operations is to defeat an enemy attack and gain the initiative for offensive operations. It is important to set conditions of the defense so friendly forces can destroy or fix the enemy while preparing to seize the initiative and return to the offense. The platoon may conduct the defense to gain time, retain key terrain, facilitate other operations, preoccupy the enemy in one area while friendly forces attack him in another, or erode enemy forces. A well coordinated defense can also set the conditions for follow-on forces and follow-on operations.

1. CHARACTERISTICS OF THE DEFENSE

   • Preparation
   • Security
   • Disruption
   • Massing effects
   • Flexibility

   a. Preparation

      (1) The friendly defender arrives in the battle area before the enemy attacker. As the defender, the platoon must take advantage of this by making the most of preparations for combat in the time available. By thoroughly analyzing the factors of METT-TC, the platoon leader gains an understanding of the tactical situation and identifies potential friendly and enemy weaknesses.

      (2) By arriving in the battle area first, the Infantry platoon has the advantage of preparing the terrain before the engagement. Through the proper selection of terrain and reinforcing obstacles, friendly forces can direct the energy of the enemy's attack into terrain of their choosing. Friendly forces must take advantage of this by making the most thorough preparations that time allows while always continuing to improve their defenses—security measures, engagement areas, and survivability positions. Preparation of the ground consists of plans for fires and movement; counterattack plans; and preparation of positions, routes, obstacles, logistics, and command and control (C2) facilities.

      (3) The Infantry platoon must exploit every aspect of terrain and weather to its advantage. In the defense, as in the attack, terrain is valuable only if the friendly force gains advantage from its possession or control. In developing a defensive plan, the friendly force takes account of key terrain and attempts to visualize and cover with fire all possible enemy avenues of approach into their sector. The friendly defense seeks to defend on terrain that maximizes effective fire, cover, concealment, movement, and surprise.

      (4) Friendly forces must assume that their defensive preparations are being observed. To hinder the enemy's intelligence effort, leaders establish security forces to conduct counter reconnaissance and deceive the enemy as to the exact location of the main defenses.
b. Security - The goals of the platoon’s security efforts are normally tied to the company efforts. These efforts include providing early warning, destroying enemy reconnaissance units, and impeding and harassing elements of the enemy main body. The platoon will typically continue its security mission until directed to displace.

c. Disruption - Defensive plans vary with the circumstances, but all defensive concepts of the operation aim at disrupting the enemy attacker’s synchronization. Counterattacks, indirect fires, obstacles, and the retention of key terrain prevent the enemy from concentrating his strength against selected portions of the platoon’s defense. Destroying enemy command and control vehicles disrupts the enemy synchronization and flexibility. Separating enemy units from one another allows them to be defeated piecemeal.

d. Massing Effects - The platoon must mass the overwhelming effects of combat power at the decisive place and time if it is to succeed. It must obtain a local advantage at points of decision. Offensive action may be a means of gaining this advantage. The platoon leader must remember that this massing refers to combat power and its effects—not just numbers of Soldiers and weapons systems.

e. Flexibility - Flexibility is derived from sound preparation and effective command and control and results from a detailed analysis of the factors of METT-TC, an understanding of the unit’s purpose, and aggressive reconnaissance and surveillance. The platoon must be agile enough to counter or avoid the enemy attacker’s blows and then strike back effectively. For example, supplementary positions on a secondary avenue of approach may provide additional flexibility to the platoon. Immediate transitions from defense to offense are difficult. To ease this transition, the platoon leader must think through and plan for actions his platoon may need to take, and then rehearse them in a prioritized sequence based on time available.

SECTION VII – CORDON AND SEARCH
(ATP 3-06.20, Cordon and Search Tactics, Techniques, & Procedures; MAY13)
A cordon and search operation is conducted to seal (cordon) off an area in order to search it for persons or things such as items, intelligence data, or answers to PIR. Effective cordon and search operations possess sufficient forces to both effectively cordon a target area and thoroughly search that target. Usually, this operation contributes to establishing public order and safety, a key establish civil control subtask. It is also one of the techniques used in the “clear” phase of a clear-hold-build operation.

Cordon is a tactical task given to a unit to prevent withdrawal from or reinforcement to a position. Cordon implies occupying or controlling terrain especially mounted and dismounted avenues of approach. Search implies the physical and visual inspection of an area. Both the object of the search and the physical area of the search influence the type and degree of the search.
1. **Methods**

   a. The two basic methods of executing a cordon and search are—cordon and knock and cordon and enter. They differ in level of aggression. Based on the enemy SITEMP and identified operational risk, actual cordon and search operations vary between these two levels.

   b. Key factors to consider in selecting the method to use include the enemy threat, the local populace support, the level of intelligence available, and the capabilities of the HN security forces. In both methods, the cordon is still established with as much speed or surprise as possible to isolate the objective. Both methods may require some integrated HN security forces or civil authorities to obtain the agreement by the occupants of the targeted search area. The figure below compares the characteristics of permissive and non-permissive cordon and search operations.

   ![Comparison of cordon and search methods](image)

   (1) **Cordon and Knock**
   
   (a) This is less intrusive than cordon and search. It is used when the populace is seen as friendly or neutral, when no resistance is expected, and when the goal is to disrupt and inconvenience the occupants as little as possible. One version of this is called the tactical callout. This is a procedure where occupants are asked to exit the before search forces enter. If occupants refuse to exit, or if the ground commander believes that the potential exists for an insurgent encounter, he may escalate to cordon and enter.

   (b) A second version of the cordon and knock is cordon and ask which means occupants or the local Host Nation authorities are asked for permission to search a particular location. If permission is denied, no entry occurs. However, the cordon and knock and the cordon and ask require some degree of integration with HN security force or HN authorities to obtain the agreement by the occupants of the target to the subsequent search. At a minimum, a sufficient number of translators, preferably one with each element is required.

   (2) **Cordon and Enter**

   (a) This approach is intrusive. The intent is to rapidly breach barriers to gain entry into the search area, typically using speed and surprise to allow the unit to quickly gain control. This action allows units to maintain the initiative over a potentially unknown insurgent force operating in the search area. Intrusive entry ranges from a Soldier simply opening a door without occupant permission, to mechanical ballistic, or explosive breaching. In addition, mounted units can use vehicles to breach. The cordon and enter approach does not explicitly require integrated HN security forces or HN authorities, because occupants' permission is not required. However, during a counterinsurgency, obtaining the leadership or direct support of the HN is always preferred. Commanders assume operational risk in COIN by foregoing these considerations.
Some considerations when using the cordon and enter method follow. These considerations may be more or less important than capturing the target individual, site, or equipment. Gains in security by violent capture of a key insurgent leader may result in far more substantial losses along the other LOE:

- Risk to civilian occupants and bystanders.
- Collateral damage to infrastructure.
- Perception of the populace.
- Risk to Soldiers.
- Rehearsals.
- Level of training of breach element.
- Effects on subsequent tactical site exploitations.

2. Approaches – Leaders plan and execute cordon and search operations using either a systematic or selective approach. A systematic approach is the search of all buildings in the targeted area, while a selective approach is the search of specific locations within a targeted area. The approach used depends on numerous factors. However, the purpose of the operation is still to capture the designated personnel, site, or equipment.

3. Considerations – If intelligence indicates enemy presence, and the local populace is either neutral or supportive of the insurgency, then the principles of speed and surprise are the keys to a successful cordon and search. Specific considerations using elements of the mission variables are—

a. Mission - Leaders determine the focus and method of the cordon and search based on the anticipated threat and the level of violence in the area of operations.

b. Enemy - Cordon elements cannot effectively block pedestrian egress or ingress. Therefore, commanders should consider how to best physically stop pedestrian traffic. Lethal fire is not a universal means of enforcing the nature of a cordon.

c. Troops and Support Available - The size and composition of the cordon and search force is based on the size of the area to be cordoned, the size of the area to be searched and the suspected enemy SITEMP. Normally, a military commander, with the police in support, best controls a search involving a battalion or larger force. The police, with the military in support, best control a search involving smaller forces. Regardless of the controlling agency, HN police are the best choice for performing the actual search. However, they must be available in adequate numbers and be trained in search operations.

d. Time Available - As time available to plan and prepare for a cordon and search mission is generally limited, it is often necessary to conduct planning while reconnaissance and intelligence collection are ongoing. The size of the area, especially the interior layout of urban buildings, impacts force size and search time. Leaders should plan on allowing time for follow-on missions based on exploitable information.
e. Civil Considerations - Cordon and search operations are a great opportunity for all Soldiers to conduct information engagements with the population. Each Soldier should know and understand the information engagement task and purpose.

4. Phases - The phases of a cordon and search are the planning phase, reconnaissance phase, and movement to the objective phase; isolate the objective phase, search phase and the withdrawal phase.

   a. Plan
      (1) Establishing the cordon requires detailed planning, effective coordination, and meticulous integration and synchronization of available assets to achieve the desired effects. This requires the commander to consider both lethal and nonlethal effects. Each subordinate cordon position such as a traffic control point or blocking position must have a designated leader and a clearly understood task and purpose.

      (2) A cordon and search operation can usually support the conduct engagement LOE. Commanders must develop, integrate, and nest the information message in accordance with the purpose of the search. Often the best message in COIN is one’s actions or that of the entire unit.

      (3) Search of an urban area varies from a few, easily isolated buildings to a large well developed urban city. Leaders should divide the urban area to be searched into zones. Buildings should be numbered and assigned specific search parties for coordination and clarity

   Enablers
   1. Assets employed during the cordon and search may include tactical PSYOP teams (TPTs), tactical HUMINT teams (THTs), law enforcement professionals (LEPs), special advisors, attack, reconnaissance, and assault aviation, CAS, SIGINT enablers, MASINT enablers, military working dog teams, (MWDs) biometrics collection efforts, female searchers, and civil affairs teams (CATs).

   2. A TPT is an outstanding combat multiplier. Messages broadcast in the local language during cordon and search/knock operations facilitates situational awareness and understanding for the local inhabitants. These TPTs, using vehicle mounted or man pack loudspeaker systems, can help inform and control the population. In addition, the TPT conducts face-to-face communication along with disseminating handbills or leaflets explaining the purpose and scope of the cordon and search. This helps in gaining compliance by the local population.

   3. THT is also an outstanding combat multiplier. THTs collect valuable information from individuals in the search area, provide a tactical questioning capability, and have additional language capabilities.

   Organization – The typical cordon and search organization includes a command element, a cordon element, a search element, and a reserve element each with a clear task and purpose. The figure below displays a typical organization for search operations.
Typical organization for cordon and search operations.

1. Command Element - An overall commander controls the unit conducting the cordon and search. He identifies the subordinate element leaders.

2. Cordon Element - This force must have enough combat power to cordon off the area. An effective cordon that both prevents the egress of individuals from the search area and prevents outside support to the search area, is critical to the success of the search effort. Based on the mission variables (METT-TC), two cordons are often established: an outer cordon to isolate the objective from outside reinforcements or disruptions, and an inner cordon to prevent individuals from leaving or communicating with someone outside the search area. Both cordon elements must maintain 360-degree security. UAS, scouts, attack reconnaissance aviation, or sniper teams should be considered by tactical units for use in observing the objective area for enemy both before and during the operation.

3. Search/Assault Element
   
   a. The search element conducts the actual search operation. A search may orient on people, on materiel, on buildings, or on terrain. Normally, it is organized into special teams. The most basic search team is a two person team consisting of one person who conducts the actual search while another person provides immediate security to the searcher. Establish discipline and standardized search SOPs to ensure searches are thorough, PIR-focused, and of minimal risk to Soldiers.

   b. All search elements must be prepared to handle male and female personnel, key equipment, hazardous materials (biohazards or other toxic elements), ordinance, and record key events. They must be trained to understand and on order execute information engagements, tactical site exploitation, detainee operations, and adjacent unit coordination. Search personnel must be trained to operate with HN security forces and within the established ROE. First aid and other medical training is critical. Soldiers must be proficient with signaling and marking devices as well as detection and recording equipment. Biometric and video/audio recording device proficiency is crucial in COIN search operations. Basic language training is essential to maintain effective searches and overall operational tempo.

   c. Typical search teams are organized in two- to three Soldier teams. Female Soldiers are a proven combat multiplier during search operations, because few cultures tolerate males searching females. Search teams clear each room or area in accordance with FM 3-21.8.
Units should not confuse entry methods and their levels of aggression with the requirement to respect the Host Nation’s people and homes. Typically, once a room is cleared, one team member provides security while the other(s) searches. All search element personnel are prepared to fight. Basic considerations for any search team include the following:

- Detailed instructions including prohibited items such as weapons, chemicals, medicines, and machine tools.
- Understanding of search restrictions and special considerations to include—
  - Searching of religious buildings.
  - Searching of females by female Soldiers.
  - Searching of historical, cultural, or governmental sites (unauthorized or hostile).
- Host nation security forces or local interpreters.
- Biometrics tools.
- Breaching kit.
- Vehicle access tools such as lock picks.
- Information engagement products and tools.
- Audio and video recording devices and data imaging devices.
- Markings and signaling techniques and any constraints.
- Respect for personal property.
- Tools to collect and record information for HUMINT.
- Necessity to maintain communication and report location.
- Standardization of maps, imagery, and labeling conventions.

(4) Reserve Element
The reserve element or QRF must possess and maintain enough combat power to defeat the insurgent forces template within the AO. The commander gives priorities for planning to the reserve that could include to be prepared to execute any of the subordinate unit missions. Priorities can also include additional missions such as CASEVAC or reinforcement. The reserve element leader focuses efforts on synchronized communications, rehearsals, battle tracking, and positioning before and during the operation.

b. Reconnaissance – Every target area should be reconnoitered prior to execution using many of the available resources. If the target is part of a unit’s AO, then a patrol around the target may not be out of order. ISR assets, attack reconnaissance aviation, local nationals, and imagery are other methods for conducting reconnaissance. The reconnaissance plan must not provide the enemy with indicators of an impending cordon and search. Given the nature of COIN, the reconnaissance phase could last an extended period, as units identify the relative size and location of buildings, entry points, cordon position and avenues of approach. Further tools for objective analysis may be obtained from attack aviation photographs, maps, and local emergency services departments.

c. Movement to the Objective - The timing, routes, and execution of movement to the objective should consider the factors of METT-TC, and whether it should be simultaneous or phased. If contact is made in the movement, commanders should consider whether they wish to send forces forward to initiate the cordon.
d. **Isolation of the Objective** – Although analysis of the mission variables using METT-TC determines specifics, a unit typically establishes the outer cordon first, establishes the inner cordon second, and moves the search element to the objective last. Commanders should consider the value of using the opposite technique of forming the cordons following rapid movement to the objective to gain surprise. Timing is when executing either technique is important. The quicker these three events are accomplished, the less time personnel on the objectives have to egress, find concealment, or destroy materials or equipment.

(1) Position the Reserve Element - The reserve element or QRF is a mobile force positioned in a nearby area, with multiple planned ground, water, or air routes to the objective area. Its mission is to aid the search and security elements if they require assistance or become unable to achieve their purpose.

(2) Establish the Cordon

(a) There are two techniques for emplacing the actual cordon positions: simultaneously and sequentially. Careful consideration must be given to both, because each has advantages and disadvantages. Units establishing a cordon position themselves to be able to block movement to and from the objective area. This may be by observed fire, but usually it will be by physically controlling routes. Cordon positions should be occupied rapidly just prior to the search element reaching the objective. Establishing the cordon during a period of limited visibility increases movement security but makes control difficult. Cordon positions, once occupied, will be detected by locals as they conduct their daily business.

(b) Both the outer and inner cordon leaders must maintain situational understanding of not only their AOs, but also each other’s cordon and the progress of operations of the search element. In doing so, they can anticipate insurgent activity; controls direct and indirect fires, and achieve their task and purpose.

(c) The various positions of the outer and inner cordons may include, vehicle mounted platoons or sections, dismounted platoons or squads, interpreters, detainee security teams, crowd control teams, tactical PSYOP teams, observation posts, traffic control points or blocking positions, Host Nation security forces (military or police), and aviation assets.

(d) The outer cordon usually focuses on traffic control points and blocking positions, while the inner cordon focuses on over-watching the objective and preventing ex-filtration or reposition of persons within the search area. The two figures below show the typical establishment of a cordon and the details of an inner cordon in an urban setting. Note the technique of assigning each building a number to increase clarity and coordination between units.
e. **Search**

(1) A search may be oriented toward people, materiel, buildings, or terrain. It usually involves both HN police and military personnel. It must be a systematic action to ensure that personnel, documents, electronic data, and other material are identified, evaluated, collected, and protected to develop intelligence and facilitate follow-on actions.

(2) The tempo at which a search operation is conducted should be slow enough to allow for an effective search, while not so slow that it allows the insurgent force time to react to the search. Search teams must consider a return to an area after an initial search. This can surprise and remove insurgents who may not have been detected or may have returned. All searches
should create pressure on insurgents and sympathizers to not stay in the area, but not inconvenience the local residents to the degree that they will collaborate with the insurgents.

(3) Special laws regulate the search powers of military forces. Misuse of search authority can adversely affect the outcome of operations and future legal proceedings; therefore, all searches must be lawful and properly recorded to be of value. These laws must be disseminated to the population to ensure understanding and compliance. Additional information on searches can be found in ATP 3-06.20. Search teams must have instructions for three basic categories:
Personnel - This includes both male and female and both persons of interest and other persons.
Physical Items - This includes weapons, equipment, documents, computers, and cameras.
Information Mediums - This includes data inside computers, cameras, and cell phones.

f. Withdrawal - During this phase, the unit may be the most vulnerable. To mitigate risk, a commander may choose to—
   - A relief in place.
   - Stay-behind elements to cover the withdrawal.
   - Different routes and timing.

SECTION VIII BATTLE DRILLS
(TC 3-21.8 AUG13)

Infantry battle drills describe how platoons and squads apply fire and maneuver to commonly encountered situations. They require leaders to make decisions rapidly and to issue brief oral orders quickly. A battle drill is defined as “a collective action rapidly executed without applying a deliberate decision-making process.”

Characteristics of a battle drill are:
- They require minimal instructions or guidance and are standardized throughout the Army.
- Sequential actions are vital to success in combat or critical to preserving life.
- They apply to platoon or smaller units.
- They are trained and rehearsed responses to enemy actions or leader’s orders.
- They are reflexive steps followed for offensive and defensive actions in training and combat.

A platoon’s ability to accomplish its mission often depends on Soldiers’ and leaders’ ability to execute key actions quickly. All Soldiers and their leaders must know their immediate reaction to enemy contact as well as follow-up actions. Drills are limited to situations requiring instantaneous response; therefore, Soldiers must execute drills instinctively. This results from continual practice. Drills provide small units with standard procedures essential for building strength and aggressiveness.
- They identify key actions that leaders and Soldiers must perform quickly.
- They provide for a smooth transition from one activity to another; for example, from movement to offensive action to defensive action.
- They provide standardized actions that link Soldier and collective tasks at platoon level and below. (Soldiers perform individual tasks to CTT or SDT standard).
• They require the full understanding of each individual and leader, and continual practice.

The format for drills discussed in the following pages includes the title, the SITUATION that would cue the unit or the leader into initiating the drill, the REQUIRED ACTIONS in sequence, and supporting illustrations. The following Squad Battle Drills are discussed:

- Task 07-3-D9501: React to Contact
- Task 07-3-D9505: Break Contact
- Task 07-3-D9502: React to Ambush (Near)
- Task 07-3-D9503: React to Ambush (Far)
- Task 07-4-D9509: Enter and Clear a Room

**TASK:** React to Contact (Visual, IED, Direct Fire [includes RPG]) (07-3-D9501)

**CONDITIONS:** Visual (dismounted/mounted). The unit is stationary or moves, conducting operations. Visual contact is made with the enemy. Mounted. The unit is stationary or moves, conducting operations. Visual contact is made with the enemy. Improvised explosive device (IED) (dismounted/mounted). The unit is stationary or moves, conducting operations. The unit identifies and confirms an IED or one is detonated. Direct fire dismounted/mounted. The unit is stationary or moves, conducting operations. The enemy initiates contact with a direct fire weapon.

**CUE:** This drill begins when visual contact, direct fire, or an IED is identified or detonated.

**STANDARDS:** Visual (dismounted). The unit destroys the enemy with a hasty ambush or an immediate assault through the enemy position. Visual (mounted). Based on the composition of the mounted unit, the unit either suppresses and reports the enemy position and continues its mission, or suppresses the enemy position for a follow-on assault to destroy them. IED (dismounted/mounted). The unit takes immediate action by using the 5Cs procedure (confirm, clear, call, cordon, check, and control). Direct fire (dismounted/mounted). The unit immediately returns well-aimed fire and seeks cover. The unit leader reports the contact to higher headquarters (HQ).

**TASK STEPS AND PERFORMANCE MEASURES**

1. **Visual dismounted.**
   a. Hasty ambush. Unit leaders take the following actions:
      (1) Determine that the unit has not been seen by the enemy.
      (2) Signal Soldiers to occupy best available firing positions.
      (3) Initiate the ambush with the most casualty-producing weapon available, immediately followed by a sustained well-aimed volume of effective fire.
      (4) If the unit is prematurely detected, the Soldier(s) aware of the detection initiates the ambush.
      (5) Ensure the unit destroys the enemy or forces them to withdraw.
      (6) Report the contact to higher HQ.
   b. Immediate assault.
(1) The unit and the enemy simultaneously detect each other at close range.
(2) All soldiers who see the enemy engage and announce “contact” with a clock direction and distance to enemy, (example, “contact three o’clock, 100 meters”). Unit personnel take the following actions:
(3) Elements in contact immediately assault the enemy using fire and movement.
(4) The unit destroys the enemy or forces them to withdraw
(5) The unit leader reports the contact to higher headquarters.

2. Visual mounted. Unit personnel take the following actions:
   a. The Soldier who spots the enemy announces the contact.
   b. The element in contact immediately suppresses the enemy.
   c. The vehicle commander of the vehicle in contact sends contact report over the radio.
   d. The unit maneuvers on the enemy or continues to move.
   e. Vehicle gunners fix and suppress the enemy positions.
   f. The unit leader reports the contact to higher HQ.

3. IED dismounted/mounted. Unit personnel take the following actions:
   a. React to a suspected or known IED prior to detonation by using the 5Cs.
   b. Unit determines if there is a requirement for explosive ordnance disposal (EOD), while maintaining as safe a distance as possible and 360 security, Unit “confirms” the presence of an IED by using all available optics to identify any wires, antennas, detcord, or parts of exposed ordinance. Take the following actions:
      (1) Conduct surveillance from a safe distance.
      (2) Observe the immediate surroundings for suspicious activities.
      (3) Requests EOD if the need is determined.
   c. Unit “clears” all personnel from the area a safe distance to protect them from a potential second IED.
   d. Unit "cords" off the area, directs personnel out of the danger area, prevents all military or civilian traffic from passing and allows entry only to authorized personnel. They take the following actions:
      (1) Direct people out of the 300-meter minimum danger area.
      (2) Identify and clears an area for an incident control point (ICP).
      (3) Occupy positions and continuously secure the area.
   e. Unit "checks" the immediate area for secondary/tertiary devices around the incident control point (ICP) and cordon using the 5/25 meter checks.
   f. Unit "controls" the area inside the cordon to ensure only authorized access
   g. Unit continuously scans the area for suspicious activity. They take the following actions:
      (1) Identify potential enemy observation, vantage, or ambush points.
      (2) Maintain visual observation on the IED to ensure the device is not tampered with.

4. Direct fire dismounted. (See Figure 1.) Unit personnel take the following actions:
a. Soldiers under direct fire immediately return fire and seek the nearest covered positions. They call out distance and direction of direct fire.

b. Element leaders locate and engage known or suspected enemy positions with well-aimed fire and pass information to the unit leader.
c. Element leaders control their Soldier's fire by:
   (1) Marking targets with lasers.
   (2) Marking the intended target with tracers or M203 rounds.
d. Soldiers maintain contact (visually or orally) with the Soldiers on their left or right.
e. Soldiers maintain contact with their team leader and relay the location of enemy positions. (See Figure 3.)
f. Element leaders (visually or orally) check the status of their Soldiers.
g. Element leaders maintain contact with the unit leader.
h. Unit leader reports the contact to higher headquarters.

5. Direct fire mounted. Unit personnel take the following actions:
   a. If moving as part of a logistics patrol, vehicle gunners immediately suppress enemy positions and continue to move.
   b. Vehicle commanders direct their drivers to accelerate safely through the engagement area.
   c. If moving as part of a combat patrol, vehicle gunners suppress and fix the enemy allowing others to maneuver against and destroy the enemy.
   d. Leaders (visually or orally) check the status of their Soldiers and vehicles.
   e. Unit leader reports the contact to higher HQ.

**TASK:** Break Contact (07-3-D9505)

**CONDITIONS:** (Dismounted/Mounted) - The unit is stationary or moving, conducting operations. All or part of the unit is receiving enemy direct fire.

**CUE:** The unit leader initiates drill by giving the order, BREAK CONTACT.

**STANDARDS:** (Dismounted/Mounted) - The unit returns fire. A leader identifies the enemy as a superior force, and makes the decision to break contact. The unit breaks contact using fire and movement. The unit continues to move until the enemy cannot observe or place effective fire on them. The unit leader reports the contact to higher headquarters (HQ).

**TASK STEPS AND PERFORMANCE MEASURES**
1. Dismounted—
a. The unit leader designates an element to suppress the enemy with direct fire as the base-of-fire element.

b. The unit leader orders distance, direction, a terrain feature, or last rally point for the movement of the first element.

c. The unit leader calls for and adjusts indirect fire to suppress the enemy positions.

d. The base-of-fire element continues to suppress the enemy. (See Figure 1.)

![Figure 1. Break contact (dismounted)](image)

UNIT IS ENGAGING ENEMY AND MUST BREAK CONTACT.

e. The bounding element uses the terrain and/or smoke to conceal its movement and bounds to an overwatch position.

f. The bounding element occupies their overwatch position and suppresses the enemy with "well-aimed fire." (See Figure 2.)

![Figure 2. Break contact (dismounted) (continued)](image)

BOUNDING TEAM USES SMOKE TO CONCEAL MOVEMENT TO NEXT POSITION.
g. The base-of-fire element moves to its next covered and concealed position. (Based on the terrain and volume and accuracy of the enemy's fire, the moving element may need to use fire and movement techniques). (See Figure 3.)

![Figure 3. Break contact (dismounted)](image)

h. The unit continues to suppress the enemy and bound until it is no longer in contact with enemy.
  i. The unit leader reports the contact to higher headquarters.

2. Mounted–
   a. The unit leader directs the vehicles in contact to place "well-aimed" suppressive fire on the enemy positions.
   b. The unit leader orders distance, direction, a terrain feature, or last objective rally point over the radio for the movement of the first section.
   c. The unit leader calls for and adjusts indirect fire to suppress the enemy positions.
   d. Gunners in the base-of-fire vehicles continue to engage the enemy. They attempt to gain fire superiority to support the bound of the moving section.
   e. The bounding section moves to assume the overwatch position.
      (1) The section uses the terrain and/or smoke to mask movement.
      (2) Vehicle gunners and mounted Soldiers continue to suppress the enemy.

f. The unit continues to suppress the enemy and bounds until it is no longer receiving enemy fire.
  g. The unit leader reports the contact to higher HQ.

**TASK:** React to Ambush (Near) (07-3-D9502)

**CONDITIONS:** (Dismounted/Mounted) - The unit is moving tactically, conducting operations. The enemy initiates contact with direct fire within hand grenade range. All or part of the unit is receiving accurate enemy direct fire.
CUE: This drill begins when the enemy initiates ambush within hand grenade range.

STANDARDS:
Dismounted. Soldiers in the kill zone immediately return fire on known or suspected enemy positions and assault through the kill zone. Soldiers not in the kill zone locate and place “well-aimed” suppressive fire on the enemy. The unit assaults through the kill zone and destroys the enemy.

Mounted. Vehicle gunners immediately return fire on known or suspected enemy positions as the unit continues to move out of the kill zone. Soldiers on disabled vehicles in the kill zone dismount, occupy covered positions and engage the enemy with accurate fire. Vehicle gunners and Soldiers outside the kill zone suppress the enemy. The unit assaults through the kill zone and destroys the enemy. The unit leader reports the contact to higher headquarters (HQ).

TASK STEPS AND PERFORMANCE MEASURES
1. Dismounted (See Figure 1.); takes the following actions:

   a. Soldiers in the kill zone execute one of the following two actions:
      (1) Return fire immediately. If cover is not available, immediately, without order or signal, assault through the kill zone.
      (2) Return fire immediately. If cover is available, without order or signal, occupy the nearest covered position, and throw smoke grenades. (See Figure 2.)
b. Soldiers in the kill zone assault through the ambush using fire and movement.
c. Soldiers not in the kill zone identify the enemy location, place “well aimed” suppressive fire on the enemy's position and shift fire as Soldiers assault the objective.
d. Soldiers assault through and destroy the enemy position. (See Figure 3.)

e. The unit leader reports the contact to higher HQ.

2. Mounted; takes the following actions:
a. Vehicle gunners in the kill zone immediately return fire and deploy vehicle smoke, while moving out of the kill zone.
b. Soldiers in disabled vehicles in the kill zone immediately obscure themselves from the enemy with smoke, dismount if possible, seek covered positions, and return fire.
c. Vehicle gunners and Soldiers outside of the kill zone identify the enemy positions, place "well-aimed" suppressive fire on the enemy, and shift fire as Soldiers assault the objective.
d. The unit leader calls for and adjusts indirect fire and request close air support according to METT-TC.
e. Soldiers in the kill zone assault through the ambush and destroy the enemy.
f. The unit leader reports the contact to higher HQ.

**TASK:** React to Ambush (Far) (07-3-D9503)

**CONDITIONS:**
*Dismounted/mounted.* The platoon/squad/section moves tactically, conducting operations. The enemy initiates contact with direct and indirect fire.

**CUE:** This drill begins when the enemy initiates ambush with direct and indirect fire.

**STANDARDS:**
*Dismounted.* The unit immediately returns fire and occupies covered and/or concealed positions. The unit moves out of the kill zone, locates the enemy position, and conducts fire and maneuver to destroy the enemy.
*Mounted.* Vehicle gunners immediately return fire on known or suspected enemy positions as the unit continues to move out of the kill zone. The unit leader reports the contact to higher headquarters (HQ).

**TASK STEPS AND PERFORMANCE MEASURES**

1. **Dismounted.** (See Figure 1.) Unit personnel take the following actions:

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**Figure 1. React to ambush (far) (dismounted)**
a. Soldiers receiving fire immediately return fire, seek cover, establish a support by fire, and suppress the enemy position(s).

b. Soldiers not receiving fire move along a covered and concealed route to the enemy’s flank to assault the enemy position. (See Figure 2.)

c. Unit leaders or forward observers call for and adjust indirect fires and close air support, if available. On order, the unit leaders or forward observers lift or shift fires to isolate the enemy position or to attack them with indirect fires as they retreat.

d. Soldiers in the kill zone shift suppressive fires as the assaulting Soldiers fight through and destroy the enemy. (See Figure 3.)
e. Unit leaders report the contact to higher HQ.

2. **Mounted.** Unit personnel take the following actions:
   a. Gunners and personnel on vehicles immediately return fire.
   b. If the roadway is clear, they move all vehicles through the kill zone.
   c. Soldiers on the lead vehicle deploy vehicle smoke to obscure the enemy's view of the kill zone.
   d. The vehicle commander, in disabled vehicles, orders Soldiers to dismount according to the variables of mission, enemy, terrain and weather, troops and support available-time available and civil considerations (METT-TC) and sets up security while awaiting recovery.
   e. The remainder of the unit follows the lead vehicle out of the kill zone while continuing to suppress the enemy.
   f. Unit leaders report the contact to higher HQ.

**TASK:** Enter and Clear a Room (07-4-D9509)

**CONDITIONS:** The unit is conducting operations as part of a larger unit and has been given the mission to clear a room. Enemy personnel are believed to be in building. Noncombatants may be present in the building and are possibly intermixed with the enemy personnel. The unit has support and security elements positioned at the initial foothold and outside the building. Some iterations of this drill should be performed in mission oriented protective posture 4 (MOPP 4).

**CUE:** This drill begins on the order of the unit leader or on the command of the clearing team leader.

**STANDARDS:** The team secures and clears the room by killing or capturing the enemy, while minimizing friendly casualties, noncombatant casualties and collateral damage; team complies with rules of engagement (ROE). The team maintains a sufficient fighting force to repel an enemy counterattack and continue operations.

**TASK STEPS AND PERFORMANCE MEASURES**
1. The unit leader occupies a position to best control the security and clearing teams.
   a. Unit leader directs a clearing team to secure corridors or hallways outside the room with appropriate firepower.
   b. The clearing team leader (normally the number two Soldier) takes a position to best control the clearing team outside the room.
   c. The unit leader gives the signal to clear the room.

**NOTE:** If the unit is conducting high intensity combat operations and grenades are being used, the unit must comply with the ROE and consider the building structure. A Soldier of the clearing team cooks off at least one grenade (fragmentation), throws the grenade into the room and announces, FRAG OUT. The use of grenades should be consistent with the ROE and building structure. Soldiers can be injured from fragments if walls and floors are thin or damaged.

2. The clearing team enters and clears the room.
   a. The first two Soldiers enter the room almost simultaneously. (See Figure 1.)
Figure 1. Clear a room, first two Soldiers enter

(1) The first Soldier enters the room and moves left or right along the path of least resistance to one of two corners. He assumes a position of domination facing into the room. During movement, he scans his sector and eliminates all immediate threats.

(2) The second Soldier (normally the clearing team leader) enters the room immediately after the first Soldier. He moves in the opposite direction of the first Soldier to his point of domination. During movement he eliminates all immediate threats in his sector.

NOTE: During high intensity combat the Soldiers enter immediately after the grenade detonates. Both Soldiers enter firing aimed bursts into their sectors engaging all threats or hostile targets to cover their entry.

NOTE: If the first or second Soldier discovers that the room is small or a short room (such as a closet or bathroom), he announces: SHORT ROOM or SHORT. The clearing team leader informs the third and fourth Soldiers whether or not to stay outside the room or to enter.

b. The third Soldier moves opposite direction of the second Soldier while scanning and clearing his sector as he assumes his point of domination. (See Figure 2.)

c. The fourth Soldier moves opposite of the third Soldier to a position that dominates his sector. (See Figure 3.)
d. All Soldiers engage enemy combatants with precision aimed fire and identify noncombatants to avoid collateral damage.

**NOTE:** If necessary or on order, number one and two Soldier of the clearing team may move deeper into the room while overwatched by the other team members.

e. The clearing team leader announces to the unit leader when the room is CLEAR.

3. The unit leader enters the room.
   a. Makes a quick assessment of room and threat.
   b. Determines if unit has fire power to continue clearing their assigned sector.
   c. Reports to the higher unit leader that the first room is clear.
   d. Requests needed sustainment to continue clearing his sector.
   e. Marks entry point according to unit SOP.

4. The unit consolidates and reorganizes, as needed.

**SECTION IX – CALL FOR FIRE**

*(ATP 3-09.30, Techniques for Observed Fire, AUG 13)*

The battalion fire support execution matrix may require the platoon to call for and adjust its own indirect fire support. Normally, the battalion fire support annex will designate company targets. However, the matrix also might designate platoon targets. The platoon uses these preplanned artillery targets to call for and adjust indirect fire. Either a Soldier or a forward observer (FO) can prepare and request a call for fire. To receive immediate indirect fire support, the observer must plan targets and follow proper call-for-fire procedures. If available, he should use a GPS and laser range finder.

The call for fire consists of required and optional elements. If the observer is untrained, FDC personnel are trained to assist him in the call-for-fire procedure and subsequent adjustments by asking leading questions to obtain the information needed. Optional elements, methods of engagement, and methods of fire and control require a relatively high level of experience, but are not necessary to get fire support.

1. Required Elements
   - Observer identification and warning order.
   - Target location.
   - Target description.
a. Observer Identification and Warning Order - identification tells the fire direction center (FDC) who is calling. It also clears the net for the duration of the call. The WARNORD tells the FDC the type of mission and the method of locating the target. The types of indirect fire missions are adjust fire, fire for effect (FFE), suppress, and immediate suppression.

(1) Adjust Fire - Use this command when uncertain of target location. Calling an adjust fire mission means the observer knows he will need to make adjustments prior to calling a fire for effect.

(2) Fire for Effect - Use this command for rounds on target, no adjustment. An example of this situation is if it is known that the target is in building X. Building X is easily identified on the map as Grid ML 12345678910.

(3) Suppress - Use this command to obtain fire quickly. The suppression mission is used to initiate fire on a preplanned target (known to the FDC) and unplanned targets. An example is calling for fire to force the enemy to “get down and seek cover.” This should enable friendly forces to close with and destroy the enemy with direct fire.

(4) Immediate Suppression - Use this command to indicate the platoon is already being engaged by the enemy. Target identification is required. The term “immediate” tells the FDC that the friendly unit is in direct fire contact with the enemy target.

b. Target Location Methods - When locating a target for engagement, the observer must determine which of the target location methods he will use: grid, polar, or shift from a known point.

(1) Grid Mission - The observer sends the enemy target location as an 8- or 10-digit grid coordinate. Before the first adjusting rounds are fired, the FDC must know the direction from the observer’s location. The observer sends observer-target (OT) direction (to the nearest 10 mils) from his position to the target.

<table>
<thead>
<tr>
<th>Example fire mission, grid.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Initial Fire Request From Observer to FDC</strong></td>
</tr>
<tr>
<td><strong>Observer</strong></td>
</tr>
<tr>
<td>Z57, THIS IS 271, ADJUST FIRE, OVER.</td>
</tr>
<tr>
<td>GRID NK180513, OVER.</td>
</tr>
<tr>
<td>INFANTRY PLATOON IN THE OPEN, ICM IN EFFECT, OVER.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Message to Observer</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FDC</strong></td>
</tr>
<tr>
<td>Z, 2 ROUNDS, TARGET, AF1027, OVER.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>For Subsequent Rounds (From Observer to FDC)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Observer</strong></td>
</tr>
<tr>
<td>DIRECTION 1680, OVER.</td>
</tr>
</tbody>
</table>

**Note:** Send direction before or with the first subsequent correction.
(2) Polar Mission - The observer sends direction, distance, and an up or down measurement (if significant) from his location to the enemy target. The FDC must know the observer's location prior to initiating the call for fire. The word “polar” in the WARNORD alerts the FDC that the target will be located with respect to the observer's position. The up or down correction is an estimated vertical shift from the observer's location to the target and is only significant if greater than or equal to 35 meters. If the target is higher, it is an up correction. If the target is lower, it is a down correction. Normally, inexperienced observers only send a direction and distance and ignore the up or down correction.

**Example fire mission, polar plot.**

<table>
<thead>
<tr>
<th>Initial Fire Request From Observer to FDC</th>
<th>Message to Observer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Observer</strong></td>
<td><strong>FDC</strong></td>
</tr>
<tr>
<td>Z56, THIS IS Z31, FIRE FOR EFFECT, POLAR, OVER.</td>
<td>THIS IS Z56, FIRE FOR EFFECT, POLAR, OUT.</td>
</tr>
<tr>
<td>DIRECTION 4520, DISTANCE 2300, DOWN 35, OVER.</td>
<td>DIRECTION 4520, DISTANCE 2300, DOWN 35, OUT.</td>
</tr>
<tr>
<td>INFANTRY COMPANY IN OPEN, ICM, OVER.</td>
<td>INFANTRY COMPANY IN OPEN, ICM, OUT.</td>
</tr>
<tr>
<td><strong>FDC</strong></td>
<td><strong>Observer</strong></td>
</tr>
<tr>
<td>Y, VT, 3 ROUNDS, TARGET AF2036, OVER.</td>
<td>Y, VT, 3 ROUNDS, TARGET AF2036, OUT.</td>
</tr>
</tbody>
</table>
(3) Shift From a Known Point - is performed when the observer and FDC have a common known point. The observer sends OT line and then determines the lateral and range shifts. The enemy target will be located in relation to a preexisting known point or recorded target. The point or target from which the shift is made is sent in the WARNORD. (Both the observer and the FDC must know the location of the point or recorded target.) The observer sends a target/known point number, a direction, and left/right, add/drop, and up/down corrections as listed below:

- Direction from observer (grid azimuth in mils) to target.
- The lateral shift in meters (how far left or right the target is) from the known point.
- The range shift (how much farther [ADD] or closer [DROP] the target is in relation to the known point, to the nearest 100 meters).
- The vertical shift (how much the altitude of the target is above [UP] or below [DOWN] the altitude of the known point, expressed to the nearest 5 meters). A vertical shift is usually only significant if it is greater than or equal to 35 meters.

**Example fire mission, shift from a known point.**

**Initial Fire Request From Observer to FDC**

<table>
<thead>
<tr>
<th>Observer</th>
<th>FDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>H66 THIS IS H44, ADJUST FIRE, SHIFT AA7733, OVER.</td>
<td>THIS IS H66, ADJUST FIRE, SHIFT AA7733, OUT.</td>
</tr>
<tr>
<td>DIRECTION 5210, LEFT 380, ADD 400, DOWN 35, OVER.</td>
<td>DIRECTION 5210, LEFT 380, ADD 400, DOWN 35, OUT.</td>
</tr>
<tr>
<td>COMBAT OP IN OPEN, ICM IN EFFECT, OVER.</td>
<td>COMBAT OP IN OPEN, ICM IN EFFECT, OUT.</td>
</tr>
</tbody>
</table>

**Message to Observer**

<table>
<thead>
<tr>
<th>FDC</th>
<th>Observer</th>
</tr>
</thead>
<tbody>
<tr>
<td>H, 1 ROUND, TARGET AA7742, OVER.</td>
<td>H, 1 ROUND, TARGET AA7742, OUT.</td>
</tr>
</tbody>
</table>
c. Target Description - helps the FDC to select the type and amount of ammunition to best defeat the enemy target. Following is a brief description of the target using the mnemonic SNAP:

- **Size and or shape** (“one enemy soldier” or “platoon of enemy soldiers”).
- **Nature and or nomenclature** (“T72,” “sniper team,” “machine gunner”).
- **Activity** (“stationary” or “moving”).
- **Protection and or posture** (“in the open,” “dug in,” or “on a rooftop”).

**Message to Observer**

After the FDC receives the call for fire, it determines if and how the target will be attacked. That decision is announced to the observer in the form of a message to the observer. The observer acknowledges the message to observer by reading it back in its entirety. Additionally, the FDC will send the following transmissions:

- **Shot.** The term SHOT, OVER is transmitted by the FDC after each round fired in adjustment and after the initial round in the fire for effect (FFE) phase. The observer acknowledges with SHOT, OUT.
- **Splash.** The term SPLASH, OVER is transmitted by the FDC to inform the observer when his round is five seconds from detonation/impact. The observer responds with SPLASH, OUT.
- **Rounds Complete.** The term ROUNDS COMPLETE, OVER signifies that the number of rounds specified in the FFE have been fired. The observer responds with ROUNDS COMPLETE, OUT.

2. Optional Elements

- **Method of engagement.**
- **Danger close.**
- **Method of fire and control.**
- **Refinement and end of mission.**

a. **Method of Engagement** - The observer uses the method of engagement portion of the call for fire to tell the FDC how to attack the enemy target. The method of engagement consists of the type of engagement, trajectory, danger close (if applicable), ammunition, and distribution.

1. **Trajectory** - A low-angle trajectory is standard without a request. A high-angle trajectory is at the request of the observer or when required due to masking terrain. An example of this terrain would be an enemy position in defilade on the backside of a mountain range. This allows the indirect fire munitions to successfully clear the top of the masking terrain and have more of a vertical descent, resulting in the munitions impacting directly on the enemy position.

2. **Danger Close** - is announced when applicable. Include the term danger close in the method-of engagement portion of the call for fire when the target is within 600 meters of any friendly elements for both mortars and field artillery. When adjusting naval gunfire, announce DANGER CLOSE when the target is located within 750 meters and naval guns 5 inches or smaller are in use. For naval guns larger than 5 inches,
announce DANGER CLOSE when the target is within 1,000 meters. The creeping method of adjustment will be used exclusively during danger close missions. The forward observer makes range changes by creeping the rounds to the target using corrections of less than 100 meters.

(b) Ammunition - is the type of projectile, the type of fuse action, and the volume of fire desired in the fire-for-effect phase stated in rounds per howitzer. The type of ammunition can be requested by the observer, but final determination is by the FDC based on Class V unit basic load and target description.

b. Method of Fire and Control - indicates the desired manner of attacking the target, whether the observer wants to control the time or delivery of fire, and whether he can observe the target. The observer announces the appropriate method of fire and control.

(1) Fire When Ready - is standard without request, and is not announced. The mission will be fired as soon as the data is processed, guns are laid on the target, and munitions are loaded.

(2) At My Command - If the observer wishes to control the time of delivery of fire, he includes AT MY COMMAND in the method of control. When the pieces are ready to fire, the FDC announces PLATOON (or BATTERY or BATTALION) IS READY, OVER. (Call signs are used.) The observer announces FIRE when he is ready for the pieces to fire. In certain scenarios, the observer must consider the time of flight for the munitions to leave the indirect fire system and impact on the target. The “time of flight” data can be requested by the observer and determined by the FDC. This only applies to adjusting rounds and the first volley of an FFE. AT MY COMMAND remains in effect throughout the mission until the observer announces CANCEL AT MY COMMAND, OVER. AT MY COMMAND can be further specified. BY ROUND AT MY COMMAND controls every round in adjustment and every volley in the FFE phase.

(3) Time on Target - The observer may tell the FDC when he wants the rounds to impact by requesting, for example, TIME ON TARGET, 0859, OVER. The observer must ensure his time and the FDC’s time are synchronized prior to the mission.

(4) Time to Target - The observer may tell the FDC when he wants the rounds to impact by requesting TIME TO TARGET (so many) MINUTES AND SECONDS, OVER, STANDBY, READY, READY, HACK, OVER. Time to target is the time in minutes and seconds after the "hack" statement is delivered when rounds are expected to hit the target.

(5) Check Firing - is used to cause an immediate halt in firing. Use this command only when necessary to immediately stop firing (for example, safety reasons) as it may result in cannons being out of action until any rammed/loaded rounds can be fired or cleared from the tubes.
(6) Repeat - can be given during adjustment or fire-for-effect missions. During adjustment, REPEAT means firing another round(s) with the last data and adjusting for any change in ammunition if necessary. REPEAT is not sent in the initial call for fire. During fire for effect, REPEAT means fire the same number of rounds using the same method of fire for effect as last fired. Changes in the number of guns, the previous corrections, the interval, or the ammunition may be requested.

(7) Request Splash - can be sent at the observer's request. The FDC announces SPLASH to the observer 5 seconds prior to round impact. SPLASH must be sent to aerial observers and during high-angle fire missions.

c. Refinement and End of Mission - The observer should observe the results of the fire for effect and then take one of the following actions to complete the mission:
   ➢ Correct any adjustments.
   ➢ Record as target.
   ➢ Report battle damage assessment.
   ➢ Report end of mission.

(1) Adjust Fire - If the rounds have accurately impacted the target after the initial call for fire, the observer requests fire for effect. If the rounds are not impacting the target, the observer adjusts the indirect fire onto the enemy target. Making adjustments to an indirect fire mission requires the observer to determine deviation and range corrections. Deviation corrections move the round right or left toward the target while range corrections add or drop the round toward the target with respect to the observer’s position. If the observer cannot locate the target (due to deceptive terrain, lack of identifiable terrain features, poor visibility, or an inaccurate map), he adjusts the impact point of the rounds. The observer chooses an adjusting point. For a destruction mission (precision fire), the target is the adjusting point. For an area target (area fire), the observer picks a well defined adjusting point close to the center. The observer spots the first and each successive adjusting round and sends range and deviation corrections back to the FDC until rounds hit the target. The observer spots each round by relating the round’s point of impact to the adjusting point. See ATP 3-09.30, Techniques for Observed Fire, AUG 13, for a more detailed discussion of adjusting mortar and artillery fire.
Chapter 8 – OTHER CONSIDERATIONS IN THE OPERATING ENVIRONMENT
SECTION I – CULTURAL AWARENESS
(FM 3-24, MAY14; AR 350-1, 19AUG14)

Culture forms the basis of how people interpret, understand, and respond to events and people around them. Cultural understanding is critical because who a society considers to be legitimate will often be determined by culture and norms. To be successful in interacting with the local population to gain information on the enemy, or to understand their requirements, military members must do more than learn a few basic facts or “do’s and do not’s.” They must understand the way that their actions can change the situation for the local population (both positively and negatively) and the resulting perceptions of the population towards those actions.

Commanders and staffs consider four fundamental aspects of culture when planning and executing military operations:

- Culture influences how people view their world.
- Culture is holistic.
- Culture is learned and shared.
- Culture is created by people and can and does change.

1. Culture
   a. Culture is a "web of meaning" shared by members of a particular society or group within a society.
      (1) Culture influences perceptions, understandings, and interpretations of events.

      (2) U.S. interpretations of events are often quite different from the perceptions of these events by other people in an area of operations.

      (3) The U.S. military refers to this pattern of assuming others see events in the same way the U.S. does as mirror imaging. Mirror imaging is dangerous because it leads Soldiers and Marines into thinking that their assumptions about a problem and its solution are shared by the population and multinational partners, rather than employing perspective taking, and looking at the problem from the population’s perspective.

   b. Culture is learned and shared.
      (1) Children learn the appropriate way to act in a culture by observing other people; by being taught accepted values and ways of thinking about the world from their parents, teachers and others.

      (2) The Process of learning a new culture is called socialization.

      (3) Culture can be learned at any age.

   c. Cultures are not static; they can and do change, often rapidly.
      (1) As security declines, the threat of attack, rape, and murder forces many changes in society.
(2) Counterinsurgency planners need to recognize and plan for the impact that their operations will have upon the people and cultures in an area of operations.

(3) Influences on culture may include: Geography, Climate, History, Religion, Economics, Political Structures, Social Organizations

2. Tools for Understanding Unfamiliar Cultures

   a. **PMESII-PT - Operational Analysis of Culture**
      - Political
      - Military
      - Economic
      - Social
      - Information
      - Infrastructure
      - Physical Environment
      - Time

   b. **ASCOPE - Mission Analysis of Culture**
      - Areas
      - Structures
      - Capabilities
      - People
      - Events

   c. **Tactical Conflict Assessment and Planning Framework (TCAPF)**
      - What changes need to be made?
      - What are the most important problems?
      - Who can solve these problems?
      - What should be done first?

   d. **Barriers to Cultural Understanding**
      - Force protection
      - Stereotypes and biases
      - Miscommunication
      - Culture shock

   e. **Building Rapport**
      - Use active listening and take interest in your counterpart
      - Greet and interact according to local customs
      - Identify mutual goals
      - Relax, get comfortable, be friendly, smile, and laugh
      - Show and accept hospitality
      - Show that you care, are concerned about the local situation, respect them, and empathize with their situation
Communicate clearly, show when grateful, and forgive errors
Establish trust - look for easy short term tasks and deliver on promises

SOLDIER RULES   Army Regulation (AR) 350-1, App. G-23b

1. Soldiers fight only enemy combatants
2. Soldiers do not harm enemies who surrender. They disarm them and turn them over to their superiors
3. Soldiers do not kill or torture enemy prisoners of war
4. Soldiers collect and care for the wounded, whether friend or foe
5. Soldiers do not attack medical personnel, facilities or equipment
6. Soldiers destroy no more than the mission requires
7. Soldiers treat civilians humanely
8. Soldiers do not steal. Soldiers respect private property and possessions
9. Soldiers should do their best to prevent violations of the law of war
10. Soldiers report all violations of the law of war to their superior

SECTION II – ROE/DETAINEE OPERATIONS
(FM 2.22.3, 6SEP06; JP 1-02; CJCSI 3121.01B, 13JUN05)

1. Definition - Rules of Engagement (ROE) are directives issued by competent military authority, which delineate the circumstances and limitations under which US forces will initiate or continue combat engagement with other forces encountered.

2. Rules of Engagement
   a. The ROE apply to US forces during all military operations and contingencies. Commanders may augment the ROE for specific operations. Commanders must assess the capabilities and intent of other forces and make recommendations for supplemental ROE through the chain of command. Clearly state the ROE in simple language.

   b. These ROE are intended for the following:
      (1) Implementing the right of self-defense, this is applicable worldwide, to all echelons of command.
      (2) Providing guidance governing the use of force consistent with mission accomplishment.
      (3) Use in peacetime operations other than war, during transition from peacetime to armed conflict or war, and during armed conflict in the absence of superseding guidance.

3. Guide for Handling Detainees, Captured Enemy Documents (CEDs), & Captured Enemy Equipment (CEE) - Detainees, retained personnel, CEDs, and CEE are critical sources of combat intelligence. Often the Maneuver Battalion S2 is the first MI officer to encounter these sources. His actions are critical to the exploitation system. Information from these items is time sensitive, and these information sources need to be exploited at as low an echelon as possible. The S2 should anticipate requirements for support based on planned missions and request HUMINT collector support as necessary. If unable to receive HUMINT collector support, the S2 must be prepared to exploit these sources of information to the best of his ability and more importantly expedite their evacuation to locations and units where they can be exploited.
Purpose
This guide is for battalion and brigade S2s. It explains standard procedures on what the S2 should do when his unit—
- Captures an enemy soldier or other detainee.
- Encounters a civilian on the battlefield.
- Finds or captures an enemy document.
- Discovers an unusual enemy weapon or other unusual piece of equipment during tactical operations.

4. PERSONNEL HANDLING OVERVIEW
   
      b. The Geneva Convention defines the civilian population (exclusive of those civilian persons listed in Article 4) who benefit to varying degrees from the provisions of the Geneva Conventions.
   
      c. Persons in each of these categories have distinct rights, duties, and restrictions. Persons who are not members of the Armed Forces, as defined in Article 4, who bear arms or engage in other conduct hostile to the enemy thereby deprive themselves of many of the privileges attaching to the members of the civilian population. The capturing unit treats all combatants and noncombatants who are suspected of being part of the threat force as EPWs or retained personnel until their status can be determined. This determination normally occurs at the detainee collection point or at a higher echelon. Noncombatants are handled, questioned, detained, evacuated, and released in accordance with theater policy. In all cases, detainees are treated humanely.
   
      d. Detainees are treated humanely but with firmness at all times. High standards of discipline are required not only of detainees but also of capturing and escort forces. Fraternization with detainees or mistreatment or abuse of them is not only a violation but also is not conducive to good discipline. In addition to not being conducive to good discipline, the mistreatment or abuse of detainees is a violation of the UCMJ for which violators may be punished. The control of detainees is exercised through the issuance and firm enforcement of necessary instructions in their own language. Instructions relating to their control during evacuation from the combat zone should be as brief as possible. Care must be taken to ensure that detainees have a clear understanding of all instructions to them.
   
      e. At the capture point, the capturing element performs the following steps on detainees. The senior soldier will ensure that the steps are performed. The steps are referred to as the "Five S's and a T".

STEPS IN PERSONNEL HANDLING
1. SEARCH
   a. The capturing unit's first job is to disarm, search, and maintain positive control over all detainees. The detainees are disarmed and searched for concealed weapons and for equipment and documents of particular intelligence value immediately upon capture, unless the number of
detainees captured, enemy action, or other circumstances make such a search impracticable. Until each detainee is searched, the responsible forces must be alert to prevent the use of concealed weapons or destruction of documents or equipment.

b. The capturing unit gathers all loose CEDs and CEE in the area. Identification documents and protective military equipment such as helmets or CBRN gear stay with the detainee unless otherwise directed by the battalion S2.

(1) **Equipment.** Items of personal or individual equipment that are new or appear to be of a type not previously observed may be of intelligence value and should be processed and reported in accordance with the unit's SOP, specific evacuation instructions in Annex B (Intelligence) of the OPORD, and theater policy. Equipment for personal protection such as protective masks or protective clothing may not be taken unless replaced with equivalent equipment.

(2) **Documents.** A CED is any piece of recorded information that has been in the hands of the enemy. CEDs include but are not limited to maps, sketches, photographs, orders, tactical and technical manuals and instructions, code books, log books, maintenance records, shipping and packing slips and lists, war and field diaries, personal diaries, pay books, newspapers, service records, postal savings books, payrolls, postcards and letters, and any written, printed, engraved, or photographic matter that may contain information relative to the enemy and to weather and terrain data. A capturing unit is normally not able to accurately determine the potential intelligence value of any documents found on the detainee. It is therefore normally expedient to remove all documents, with the exception of the detainee's primary identification document. These documents are sealed in a waterproof container and tagged with part C of the capture tag. If capture tags are not available, the document bag must be marked at a minimum to identify the detainee to whom the documents belong.

(3) **Personal effects.** Except as provided in Step 1, detainees should be permitted to retain all of their personal effects including money; valuables; protective equipment, such as helmets, protective masks, and like items; effects and articles used for clothing or eating, except knives and forks; identification cards or tags; badges of grade and nationality; and articles having a personal or sentimental value. When items of equipment issued for the personal protection of detainees are taken from them, they must be replaced with equivalent items serving the same purpose. Although money and other valuables may be taken from detainees as a security measure, they must then be receipted for and a record thereof maintained in a special register. These administrative steps normally are not practical to accomplish prior to arrival of the detainee at an EPW camp.

2. **SILENCE** - Detainees are kept silent so that they cannot plan deception or encourage each other to resist. Keeping the detainees silent also prevents them from relieving the stress and shock of capture by talking with others. If the shock of capture is preserved, HUMINT collectors can take advantage of it in an approach. The capturing unit instructs or signals the detainees to be silent. If that does not work, the detainee is gagged. Guards give orders to detainees, but do not converse with them or give them any comfort items.
3. **SAFEGUARD** - All detainees are promptly evacuated out of the "danger" zone. Their presence may not be used to render points or areas immune to attack, nor should they be retained for participation in psychological warfare or other activities. The capturing forces must protect detainees from reprisals. Detainees will not be denied food, potable water, or appropriate clothing and shelter. Necessary medical attention will not be delayed. Those detainees held in an area should be provided protective facilities and equipment and should be oriented as to procedures to be followed in case of chemical, biological, and radiological agent attack.

4. **SEGREGATE** - The capturing unit separates officers from enlisted, senior from junior, male from female, and civilian from military within their capabilities to both guard and safeguard the detainees. (Physical segregation at this point is not always possible.) Deserters and people of different nationalities and ideologies should be further segregated. The capturing unit prepares a capture tag and puts one on each detainee (see DD Form 2745).

5. **SPEED TO THE REAR**
   a. The capturing unit moves detainees and CEDs to the unit supply point or other area where transportation to the rear is available for evacuation. Evacuation of detainees from the combat zone should be effected within the minimum time after capture. While in the combat zone, not only may detainees become casualties as the result of enemy fire but also the fluidity of operations, the wide dispersion of units, and the austerity of facilities may necessitate their rapid evacuation.

   b. The normal evacuation channel is from the detainee collection point through intermediate detainee holding areas to an internment facility at a higher echelon. Available returning transportation, however, may bypass any intermediate detainee holding area and proceed directly to a corps or theater internment facility. Detainees will then be processed directly into the corps or theater internment facility. Evacuation may be by foot, vehicle, rail, aircraft, or ship. Evacuate detainees who are litter patients through medical channels.

   c. The command (brigade and above) from which the detainees are being evacuated is responsible to provide transportation and rations and for coordinating all other matters related to the evacuation. Escort guards are furnished by the command (division and above) to which the detainees are being evacuated.

6. **TAG** - When the detainees have been searched and segregated, the capturing unit prepares a capture tag and puts one on each detainee. It is very important that the capturing unit fill out the Capture Tag as accurately and completely as possible. HUMINT collectors will use the information from the tag when preparing to interrogate detainees. The "capturing unit" and "location of capture" information will be used to provide direct feedback to the capturing unit when information of immediate tactical value is obtained. Each EPW tag has a different serial number used for the purpose of accountability and cannot be reproduced. The EPW tag is perforated into three parts: Part A is attached to the detainee, Part B is retained by the capturing unit, and Part C is attached to the detainee's property (see DD Form 2745).
DOCUMENT HANDLING

1. DOCUMENTS FOUND ON ENEMY PRISONER OF WAR (EPWs)
   a. The battalion S2 and subordinate unit commander ensure that CEDs found on detainees are handled as follows. The capturing unit will—
      (1) Search each detainee.
      (2) Return identification documents to detainees. It may be preferable to return only one identity document, to preclude the detainee from spreading extras around to cause confusion. The preferred ID document to return to the detainee is a picture ID (such as a military or government ID card). If the detainee has several identification documents, the S2 returns the ID that most accurately reflects the detainee's official status. This might be a military ID for a soldier and a passport or government-issue ID for a civilian. If the detainee has several identification documents with different names, this may be an indicator of CI interest. The S2 notifies the nearest Counter Intelligence (CI) unit.
      (3) Write the following on the top and bottom half of the EPW capture tag: Number of documents taken, date and time, location and circumstances of capture, capturing unit's designation.
      (4) Put CEDs in a waterproof bag, one per detainee.
      (5) Affix Part C of the capture tag to the bag.
      (6) Give CEDs to the senior escort.
      (7) Direct the senior escort to evacuate CEDs with the detainee.

2. DOCUMENTS FOUND IN THE AO
   a. An example of CEDs found in the AO is paperwork discovered in an overrun CP, but not on a detainee. The capturing unit will—
      (1) Put CEDs in a waterproof bag.
      (2) Follow the same procedures described above, and tag the bag.
      (3) Evacuate the CEDs to the battalion S2.
      (4) Evacuate all CEDs as dictated by Annex B of the OPORD. This is normally through the MI chain (for example, from Battalion S2 to Brigade S2, to the first HUMINT collection or DOCEX unit in the MI chain). The S2 normally coordinates with the S4 for the use of supply vehicles returning empty to the rear for the transportation of large numbers of documents.

3. INITIAL DOCUMENT EXPLOITATION
   a. A combat unit without language-qualified personnel can perform limited battlefield DOCEX, mainly on maps and overlays. The unit S2 is normally responsible for any initial exploitation by the capturing unit. The S2 safeguards the items pending disposition. At the same time he—
      (1) Looks over the document.
      (2) Does not mark or harm it in anyway.
      (3) Uses whatever resources are available to decipher it; for example, dictionaries and enemy map symbol guides.
      (4) Looks for information that has a direct bearing on his current mission.
b. The S2 extracts the combat information and uses the SALUTE format as a template to organize the information.

4. EQUIPMENT HANDLING PROCEDURES
   a. CEE includes all types of foreign materiel found on a detainee or in the AO that may have military application. The capturing unit—
      (1) Always permits the detainee to keep protective equipment and equipment for his personal well being unless this gear is replaced by equivalent items by the capturing unit. This equipment includes helmet, CBRN gear, mess gear (excluding knife and fork).
      (2) Disposes of equipment in accordance with unit SOPs and instructions in Annex B of the OPORD. Most routine equipment is normally destroyed in place. Unusual or new equipment or equipment identified as being of technical intelligence is tagged with a CEE tag (Part C of DD Form 2745) and evacuated to the nearest technical intelligence unit. Communications equipment is also tagged and evacuated to the nearest signals intelligence unit.
      (3) Identifies equipment that cannot be easily evacuated; its location is passed through intelligence channels to the nearest unit that will be involved in its exploitation.

5. FIELD-EXPEDIENT TAGGING PROCEDURES - When no standard tag forms are available, the following field-expedient methods may be used:
   • Use meals, ready-to-eat (MRE) cardboard or other type of paper.
   • Write the capturing unit's designation.
   • Write data and time of capture.
   • Write POC coordinates.
   • Write circumstances of capture.
   • Identify EPW, captured document, or equipment captured.
   • Put tag, without damaging the CED, in a waterproof bag.
   • Attach EPW and CEE tags so they will not come off.

6. MEDICAL CARE
   a. Medical equipment and supplies to permit the administering of emergency first aid should be available at each EPW collecting point and EPW holding area. A qualified medical retained person, if available, may administer first aid to other detainees. All detainees suspected of having communicable diseases are isolated for examination by a medical officer. Wounded detainees may be questioned by intelligence personnel once the detainees are cleared by competent medical authority for questioning.

   b. For evacuation purposes, detainees may be classified as walking wounded or sick, or as non-walking wounded or sick. Walking wounded detainees are evacuated through MP EPW evacuation channels. Non-walking wounded are delivered to the nearest medical aid station and evacuated through medical channels.
## Categories of evacuation precedence

<table>
<thead>
<tr>
<th>Priority I—URGENT</th>
<th>Is assigned to emergency cases that should be evacuated as soon as possible and within a maximum of 1 hour in order to save life, limb, or eyesight and to prevent complications of serious illness and to avoid permanent disability.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority IA—URGENT-SURG</td>
<td>Is assigned to patients who must receive far forward surgical intervention to save life and stabilize for further evacuation.</td>
</tr>
<tr>
<td>Priority II—PRIORITY</td>
<td>Is assigned to sick and wounded personnel requiring prompt medical care. This precedence is used when the individual should be evacuated within 4 hours or if his medical condition could deteriorate to such a degree that he will become an URGENT precedence, or whose requirements for special treatment are not available locally, or who will suffer unnecessary pain or disability.</td>
</tr>
<tr>
<td>Priority III—ROUTINE</td>
<td>Is assigned to sick and wounded personnel requiring evacuation but whose condition is not expected to deteriorate significantly. The sick and wounded in this category should be evacuated within 24 hours.</td>
</tr>
<tr>
<td>Priority IV CONVENIENCE</td>
<td>Is assigned to patients for whom evacuation by medical vehicles a matter of medical convenience rather than necessity.</td>
</tr>
</tbody>
</table>

The NATO STANAG 3204 has deleted the category of Priority IV—CONVENIENCE; however, this category is still included in the United States Army evacuation priorities as there is a requirement for it in an operational environment.
<table>
<thead>
<tr>
<th>LINE</th>
<th>ITEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Location of Pickup Site.</td>
</tr>
<tr>
<td>2</td>
<td>Radio Freq., Call Sign, &amp; Suffix.</td>
</tr>
<tr>
<td>3</td>
<td>No. of Patients by Precedence.</td>
</tr>
<tr>
<td>4</td>
<td>Special Equipment Required.</td>
</tr>
<tr>
<td>5</td>
<td>Number of Patients by Type.</td>
</tr>
<tr>
<td>6</td>
<td>Security of Pickup Site (Wartime).</td>
</tr>
<tr>
<td>6</td>
<td>Number and Type of Wound, Injury, or Illness (Peace time).</td>
</tr>
<tr>
<td>7</td>
<td>Method of Marking Pickup Site.</td>
</tr>
<tr>
<td>8</td>
<td>Patient Nationality and Status.</td>
</tr>
<tr>
<td>9</td>
<td>NBC Contamination (Wartime).</td>
</tr>
<tr>
<td>9</td>
<td>Terrain Description (Peace time).</td>
</tr>
</tbody>
</table>
## SECTION II STANDARD RANGE CARD

**STANDARD RANGE CARD**

For use of this form see FM 3-21.71; the proponent agency is TRADOC.

<table>
<thead>
<tr>
<th>SQD</th>
<th>PLT</th>
<th>CO</th>
</tr>
</thead>
</table>

- May be used for all types of direct fire weapons.

### DATA SECTION

<table>
<thead>
<tr>
<th>Position Identification</th>
<th>Date</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Weapon</th>
<th>Each Circle Equals Meters</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Direction/Deflection</th>
<th>Elevation</th>
<th>Range</th>
<th>Ammo</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

**Remarks:**

DA FORM 5517-R, FEB 1986

9-3
SECTION III INFANTRY LEADERS REFERENCE CARD
(GTA 07-01-038)

GTA 07-01-038 INFANTRY LEADERS' REFERENCE CARD

August 2012

HEADQUARTERS, DEPARTMENT OF THE ARMY
(Supersedes GTA 07-01-038, January 1995)

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DISTRIBUTION: US Army Training Support Centers (TSCs).
WARFIGHTING FUNCTIONS
1. Mission command
2. Movement and maneuver
3. Intelligence.
4. Fires.
5. Sustainment.
6. Protection.

Multiplied by leadership, and complimented by information.

RISK MANAGEMENT PROCESS
1. Identify hazards.
2. Assess hazards to determine risks decisions
3. Implement controls.
4. Supervise and evaluate.
OPERATION ORDER

1. Situation
   a. Area of interest
   b. Area of operations.
   c. Enemy forces.
   d. Friendly forces.
   e. Interagency, intergovernmental and non-governmental organizations.
   f. Civil considerations.
   g. Assumptions.

2. Mission

3. Execution
   a. Commander's intent.
   b. Concept of operations.
   c. Scheme of movement and maneuver.
   d. Scheme of intelligence.
   e. Scheme of fires.
   f. Scheme of protection.
   g. Stability operations.
   h. Assessment.
   i. Tasks to subordinate units.
   j. Coordinating instructions

4. Sustainment
   a. Logistics
   b. Personnel
   c. Health system support

5. Command and Signal
   a. Command
   b. Control
   c. Signal
METT-TC

M - Mission

E - Enemy

T - Terrain and weather

T - Troops and support available

T - Time available

C - Civil considerations
COMMON DEFENSE PLANNING CONSIDERATIONS

1. Establish security (OP, patrols, PWs).

2. Position key weapons:
   a. Coordinate with units on left and right.
   b. Establish FPF or PDF for machine gun.
   c. Ensure mutual support between machine guns
   d. Cover armor approaches with anti-armor
   e. Establish fire control measures.

3. Prepare positions:
   a. Check sectors of fire
   b. Check overhead cover and view positions from enemy vantage.
   c. Position in depth and achieve mutual support
   d. Select/prepare alternate and supplementary positions.

4. Integrate indirect fires, CAS, and obstacles with direct and indirect fire.

5. Check communications and establish emergency signals.

6. Designate ammunition, supply, PW, and casualty points.
PHASES OF DELIBERATE ATTACKS IN AN URBAN AREA

1. Reconnoiter the objective.
2. Move to the objective.
3. Isolate the objective.
4. Secure a foothold.
5. Clear the objective.
6. Consolidate and reorganize.
7. Prepare for future missions.
<table>
<thead>
<tr>
<th>CHARACTERISTICS OF THE OFFENSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Surprise</td>
</tr>
<tr>
<td>2. Concentration</td>
</tr>
<tr>
<td>3. Tempo</td>
</tr>
<tr>
<td>4. Audacity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHARACTERISTICS OF THE OFFENSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preparation</td>
</tr>
<tr>
<td>2. Security</td>
</tr>
<tr>
<td>3. Disruption</td>
</tr>
<tr>
<td>4. Massing and concentration</td>
</tr>
<tr>
<td>5. Flexibility</td>
</tr>
<tr>
<td>6. Maneuver</td>
</tr>
<tr>
<td>7. Operations</td>
</tr>
</tbody>
</table>
TROOP LEADING PROCEDURES

1. Receive the mission
2. Issue a warning order
3. Make a tentative plan
4. Conduct reconnaissance
5. Complete the plan
6. Issue the order
7. Supervise and refine the plan
<table>
<thead>
<tr>
<th>AIRCRAFT REQUEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identification.</td>
</tr>
<tr>
<td>2. Precedence or priority.</td>
</tr>
<tr>
<td>3. Target description.</td>
</tr>
<tr>
<td>4. Target location.</td>
</tr>
<tr>
<td>5. Target time/date.</td>
</tr>
<tr>
<td>6. Desired ordnance and results.</td>
</tr>
<tr>
<td>7. Final control</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FIRE REQUEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Observer identification.</td>
</tr>
<tr>
<td>2. Warning order.</td>
</tr>
<tr>
<td>3. Target location.</td>
</tr>
<tr>
<td>4. Target description.</td>
</tr>
<tr>
<td>5. Method of engagement.</td>
</tr>
<tr>
<td>6. Method of fire and control.</td>
</tr>
</tbody>
</table>
**THREAT BASED FIRE CONTROL MEASURES**

1. Engagement priorities.
2. Weapons-ready posture.
3. Engagement criteria.
4. Weapons control status.
5. Rules of Engagement (ROE).
7. Engagement techniques.
8. Fire patterns.
9. Target array.

**TERRAIN BASED FIRE CONTROL MEASURES**

1. Target reference point (TRP)
2. Engagement area
3. Sector of fire.
4. Direction of fire.
5. Terrain-based quadrant.
6. Friendly-based quadrant.
7. Maximum engagement line.
8. Restrictive fire line (RFL).
9. Final protective line (FPL)
# WEAPONS

<table>
<thead>
<tr>
<th>TYPE</th>
<th>MAX EFF Range (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M16A2/M16A4</td>
<td>580 (pt) 800 (area) 200 (mov)</td>
</tr>
<tr>
<td>M203</td>
<td>150 (pt) 350 (area)</td>
</tr>
<tr>
<td>M249</td>
<td>600 (pt) 800 (area)</td>
</tr>
<tr>
<td>M240B...800 (tripod)/600 (T&amp;E) (pt) 1100/800 (area)</td>
<td></td>
</tr>
<tr>
<td>M136(AT4)</td>
<td>300</td>
</tr>
<tr>
<td>Mk19</td>
<td>1500 (pt) 2212 (area)</td>
</tr>
<tr>
<td>.50 Caliber MG</td>
<td>1500 (pt) 1830 (area)</td>
</tr>
<tr>
<td>TOW</td>
<td>3000 (plng purposes)</td>
</tr>
<tr>
<td>TOW2</td>
<td>3750</td>
</tr>
<tr>
<td>105-mm</td>
<td>11500</td>
</tr>
<tr>
<td>105-mm Tank</td>
<td>*2000 - 2500</td>
</tr>
<tr>
<td>120-mm Tank</td>
<td>3000</td>
</tr>
<tr>
<td>25-mm BFV</td>
<td>3000</td>
</tr>
<tr>
<td>155-mm M109A3</td>
<td>18100</td>
</tr>
<tr>
<td>M198</td>
<td>24000</td>
</tr>
<tr>
<td>8-in Howitzer</td>
<td>22900</td>
</tr>
<tr>
<td>105-mm MGS</td>
<td>*2000</td>
</tr>
<tr>
<td>Javelin</td>
<td>2000</td>
</tr>
<tr>
<td>M14</td>
<td>460</td>
</tr>
<tr>
<td>M24</td>
<td>800</td>
</tr>
<tr>
<td>M107</td>
<td>1830</td>
</tr>
</tbody>
</table>

*Optimum engagement ranges
## WEAPONS

(MORTAR) HE Only

<table>
<thead>
<tr>
<th></th>
<th>MIN</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 mm (M224)</td>
<td>70 m</td>
<td>3500 m</td>
</tr>
<tr>
<td>81 mm (M252)</td>
<td>80 m</td>
<td>5800 m</td>
</tr>
<tr>
<td>120 mm (M120/M121)</td>
<td>200 m</td>
<td>7200 m</td>
</tr>
</tbody>
</table>

### Final Protective Fires

<table>
<thead>
<tr>
<th>GUNS</th>
<th>MORTAR</th>
<th>WIDTH DEPTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>60 mm</td>
<td>60 m x 30 m</td>
</tr>
<tr>
<td>4</td>
<td>81 mm (M252)</td>
<td>150 m x 50 m</td>
</tr>
<tr>
<td>6</td>
<td>120 mm (M120/M121)</td>
<td>360 m x 60 m</td>
</tr>
<tr>
<td>PLT</td>
<td>155 mm</td>
<td>200 m x 50 m</td>
</tr>
<tr>
<td>BTRY</td>
<td>155 mm</td>
<td>400 m x 50 m</td>
</tr>
</tbody>
</table>
PRINCIPLES OF COIN

1. Legitimacy is the main objective.
2. Unity of effort is essential.
3. Political factors are primary.
4. Counterinsurgents must understand the environment.
5. Intelligence drives operations.
6. Insurgents must be isolated from their cause and support.
7. Security under the rule of law is essential.
8. Counterinsurgents should prepare for a long-term commitment.
**EXPLOSIVE HAZARD SPOT REPORT**

1. Date-time group
2. Reporting unit and location
3. Contact method
4. Type of munitions
5. CBRN contamination
6. Resources threatened
7. Impact on mission
8. Protective measures taken
9. Recommended priority

---

**SALUTE**

1. **S**ize
2. **A**ctivity
3. **L**ocation
4. **U**nit
5. **T**ime
6. **E**quipment
SECTION IV CALL FOR FIRE

CALL FOR FIRE
HEADQUARTERS, DEPARTMENT OF THE ARMY
NOVEMBER 2009

DISTRIBUTION RESTRICTION: (Refer to instructions on back cover.)

I. OBSERVER IDENTIFICATION: Use call signs from the SOI.

II. WARNING ORDER:
   a. Type of Mission.
      (1) Adjust Fire.
      (2) Fire for Effect.
      (3) Suppression and Immediate Smoke.
      (4) Immediate Suppression.
   b. Size of Element to Fire.
      (1) Omission indicates a request for one FA battery.
      (2) Larger units by stating size desired.
   c. Method of Target Location:
      (1) Grid: No announcement.
      (2) Polar Plot: Announce the word “POLAR.”
      (3) Shift from a Known Point: Announce the word “SHIFT” followed immediately by the designation (Target (TGT) Number) of the known point.
      (4) Laser Polar Plot. The fire direction center (FDC) needs to know as quickly as possible if the observer is using a laser. Although the data are still polar, the backup computer system (BUCS) uses a different format from the fire mission index. From the initial transmission of the call for fire, the FDC will know which of its four mission formats to display; for example, ADJUST FIRE, LASER POLAR, OVER.

III. TARGET LOCATION:
   a. Grid: Two character six digit grid, i.e., NA123456.
   b. Polar: Direction and distance to the target from the observer’s position.
   c. Shift: Direction to the target.
      Lateral Shift (left/right) in meters.
      Range Shift (add/drop) in meters.
      Vertical Shift (up/down) in meters, if significant.
IV. TARGET DESCRIPTION: A word picture of the target (i.e., the number and type of vehicles/personnel observed).

V. METHOD OF ENGAGEMENT:
   a. Type of Adjustment:
      (1) Area Fire: Standard without request.
      (2) Precision Fire: Used only with destruction or registration missions.
   b. Danger Close: Announced when applicable.
   c. Trajectory:
      (1) Low Angle: Standard without request.
      (2) High Angle: Upon request of observer or when required due to masking terrain.
   d. Ammunition:
      (1) Type of projectile desired in Fire for Effect phase.
      (2) Type of fuze action desired in Fire for Effect phase.
      (3) Volume of fire desired in Fire for Effect stated in rounds per howitzer.
      (4) Distribution: Type of sheaf desired. Parallel is standard without request.

VI. METHOD OF FIRE AND CONTROL:
   a. Method of Fire:
      (1) Center platoon/center section (one weapon) is standard for adjustment phase.
      (2) Battery/platoon right/left on request.
      (3) Time interval (5 seconds is standard when (2) above is used).
   b. Method of Control:
      (1) Fire when ready: Standard - no request required.
      (2) At my command: Weapons fire at observer’s command.
      (3) Cannot observe: Fire will not be observed.
      (4) Time on target: Rounds land at a specified time.
      (5) Continuous illumination: FDC will determine when to fire.
      (6) Coordinated illumination: Observer determines when illumination is fired.
      (7) Cease loading: Used on missions with two or more rounds in effect. Causes the firing unit to stop loading rounds.
      (8) Check firing: Temporary halt in firing.

DANGER CLOSE
The term DANGER CLOSE will be included in the Method of Engagement portion of the call for fire when the target is within 600 meters of any friendly
SECTION V HAND GRENADE
(TC 3-23.30, Grenades & Pyrotechnics, NOV13)

Perform Safety Checks on Hand Grenades

Conditions: Given any standard issue U.S. hand grenade with extra safety clips and load-carrying equipment (LCE).

Standards: Inspect the grenade for defects; identify and correct defects, if possible. Report and turn in grenades that have defects you cannot correct. Identify each grenade by type, and correctly attach grenades to your ammunition pouch.

1. Identify the grenades listed in table 071-325-4401-1 by type, color, markings, and usage.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>COLOR/MARKINGS</th>
<th>USAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>M67 Fragmentation</td>
<td>OD with yellow marking.</td>
<td>To disable or kill personnel. Will explode 4 to 5 seconds after the safety lever is released.</td>
</tr>
<tr>
<td>M18 Colored smoke</td>
<td>OD with color of smoke on top.</td>
<td>To signal personnel.</td>
</tr>
<tr>
<td>M34 WP Smoke</td>
<td>Light green, yellow band, red marking, &quot;OLD MARKING&quot; light gray, yellow band, yellow printing.</td>
<td>To signal personnel. Can produce casualties up to 35 meters away.</td>
</tr>
<tr>
<td>AN-M8 HC Smoke</td>
<td>Light green, black marking, white top.</td>
<td>To screen, &quot;provide concealment.&quot;</td>
</tr>
<tr>
<td>AN-M14 THB Incendiary</td>
<td>Light red with black lettering.</td>
<td>To destroy equipment and start fires.</td>
</tr>
<tr>
<td>ABC-M25A2 CS Riot Control</td>
<td>Gray, red band(e) and markings.</td>
<td>To control riots or disable individuals without serious injury.</td>
</tr>
</tbody>
</table>

2. Inspect hand grenades for defects. Correct defects, if possible.
   a. Check the fuse to ensure that it is screwed tightly onto the body of the grenade.
   b. Check the safety clip to ensure that—
      (1) It is present.
      (2) It is in the correct position.
   c. Replace safety clips (only if missing).
      (1) Slide the clip onto the handle.
      (2) Attach the loop portion of the clip around the fuse.
      (3) Snap the clip end around the safety lever.
   d. Check the safety pin.
      (1) Ensure that the clip is in the correct position. If not, carefully push it into place while holding down the safety lever.
      (2) Ensure that the clip is straight (not bent). If it is bent, carefully bend it back in position.
   e. Check the safety ring for cracking. Reject any grenade that has a cracked safety ring.
   f. Check the grenade for dirt. Wipe any dirty or grimey grenade clean with a cloth.
   g. Turn in any defective grenade.

9-20
3. Attach the grenade to an ammunition pouch.
   a. Attach the grenade to the new style pouch.
      (1) Slip the grenade safety lever over the small strap sewn on each side of the
           ammunition pouch.
      (2) Push the grenade down until it firmly seats against the side of the pouch.
      (3) Ensure that the pull ring points downward.
      (4) Wrap the carrying strap around the fuse, safety lever, and pull ring.
   b. Attach the grenade to the old-style pouch.
      (1) Slip the safety lever over the strap sewn on each side of the pouch. Push down the
           grenade until it firmly seats against the side of the pouch.
      (2) Ensure the pull ring points downward, and wrap the carrying strap around the fuse,
           safety lever, and pull ring.

4. Check grenades occasionally while moving to ensure that the fuse is tight and the strap is
   secure.

   **Employ Hand Grenades**

   Conditions: Given load-carrying equipment (LCE) and an offensive (concussion), riot-control,
   smoke, or incendiary grenade with a time-delayed fuze.

   Standards: Throw the hand grenade to hit a target. Avoid exposing, and thus endangering,
   yourself for more than 5 seconds at a time.

   1. Position your body in a comfortable and natural position.
      a. Make sure you are in a covered position.
      b. Look at the target and judge the distance to the target.
      c. Align your body with the target as if you were going to throw a football or baseball.
   **Note: This is body-target alignment.**

   2. Grip the hand grenade as follows:
      a. Hold the safety lever down with your thumb.
      b. Keep the pull ring and safety clip (if present) free, and face it towards your throwing
         hand.

   3. Arm the grenade.
      a. Remove the safety clip.
      **Note:** Hold the safety lever down with your thumb. This keeps the pull ring and safety clip
         free and facing your non-throwing hand.
b. Insert index finger in the pull ring and rotate 90 degrees to disengage the ring from the confidence clip.

c. Pull the pin.

4. Confirm your body-target alignment.
   d. TARGET: Troops in the open. EFFECTIVE ENGAGEMENT: Within 5 meters of center.
   e. TARGET: Troops with overhead cover. EFFECTIVE ENGAGEMENT: Inside the enclosure.
   f. TARGET: Troops dug in without overhead cover. EFFECTIVE ENGAGEMENT: Inside the position.

5. Toss the grenade using an overhand movement. Release the grenade when it comes into your field of vision ensuring that you—
   g. Keep your eyes on the target.
   h. Follow through your throwing motion.
   i. Take cover, exposing yourself to fire for no more than 5 seconds.

6. Return to the position behind cover until the grenade detonates, and avoid exposing yourself for more than 5 seconds at a time.

7. Detonate the grenade within the effective bursting radius of the target.