The Warfighter Handbook

UNITED STATES ARMY

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As the U.S. Army moves further into the twenty-first century, the threat of Large-Scale Combat Operations (LSCO) against near-peer adversaries is greater than at any time since the Cold War. War on a scale not seen since World War II could erupt at any moment. When it does, our nation and Soldiers will expect you to lead them to victory.

Will you be ready?

While the costs of the last 23 years of conflict are well known, the Army has also paid a lesser-known price: a loss of critical combat skills. The Global War on Terror did not mirror the high-intensity combat for which the Army once trained, leading to a gradual erosion of warfighting competence. Observations at Combat Training Centers show that leaders at the platoon level and below often fail to execute the fundamental tasks needed for success in LSCO. Likewise, leaders at higher echelons fail to enforce standards or teach the skills required. Simply put, our Army has forgotten how fight the kind of war we exist to win.

To win the next war, you, the leaders of our smallest units, must master the warfighting skills your predecessors learned in through blood. Right now, many of you lack the knowledge, some the motivation. For those who don't care: your Soldiers will pay the price in blood. Now is the time to step up or step aside. For those who don't know: this handbook is for you. The Warfighter Handbook is designed to guide leaders—regardless of MOS, rank, or environment—in preparing their Soldiers for the next fight by addressing five essential questions:

1. Can my Soldiers shoot, move, and communicate with their assigned equipment?
2. Can they explain their roles in the next fight?
3. Do they have everything they need to win?
4. Is my unit synchronized with higher headquarters and adjacent units?
5. Can I perform my leader’s job now?

In essence, have you done everything to prepare your Soldiers for the next fight?

FIRST LAST
Command Sergeant Major
United States Army

FIRST LAST
RANK, BRANCH
Position

Leadership is the most essential element of combat power. Leaders provide their Soldiers the purpose, direction, and motivation to prepare for and win in combat. In LSCO, all leaders are responsible for the tactical employment of their units. Warfighting leaders ensure that their units are prepared for the next fight by:

- ❑ **Planning**. Leaders receive intent from their Commanders and translate it into action by backwards planning from the required end state. Leaders apply technical competence and experience to address the unique challenges of each mission.
- ❑ **Prioritizing**. Leaders assign priorities and suspense based on their understanding of the mission, time and resources available, and knowledge of their subordinates' capabilities and statuses. There is never enough time to do everything; leaders decide what must be done and mitigate the risk of what must wait.
- ❑ **Resourcing**. Leaders request and coordinate support needed to accomplish their assigned missions. Anticipating requirements for classes of supply, transportation, fires, and any other support requires Leaders to understand the mission, the terrain, the ENY, and their own units.
- ❑ **Inspecting**. Leaders check to ensure that their subordinates accomplish their assigned tasks on time, to standard, and make corrections as needed.
- ❑ **Communicating**. Leaders ensure that their superiors, adjacent units, and subordinates remain informed of their actions and requirements.
- ❑ **Assessing**. Leaders continuously assess ENY activity, adjacent unit activity, the effects of weather and terrain, and guidance from their commanders. Most importantly, Leaders assess their Soldiers' statuses (health and welfare, supplies and equipment, training, and endurance under continued strain) to determine whether their Soldiers can accomplish the mission.
- ❑ **Adapting**. Leaders take the initiative and adjust their actions when the situation changes to mitigate risk and seize opportunities within the CDR's Intent.

As a Warfighter, if you find yourself uncertain what to do next, ask yourself when the last time you performed each of these actions for your unit was.

7 TROOP LEADING PROCEDURES/ PLAN DEVELOPMENT

Planning Considerations To ensure success of the ground mission, leaders plan their own missions in detail. The more time they have to make plans, the more detailed plans they can make. As soon as the senior leader receives word of a pending operation, a mission alert is issued, immediately followed with a warning order. Just enough information is issued to allow the subordinate leaders to start preparing for the operation.

Mission analysis answers the 4 questions of the leader's battlefield vision:

1. What is my mission?
2. What is the current situation?
3. How do we accomplish the mission?
4. What are the risks? Risk to mission? Risk to force?

1. Receive the Mission	5. Conduct reconnaissance
2. Issue a Warning Order	6. Complete the plan
3. Make a tentative plan	7. Issue the Operations Order
4. Initiate Movement	***8. Supervise and Refine***

Make a tentative plan

- Mission, intent, and concept
- Unit Tasks
  - Specified Tasks
  - Implied Tasks
- Unit Constraints
- Mission essential tasks
- Analyze the situation and develop a course of action
  - Suitable- Accomplishes mission and supports commander's concept
  - Acceptable- The military advantage gained by executing the course of action must justify the cost in resources, especially casualties. Very subjective.
- What is known about the ENY?
  - Composition- Analysis of what forces and weapons the ENY can bring to bear.
  - Disposition- How is the ENY arrayed?
  - Strength- percentage of strength
  - Recent Activities- Identify future intentions
  - Reinforcement Capabilities- Location of reserves and time for a counterattack
  - Determine the ENY's possible COAs

Supervise and Refine

- The leader supervises the unit's preparation for combat by conducting rehearsals and inspections.
- The leader should conduct rehearsals on terrain that resembles the actual ground and in similar light conditions.
- Rehearsals are used to—
- Practice essential tasks (improve performance).
- Reveal weaknesses or problems in the plan.
- Coordinate the actions of subordinate elements.
- Improve Ranger understanding of the concept of the operation (foster confidence).
- The platoon may begin rehearsals of battle drills and other SOP items before the receipt of the operation order. Once the order has been issued, it can rehearse mission-specific tasks.
- Some important tasks to rehearse include—
- Actions on the objective.
- Actions at the assault position.
- Breaching obstacles (mine and wire).
- Using special weapons or demolitions.
- Actions on unexpected ENY contact

MISSION VARIABLES

The **Mission Variables** describe characteristics of an area of operations (AO), focusing on how they might affect a mission. Leaders account for the mission variables both when planning their units' actions and when adjusting to new developments. It is equally important to consider the Mission Variables in relation to how they affect friendly forces and the ENY to identify both risks and opportunities.

MISSION VARIABLE (METT-TC (I)) CONSIDERATIONS		
MISSION	WHERE AND WHEN MUST MY UNIT COMPLETE WHAT ESSENTIAL TASK, IN ORDER TO ACHIEVE WHAT PURPOSE?	
	WHAT OTHER SPECIFIED TASKS MUST MY UNIT ACCOMPLISH?	
	WHAT IMPLIED TASKS MUST MY UNIT ACCOMPLISH IOT ACCOMPLISH OUR SPECIFIED TASKS?	
	WHAT CONSTRAINTS (IN TERMS OF RESTRICTIONS, TASKS, RESOURCES, TIME, OR SPACE) MUST MY UNIT WORK WITHIN FOR THIS MISSION?	
ENEMY	WHAT IS THE ENY TRYING TO ACCOMPLISH?	
	WHAT IS THE ENY'S LAST KNOWN COMPOSITION, DISPOSITION, AND STRENGTH?	
	BASED ON THE ENY'S STATUS, DOCTRINE, AND TTPs, HOW WILL THEY TRY TO ACCOMPLISH THEIR END STATES?	
	WHAT CAPABILITIES (PARTICULARLY DIRECT FIRE, INDIRECT FIRE, UAS, ELECTRONIC WARFARE,) CAN THE ENY EMPLOY IN MY UNIT'S AO?	
	WHAT ASSETS OR SUPPORT NOT ALREADY IN MY UNIT DO I NEED TO DEFEAT THE ENY?	
TERRAIN AND WEATHER	**TERRAIN -**	**WEATHER -**
	OBSTACLES - Where do natural or manmade obstacles disrupt, fix, turn, or block movement? How can I bypass or breach these obstacles / prevent the ENY from doing so?	**WIND -** How will wind affect the ability to employ smoke, chemical munitions, UAS, or rotary wing aviation? What systems will be available throughout the operation?
	AVENUES OF APPROACH - Where can I or the ENY move, in what formation, and at what speed? Where are the natural points of convergence and defiles? Where are natural staging areas near our positions and OBJs?	**VISIBILITY -** How will periods of darkness, sources and percentages of illumination (natural and artificial), smoke / fog / precipation affect movement, affect the range, accuracy, and functionality of weapons and sensors?
	COVER AND CONCEALMENT - Where can I or the ENY move or fire without being seen or engaged?	**TEMPERATURE -** How will temperature affect Soldier fatigue, vehicle maintenance, and thermal optics? When will thermal conditions reduce my unit's or the ENY's ability to fight effectively?
	OBSERVATION / FIELDS OF FIRE - Where can I see the ENY, where can the ENY see me? Where can the ENY or I maximize the range of our sensors and weapon systems near our positions / OBJs? Where are the relevant intervisibility lines, natural staging areas, and kill zones / engagement areas?	**CLOUD COVER -** How will the cloud ceiling affect overhead ISR, movevement, and fires? When are overhead assets available or not availble for my unit and the ENY?
	KEY TERRAIN - Where can I or the ENY gain advantage in the next fight? How can my unit gain control of these places or prevent the ENY from doing so?	**PRECIPITATION -** How will recent or anticipated precipitation affect movement of troops and vehicles, signatures of movement (tracks, dust clouds, auditory signature), the range or accuracy of weapons, and the functionality of sensors or other critical equipment?
TROOPS	WHAT IS THE CURRENT STATUS OF MY SOLDIERS AND THEIR EQUIPMENT?	
	WHAT SUPPORT IS AVAILABLE TO MY UNIT FROM OUR HIGHER HEADQUARTERS, ADJACENT UNITS, AND SUPPORTING UNITS?	
	WHAT CAPABILITIES, ASSETS, OR SUPPORT NOT ALREADY IN MY UNIT DO I NEED TO DEFEAT THE ENY?	
TIME	HOW MUCH TIME IS AVAILABLE BETWEEN NOW AND THE NEXT FIGHT?	
	HOW LONG WILL IT TAKE MY UNIT TO PLAN, PREPARE, AND REHEARSE FOR THE NEXT FIGHT?	
	HOW MUCH TIME DOES MY UNIT NEED FOR MOVEMENT?	
	HOW MUCH TIME DOES THE ENY NEED TO REACT TO MY PLAN, AND HOW CAN MY UNIT DENY THEM THAT TIME?	
CIVIL	HOW WILL CIVILIAN AREAS, STRUCTURES, CAPABILITIES, ORGANIZATIONS, PEOPLE, AND EVENTS (ASCOPE) IN THE AO DURING THE NEXT FIGHT MISSION AFFECT OUR MISSION?	
INFORMATION	WHAT DOES THE ENY BELIEVE MY UNIT WILL DO IN THE NEXT FIGHT? WHAT DOES MY UNIT BELIEVE THEY WILL DO? WHY? HOW CAN MY UNIT DECEIVE THE ENY ABOUT OUR ACTIONS AND INTENTIONS?	
	WHAT DOES THE ENY WANT MY UNIT TO BELIEVE DURING THE NEXT FIGHT, AND HOW WILL THEY TRY TO CONVINCE US? WHAT DO I WANT THE ENY TO BELIEVE DURING THE NEXT FIGHT, AND HOW WILL WE CONVINCE THEM?	

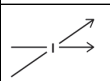
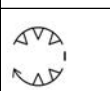
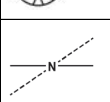
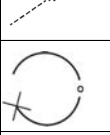
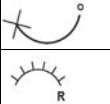
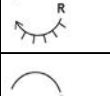
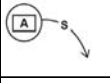
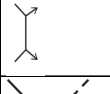
Tactical Mission Tasks are the specific activities a unit performs while executing a tactical operation or form of maneuver. The tactical mission tasks describe the results or effects commanders want to achieve. Understanding their unit's actions, their intended effects, and how their actions work as part of a larger plan enables leaders to prioritize, equip, and rehearse before combat, and to execute and adapt in combat.

Reflective Questions

❑Do all my Soldiers know what their specified tasks are in each phase of the next fight are, what they mean, and how to perform them?

❑Do all my Soldiers know the specified tasks for the units to their left and right and how our missions support one another?

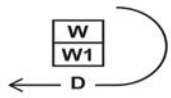
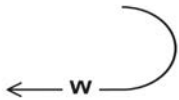
TACTICAL MISSION TASKS, PT. I		
ATTACK BY FIRE	A TACTICAL MISSION TASK USING DIRECT AND INDIRECT FIRES TO ENGAGE AN ENEMY FROM A DISTANCE	
BLOCK	TACTICAL MISSION TASK THAT DENIES THE ENEMY ACCESS TO AN AREA OR AN AVENUE OF APPROACH	
BREACH	A TACTICAL MISSION TASK IN WHICH A UNIT BREAKS THROUGH OR ESTABLISHES A PASSAGE THROUGH AN ENEMY OBSTACLE	
BYPASS	TACTICAL MISSION TASK IN WHICH A UNIT DELIBERATELY AVOIDS CONTACT WITH AN OBSTACLE OR ENEMY FORCE	
CANALIZE	A TACTICAL MISSION TASK IN WHICH A UNIT RESTRICTS ENEMY MOVEMENT TO A NARROW ZONE	
CLEAR	TACTICAL MISSION TASK IN WHICH A UNIT ELIMINATES ALL ENEMY FORCES WITHIN AN ASSIGNED AREA	
CONTAIN	TACTICAL MISSION TASK IN WHICH A UNIT STOPS, HOLDS, OR SURROUNDS AN ENEMY FORCE	
CONTROL	TACTICAL MISSION TASK IN WHICH A UNIT MAINTAINS PHYSICAL INFLUENCE OVER AN ASSIGNED AREA	
DESTROY	TACTICAL MISSION TASK THAT PHYSICALLY RENDERS AN ENEMY FORCE COMBAT-INEFFECTIVE UNTIL IT IS RECONSTITUTED	
DISENGAGE	TACTICAL MISSION TASK IN WHICH A UNIT BREAKS CONTACT WITH AN ENEMY TO CONDUCT ANOTHER MISSION OR TO AVOID BECOMING DECISIVELY ENGAGED	
DISRUPT	TACTICAL MISSION TASK IN WHICH A UNIT UPSETS AN ENEMY'S FORMATION OR TEMPO AND CAUSES THE ENEMY FORCE TO ATTACK PREMATURELY OR IN A PIECEMEAL FASHION	
EXFILTRATE	TACTICAL MISSION TASK IN WHICH A UNIT REMOVES SOLDIERS OR UNITS FROM AREAS UNDER ENEMY CONTROL BY STEALTH, DECEPTION, SURPRISE, OR CLANDESTINE MEANS	
FIX	TACTICAL MISSION TASK IN WHICH A UNIT PREVENTS THE ENEMY FROM MOVING FROM A SPECIFIC LOCATION FOR A SPECIFIC PERIOD	

TACTICAL MISSION TASKS, PT. II		
FOLLOW AND ASSUME	TACTICAL MISSION TASK IN WHICH A COMMITTED FORCE FOLLOWS A LEAD FORCE CONDUCTING AN OFFENSIVE OPERATION AND CONTINUES THE MISSION IF THE LEAD FORCE CANNOT CONTINUE	
FOLLOW AND SUPPORT	A TACTICAL MISSION TASK IN WHICH A COMMITTED FORCE FOLLOWS AND SUPPORTS A LEAD FORCE CONDUCTING AN OFFENSIVE OPERATION	
INTERDICT	A TACTICAL MISSION TASK IN WHICH A UNIT PREVENTS, DISRUPTS, OR DELAYS THE ENEMY'S USE OF AN AREA OR ROUTE IN ANY DOMAIN	
ISOLATE	A TACTICAL MISSION TASK IN WHICH A UNIT SEALS OFF AN ENEMY, PHYSICALLY AND PSYCHOLOGICALLY, FROM SOURCES OF SUPPORT AND DENIES IT FREEDOM OF MOVEMENT	
NEUTRALIZE	TACTICAL MISSION TASK IN WHICH A UNIT RENDERS THE ENEMY INCAPABLE OF INTERFERING WITH AN OPERATION	
OCCUPY	A TACTICAL MISSION TASK IN WHICH A UNIT MOVES INTO AN AREA TO CONTROL IT WITHOUT ENEMY OPPOSITION	
RETAIN	A TACTICAL MISSION TASK IN WHICH A UNIT PREVENTS ENEMY OCCUPATION OR USE OF TERRAIN	
SECURE	TACTICAL MISSION TASK IN WHICH A UNIT PREVENTS THE ENEMY FROM DAMAGING OR DESTROYING A FORCE, FACILITY, OR GEOGRAPHICAL LOCATION	
SEIZE	TACTICAL MISSION TASK IN WHICH A UNIT TAKES POSSESSION OF A DESIGNATED AREA USING OVERWHELMING FORCE	
SUPPORT BY FIRE	TACTICAL MISSION TASK IN WHICH A UNIT ENGAGES THE ENEMY BY DIRECT FIRE IN SUPPORT OF ANOTHER MANEUVERING FORCE	
SUPPRESS	A TACTICAL MISSION TASK IN WHICH A UNIT TEMPORARILY DEGRADES A FORCE OR WEAPON SYSTEM FROM ACCOMPLISHING ITS MISSION	
TURN	A TACTICAL MISSION TASK IN WHICH A UNIT FORCES AN ENEMY FORCE FROM ONE AVENUE OF APPROACH OR MOBILITY CORRIDOR TO ANOTHER	

Enabling Operations are operations that set the friendly conditions required for mission accomplishment and include security, reconnaissance, relief in place, and passage of lines. **Reconnaissance Operations** allow commanders to understand the situation, visualize the battle, and make decisions. Reconnaissance activities are missions and tasks, not unit types; every unit must conduct them using all of the tools are their disposal. **Retrograde Tasks** enable commanders to protect their units when decisive engagement with the ENY is not advantageous.

Reflective Questions

❑Do all my Soldiers know and understand the Commanders Critical Information Requirements, and the indicators associated with them, for the next fight?
❑Do all my Soldiers know the near, far, and contingency recognition procedures Forward/Rearward Passage of Lines?

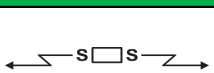
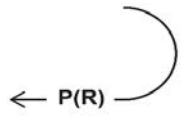
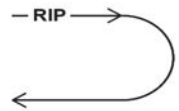
RECONNAISSANCE OPERATIONS		
AREA RECONNAISSANCE	A TYPE OF RECONNAISSANCE OPERATION THAT FOCUSES ON OBTAINING DETAILED INFORMATION ABOUT THE TERRAIN OR ENEMY ACTIVITY WITHIN A PRESCRIBED AREA	NO TASK SYMBOL
ZONE RECONNAISSANCE	A TYPE OF RECONNAISSANCE OPERATION THAT INVOLVES A DIRECTED EFFORT TO OBTAIN DETAILED INFORMATION ON ALL ROUTES, OBSTACLES, TERRAIN, AND ENEMY FORCES WITHIN A ZONE DEFINED BY BOUNDARIES	NO TASK SYMBOL
ROUTE RECONNAISSANCE	A TYPE OF RECONNAISSANCE OPERATION TO OBTAIN DETAILED INFORMATION OF A SPECIFIED ROUTE AND ALL TERRAIN FROM WHICH THE ENEMY COULD INFLUENCE MOVEMENT ALONG THAT ROUTE	NO TASK SYMBOL
RETROGRADE TASKS		
DELAY	WHEN A FORCE UNDER PRESSURE TRADES SPACE FOR TIME BY SLOWING DOWN THE ENEMY'S MOMENTUM AND INFLICTING MAXIMUM DAMAGE ON ENEMY FORCES WITHOUT BECOMING DECISIVELY ENGAGED	
RETIRE	WHEN A FORCE OUT OF CONTACT MOVES AWAY FROM THE ENEMY	
WITHDRAW	TO DISENGAGE FROM AN ENEMY FORCE AND MOVE IN A DIRECTION AWAY FROM THE ENEMY	
WITHDRAW UNDER PRESSURE	TO DISENGAGE FROM AN ENEMY FORCE AND MOVE IN A DIRECTION AWAY FROM THE ENEMY WHILE IN CONTACT	

Enabling Operations are operations that set the friendly conditions required for mission accomplishment and include security, reconnaissance, relief in place, and passage of lines. **Security Operations** provide commanders with reaction time and maneuver space to make decisions and protect the force from anticipated and unanticipated dangers. **Retrograde Tasks** enable commanders to protect their units when decisive engagement with the ENY is not advantageous.

Reflective Questions

❑Do all my Soldiers know where our subsequent battle positions are and how to get to them if there is an order to withdraw or retrograde?

❑Have all my Soldiers conducted a handover of intelligence, tasks, procedures, and equipment with our RIP partners?

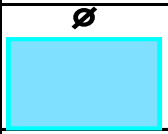
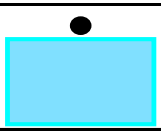
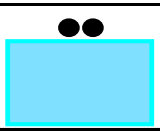
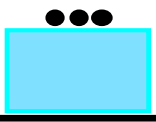
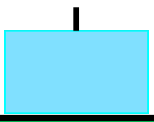
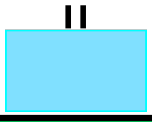
ENABLING OPERATIONS		
SCREEN	TYPE OF SECURITY OPERATION THAT PRIMARILY PROVIDES EARLY WARNING TO THE PROTECTED FORCE	
GUARD	A TYPE OF SECURITY OPERATION DONE TO PROTECT THE MAIN BODY BY FIGHTING TO GAIN TIME WHILE PREVENTING ENEMY GROUND OBSERVATION OF AND DIRECT FIRE AGAINST THE MAIN BODY	
COVER	A TYPE OF SECURITY OPERATION DONE INDEPENDENT OF THE MAIN BODY TO PROTECT THEM BY FIGHTING TO GAIN TIME WHILE PREVENTING ENEMY GROUND OBSERVATION OF AND DIRECT FIRE AGAINST THE MAIN BODY	
FORWARD PASSAGE OF LINES	OCCURS WHEN A UNIT PASSES THROUGH ANOTHER UNIT'S POSITIONS WHILE MOVING TOWARD THE ENEMY	
REARWARD PASSAGE OF LINES	OCCURS WHEN A UNIT PASSES THROUGH ANOTHER UNIT'S POSITIONS WHILE MOVING AWAY FROM THE ENEMY	
RELIEF IN PLACE	AN OPERATION IN WHICH, BY DIRECTION OF HIGHER AUTHORITY, ALL OR PART OF A UNIT IS REPLACED IN AN AREA BY THE INCOMING UNIT AND THE RESPONSIBILITIES OF THE REPLACED ELEMENTS FOR THE MISSION AND THE ASSIGNED ZONE OF OPERATIONS ARE TRANSFERRED TO THE INCOMING UNIT	

COMMON MILITARY SYMBOLS

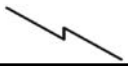
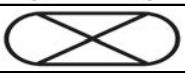
Military Symbols provide visual reference for relevant units, locations, and tasks. Leaders create rapidly shared understanding by disseminating unit graphics.

UNIT STATUS		
FRIENDLY	NEUTRAL	ENY
		

UNIT ECHELONS
(MODIFIED ABOVE UNIT SYMBOL, CAN INCLUDE + OR - FOR UNITS WHICH HAVE BEEN REINFORCED OR REDUCED IN STRENGTH)

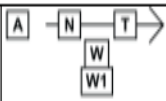
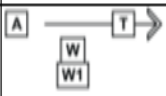
TEAM	SQD	SEC
		
PLT	**CO**	**BN**
		

UNIT TYPE
(MODIFIER INSIDE UNIT SYMBOL)

AIR DEFENSE		INFANTRY (STRYKER)	
AIR DEFENSE (SHORT-RANGE)		WHEELED	
ANTI-ARMOR		TOWED	
ARMOR		MAINTENANCE	
ARTILLERY		MEDICAL	
AVIATION (ROTARY-WING)		MILITARY POLICE	MP
CAVALRY		MORTAR	
CBRN		SIGNAL	
ENGINEER		SPECIAL FORCES	SF
ELECTRONIC WARFARE	EW	SUPPORT	SPT
AIR ASSAULT		SUSTAINMENT	SUST
AIRBORNE		TRANSPORTATION	
INFANTRY (DISMOUNTED)		UAS	
INFANTRY (MECHANIZED)			

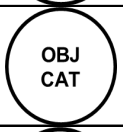
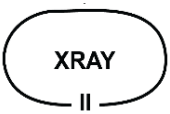
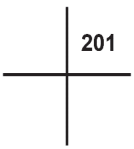
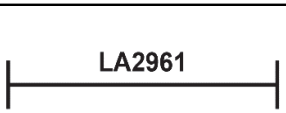
COMMON MILITARY SYMBOLS

Military Symbols provide visual reference for relevant units, locations, and tasks. Leaders create rapidly shared understanding by disseminating unit graphics.

POINTS	MODIFIER	SYMBOL	LINES	MODIFIER	SYMBOL
CHECKPOINT - point on the ground used to control movement, tactical maneuver, and orientation	CP / CKP	CKP #	FORWARD LINE OF OWN TROOPS (FLOT) - indicates the most forward position of friendly forces in any kind of military operation at a specific time		PL RED (FLOT)
LINKUP POINT - designated place where two forces are scheduled to meet	LU	LU #	BATTLEFIELD HANDOVER LINE - designated phase line where responsibility transitions from the stationary force to the moving force and vice versa	BHL	PL RED (BHL) / PL RED (BHL)
RELEASE POINT (RP) - place on a route where elements are released from centralized control	RP	RP #	LINE OF DEPARTURE (LD) - line designated to coordinate the departure of attack elements	LD	PL RED (LD) / PL RED (LD)
START POINT (SP) - designated place on a route where elements fall under the control of a designated march commander	SP	SP #	PHASE LINE - easily identified feature in the operational area utilized for control and coordination of military operations	PL	PL RED / PL RED
POINT OF DEPARTURE - point where the unit crosses the line of departure and begins moving along a direction of attack	PD	PD #	LIMIT OF ADVANCE (LOA) - phase line used to control forward progress of the attack	LOA	PL RED (LOA) / PL RED (LOA)
DECONTAMINATION POINT - location where resources for absorbing, destroying, neutralizing, or removing CBRN contamination (E/T designates sites for equipment /	DCN E / T	DCN E / T #	RESTRICTIVE FIRE LINE (RFL) - boundary established between converging friendly surface forces that prohibits fires or their effects from crossing	RFL	PL RED (RFL) / PL RED (RFL)
AMBULANCE EXCHANGE POINT (AXP) - location where a patient is transferred from one ambulance to another en route to a medical treatment facility	AXP	AXP #	AXIS OF ADVANCE - general area through which the bulk of a unit's combat power must move		
CASUALTY COLLECTION POINT (CCP) - location that may or may not be staffed, where casualties are assembled for evacuation to a medical treatment facility	CCP	CCP #	AIRBORNE / AVIATION AXIS OF ADVANCE		
MAINTENANCE COLLECTION POINT (MCP) - temporary location established within the battalion echelon for the collection of equipment needing or undergoing field maintenance	MCP	MCP #	MAIN AXIS OF ADVANCE - principal attack or effort into which the commander throws the full weight of the offensive power at his disposal		
LOGISTICS RELEASE POINT (LRP) - point where unit distribution vehicles are met by company representative for further movement forward and subsequent distribution	LRP	LRP #	SUPPORTING AXIS OF ADVANCE		
REARM, REFUEL, AND RESUPPLY POINT - designated location through which a unit passes where it receives fuel, ammunition, and other necessary supplies	R3P	R3P #	DIRECTION OF ATTACK - specific direction or assigned route a force uses and does not deviate from when attacking		
TRAFFIC CONTROL POINT (TCP) - manned post that is used to preclude the interruption of traffic flow or movement along a designated route	TCP	TCP #	DIRECTION OF MAIN ATTACK		
COORDINATION POINT - point that indicates a specific location for the coordination of tactical actions between adjacent units			DIRECTION OF SUPPORTING ATTACK		

COMMON MILITARY SYMBOLS

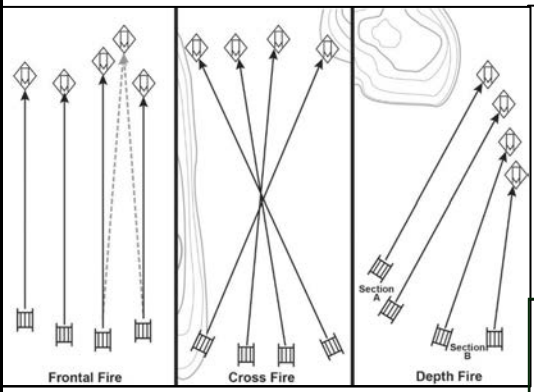
Military Symbols provide visual reference for relevant units, locations, and tasks. Leaders create rapidly shared understanding by disseminating unit graphics.

POSITIONS, AREAS, TARGETS	SYMBOL
ASSEMBLY AREA - area a unit occupies to prepare for an operation	
ATTACK POSITION - last position an attacking force occupies or passes through before crossing the line of departure	
ASSAULT POSITION - covered and concealed position short of the objective from which final preparations are made to assault the objective	
OBJECTIVE - geographical area, defined by competent authority, within which is located an objective to be captured or reached by military forces	
NAMED AREA OF INTEREST - Geospatial area or systems node or link against which information that will satisfy a specific information requirement can be collected, usually to capture indications of adversary courses of action	
ENGAGEMENT AREA - area where the commander masses effects to contain and destroy an enemy force	
BATTLE POSITION - defensive location oriented on a likely enemy avenue of approach	
TARGET REFERENCE POINT - predetermined point of reference, normally a permanent structure or terrain feature that can be used when describing a target location	
POINT TARGET - target that is less than or equal to 200 meters in width and length	
LINEAR TARGET - targets that are greater than 200 meters in length and less than or equal to 200 meters in width	

Fire Control enables units to focus, distribute, and shift the mass of their direct fire capability at critical locations and times to succeed in combat while avoiding fratricide.

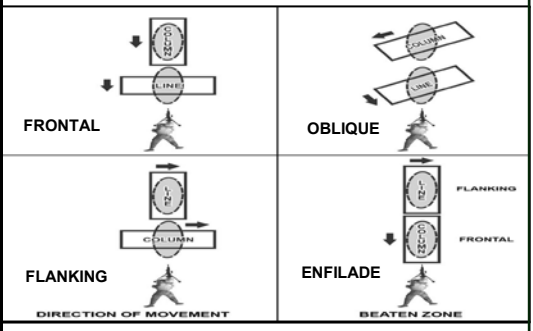
Reflective Questions

❑What ENY systems and units should my unit destroy first to prevent them from accomplishing their mission and ensure success in ours, and which of our weapon systems is the most effective way of killing them?
❑What ENY systems and units pose the greatest threat to my mission and Soldiers during the next fight, and which of our weapon systems is the most effective way of killing them?
❑Do all my Soldiers know the unit SOP for direct fire control, to include habitual sectors of fire, TTPs for lifting and shifting fires, weapons control statuses,
❑Have I provided all my Soldiers with sectors of fire and engagement priorities by weapon system during every phase of the next fight?
❑Do all my Soldiers understand where and when we cannot engage with direct fires during every phase of the next fight?



Fire Patterns

Frontal – simplest to control, disrupts ENY across entire front
Cross – increases flank shots, difficult for ENY to return fire
Depth – disrupts ENY across entire formation, prevents SBF and maneuver



Classes of Fire Relative to Target

Principles of Direct Fire

- Destroy the greatest threat first.
- Mass the effects of direct fire.
- Employ the best weapon for the specific target.
- Avoid target overkill.
- Minimize exposure.
- Plan and implement control measures.
- Plan for limited visibility conditions.
- Plan for degraded capabilities.

Direct Fire Control Measures

- Target Reference Point – easily recognizable point on the ground used to initiate, distribute, and control fires
- Sector of Fire – defined area in which a Soldier/unit can engage with direct fires; often delimited by azimuths, TRPs, clock direction
- Restrictive Fire Line – established between converging friendly units, prohibits fires or their effects across that line
- Coordinated Fire Line – established between converging friendly units, prohibits fires or their effects across that line without coordination with the adjacent unit
- Maximum Engagement Line - farthest limit of effective fire for a weapon / unit beyond which Soldier/unit does not engage
- Final Protective Line - established where unit employs interlocking fires of all available weapons to halt ENY advance

Understanding the capabilities and limitations of friendly weapons systems is critical for ensuring proper positioning of forces, targeting priorities, adequate supply for specific missions, and regard for the effects various weapons in areas which may contain friendly forces and / or civilian populations.

Reflective Questions

❑Are all my Soldiers' weapons systems in the best position to kill the ENY in the fight?
❑Do all my Soldiers know their engagement ranges, techniques, and priorities for the next fight?
❑Do all my Soldiers have enough ammunition, optics, batteries, and lubricants to achieve the desired effects with their weapon systems during the next fight?
❑Are any of my Soldiers in danger from the effects of friendly indirect fires planned for the next fight?

SMALL ARMS

WEAPON SYSTEM	MAX EFFECTIVE RANGE		MAX RANGE	SYMBOL
	POINT	AREA		
M16	550M	800M	3600M	
M4 / M4A1	500M	600M	3600M	
M249 (BIPOD)	600M	800M	3600M	
M249 (TRIPOD)	600M	1000M		
M240 B/L (BIPOD)	600M	800M	3725M	
M240 B/L (TRIPOD)	800M	1100M		
M2 / M2A1 HB .50 CAL	600M	1830M	6764M	
MK19 40MM AGL	1500M	2212M	2212M	
M203 / M320 40MM GL	150M	350M	400M	

ANTI-ARMOR WEAPON SYSTEMS

WEAPON SYSTEM	ARMING DISTANCE	MAX EFFECTIVE	MAX RANGE	SYMBOL
M136 / M136A1 AT4	10M	300M	2100M	
M72A2/A23 LAW	10M	200M	1000M	
JAVELIN	TOP ATK:	2500M	4000M	
	DIRECT ATK:			
M3 MAAWS (CARL GUSTAF)	17-46M	1300M	2100M	
M41 ITAS (TOW MISSILE VARIANTS)	30-200M	3750-4200M	4200M	

INDIRECT FIRE WEAPON SYSTEMS

WEAPON SYSTEM	MAX EFFECTIVE RANGE	2/3 PLANNING RANGE	RISK ESTIMATE DISTANCE (COMBAT ONLY)		SYMBOL
			RANGE	STANDING / PRONE	
M109A7 155MM SELF-PROPELLED HOWITZER (PALADIN)	24,000M	16,000M	1 / 3	385M / 355M	
			2 / 3	515M / 485M	
			MAX	730M / 710M	
M777A2 TOWED HOWITZER	24,000M	16,000M	1 / 3	385M / 355M	
			2 / 3	515M / 485M	
			MAX	730M / 710M	
M119A3 TOWED HOWITZER	17,500M	11,667M	1 / 3	285M / 275M	
			2 / 3	355M / 345M	
			MAX	505M / 495M	
M120 120MM MORTAR	3,490M	2,327M	1 / 3	320M / 295M	
			2 / 3	340M / 330M	
			MAX	375M / 255M	
M252 81MM MORTAR	5,608M	3,739M	1 / 3	190M / 175M	
			2 / 3	210M / 195M	
			MAX	220M / 205M	
M224 60MM MORTAR	7,200M	4,800M	1 / 3	150M / 140M	
			2 / 3	155M / 145M	
			MAX	175M / 165M	

Rates of Fire (RPM)	M249	M240B	M2	MK19
Sustained (RPM)	50	100	40	40
Rapid (RPM)	100	200	40	60
Cyclic (RPM)	850	650-950	450-550	325-375

Engagement Techniques

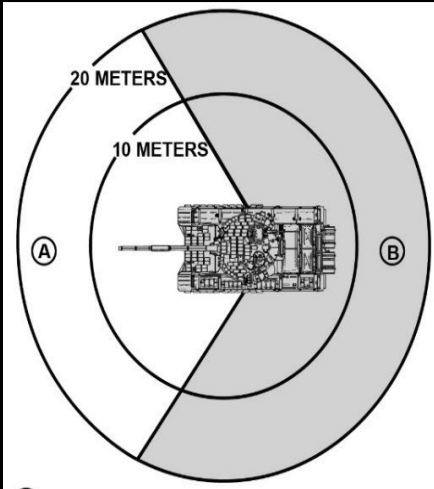
Point: Concentrating effects of fire against a specific, identified target
Area: Distributing effects of fire over an area for numerous or not obvious enemy positions
Simultaneous: Rapidly mass the effects of their fires or to gain fire superiority
Alternating: Pairs of elements continuously engage same point/area target one at a time
Observed: Direct one element to engage; other elements observe and prepare to engage
Sequential: Elements of a unit engage the same point/area target in arranged sequence
Time of Suppression: Period when enemy position or force is required to be suppressed
Recon by Fire: Engage possible enemy locations to elicit a tactical response (return fire or movement)

Understanding the capabilities and limitations of friendly weapons systems is critical for ensuring proper positioning of forces, targeting priorities, adequate supply for specific missions, and regard for the effects various weapons in areas which may contain friendly forces and / or civilian populations.

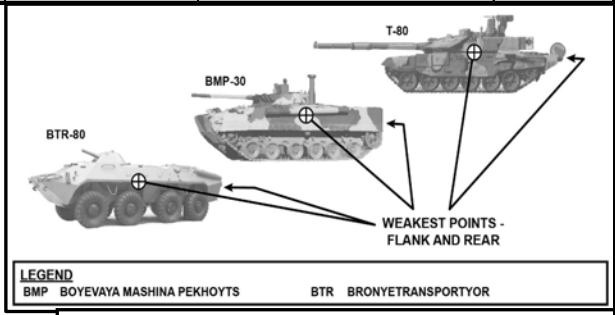
Reflective Questions

❑Are all my Soldiers' weapons systems in the best position to kill the ENY in the fight?
❑Do all my Soldiers know their engagement ranges, techniques, and priorities for the next fight?

ANTI-ARMOR WEAPON SYSTEMS				
WEAPON SYSTEM	ARMING DISTANCE	MAX EFFECTIVE	MAX RANGE	SYMBOL
M136 / M136A1 AT4	10M	300M	2100M	
M72A2/A23 LAW	10M	200M	1000M	
JAVELIN	TOP ATK: / DIRECT ATK:	2500M	4000M	
M3 MAAWS (CARL GUSTAF)	17-46M	1300M	2100M	
M41 ITAS (TOW MISSILE VARIANTS)	30-200M	3750-4200M	4200M	



A PRINCIPAL DIRECTION OF FIRE AND OBSERVATION.
B PRINCIPAL DIRECTION OF ATTACK.



Sequence: 1 firer, 2+ sequential shots
Pair: 2+ firers, alternating adjust fire, then fire for effect
Volley: 2+ simultaneous firers

Ideally, AT teams should fire from multiple positions to confuse return fire.

Understanding the capabilities and limitations of friendly weapons systems is critical for ensuring proper positioning of forces, targeting priorities, adequate supply for specific missions, and regard for the effects various weapons in areas which may contain friendly forces and / or civilian populations.

Reflective Questions

❑Are all my Soldiers' weapons systems in the best position to kill the ENY in the fight?
❑Do all my Soldiers know their engagement ranges, techniques, and priorities for the next fight?

M1A2 SEP v3 MAIN BATTLE TANK (ABRAMS)

WEAPON SYSTEM	MAX EFFECTIVE RANGE	MAX RANGE	SYMBOL
M256 120MM MAIN GUN	3000M	SEE TM 9-2350-264-10-1/2	
M2A1HB .50 CAL	1830M	6764M	
M240 (COAX)	1100M	3725M	
M240 (LOADER)	800M	3725M	

M2A3 / M2A4 INFANTRY FIGHTING VEHICLE (BRADLEY)

WEAPON SYSTEM	MAX EFFECTIVE RANGE	MAX RANGE	SYMBOL
BGM-71 TOW MISSILE	3750M	SEE TM 9-2350-294-10-1/2	
M242 25mm	2000M	SEE TM 9-2350-294-10-1/2	
M240 (COAX)	1100M	3725M	

Stand-To is a procedure conducted by units to ensure synchronization at daily periods of high risk near sunrise and sunset. During Stand-To, units assume 100% security posture, conduct communications checks, send routine reports, and prepare either to receive contact or displace. Units equipped with vehicles prepare to turn all vehicles on simultaneously, either via a synchronized start time or FM short-count, to prevent the ENY from making an accurate count. At the conclusion of stand-to, the unit is ready to conduct other actions (often personal hygiene, meals, and other priorities of work). Small unit leaders are responsible for preparing their elements to conduct stand-to IAW their higher HQ's SOP.

Stand-To Checklist

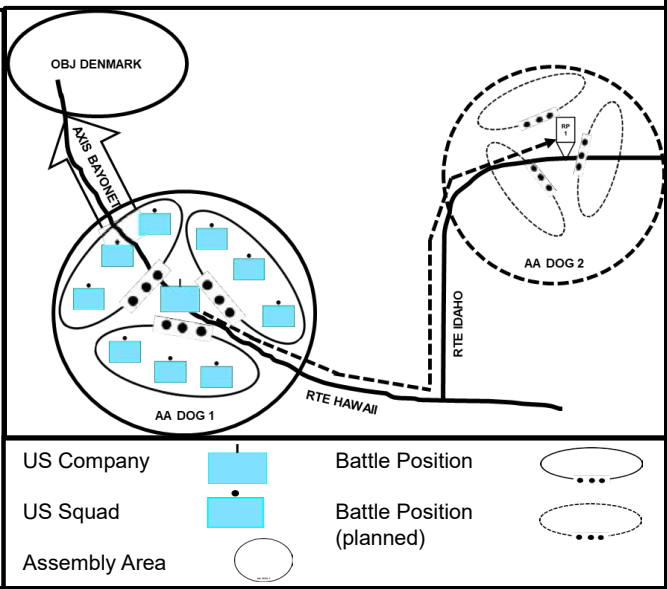
- All personnel awake, alert
- Prepare to fire checks complete for all weapons systems
- Vehicles prepared for power up at completion of short-count
- Internal communications checks complete
- Routine reports prepared

Reflective Questions

❑Do all my Soldiers know the next stand-to time, and have I confirmed this with them / their first-line supervisors?
❑Do all my Soldiers know how to prepare for stand-to while maintaining strict noise and light discipline?
❑Have my Soldiers and I rehearsed our actions on contact for the most likely / most dangerous of the nine forms of contact (DINOCAVE-I)? see page 23 for forms of contact.
❑Have my Soldiers and I rehearsed displacing to our planned rally point? Have we identified an alternate rally point if our planned point is not viable?
❑Do all my Soldiers know their priorities of work after stand-to procedures are complete, and have I confirmed this with them / their first-line supervisors?

STAND-TO INSTRUCTIONS

MISSION: NLT 0900, D CO seizes OBJ DENMARK IOT enable 1-23 FA to occupy PAA 1.
WAKE UP: 0537
STAND-TO: 0557
PRIORITIES OF WORK: SECURITY (50%), MAINTENANCE (WEAPONS, VEHICLES, COMS), RESUPPLY (V, III, I), FOOD / HYGIENCE, MOVE PREP
BMTN: 0627
SP: 0800
ROUTE: RTE HAWAII IVO AXIS BAYONET
ORDER OF MARCH: 2, 3, HQ, 1
CONTINGENCY RP: RP 1
CONTINGENCY ROUTE: RTE HAWAII TO RTE IDAHO



Priorities of Work are the continuous activities needed to prepare and maintain Soldiers and equipment for combat. Leaders manage and assign priorities of work based on the anticipated time available, the next mission, and the status of their Soldiers and equipment. The priorities of work generally are:

1. Establishing and Maintaining Security.
2. Establishing a Withdrawal Plan.
3. Establishing and Maintaining Communications.
4. Mission Planning and Preparation.
5. Conducting Weapons and Equipment Maintenance.
6. Conducting Resupply.
7. Conducting Food, Rest, and Hygiene Cycles.

There is seldom enough time to do everything that would be beneficial. Therefore, leaders consider, articulate, and mitigate risk in those priorities of work which receive less attention.

Reflective Questions

❑Given current threats, how many of my Soldiers must remain focused on security to create time for others to complete other priorities of work?
❑Do all my Soldiers and vehicles have fighting positions with cover and concealment from direct and overhead fires?
❑Have all my Soldiers conducted maintenance and functions checks on all weapon systems, communications equipment, night vision devices, and other critical items?
❑How much time is available between now and the next movement or fight?
❑What are my Soldiers' current critical supply shortfalls, are my leaders aware, and how can I resupply the things we need?
❑When is the last time my Soldiers ate, slept, and conducted personal hygiene?

Leader Priorities of Work

❑Establish local security, accounting for mission variables (METT-TC (I)).
❑Assign primary, alternate, and supplementary positions and sectors of fire to subordinates; the squad covering the most likely ENY avenue of approach receives the smallest sector.
❑Position crew-served weapons to ensure overlapping sectors of fire and enable flanking / enfilading fire from covered and concealed positions.
❑Designate and register preplanned targets, Final Protective Fires, assign priority of fires, and integrate planning with HHQ.
❑Ensure obstacles are deployed in-depth around the perimeter, including wire and antipersonnel mines on dismounted avenues of approach.
❑Emplace main and alternate CPs, position leaders to enable C2 of the whole unit.
❑Distributes rations, water, ammunition, tools, and obstacle materials.
❑Issue additional information, plans, and orders for patrols, upcoming operations.
❑Reconnoiter alternate/supplementary fighting positions, routes; then briefs team leaders.
❑Supervise continuously.

Rehearsals enable small units to practice essential tasks, reveal weaknesses or problems in their plans, coordinate the actions of subordinate elements, and ensure common understanding of the concept of the operation, all of which improve performance and foster confidence in Soldiers. Every operation requires rehearsal, ideally on the terrain and with the full unit participating. However, leaders should consider the most appropriate rehearsal types and techniques based on the security situation, time available, and level of competence of their units, prioritizing the points of greatest friction.

Rehearsal Techniques

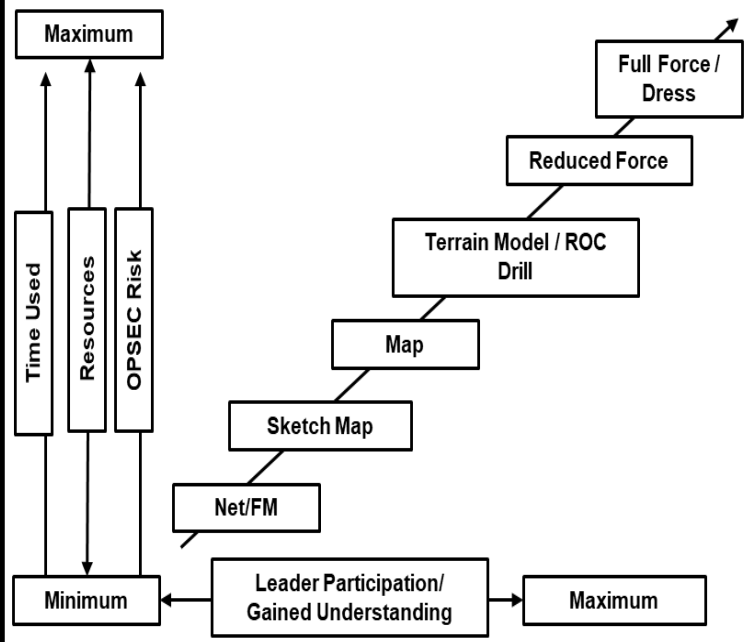
(a) Force on Force
(b) Map
(c) Net / FM - cannot mass leaders, confirms communications
(d) Sand table/terrain model - key leaders, includes all control measures
(e) ROC drill - like sand table/terrain model, subordinates are moving themselves

Rehearsal Types

- **Confirmation Brief –** leaders identify key tasks for their unit after receiving HHQ OPORD
- **Backbrief – l**eaders brief own plan for how to conduct their portion of operation
- **Reduced Force** – portion of unit performs key tasks; conducted when time is limited and/or security is required
- **Full Force** – whole unit conducts key tasks; most effective

Reflective Questions

❑Have I identified the essential task and other critical phases/tasks my unit must perform during the next fight, and have I confirmed them with my HHQ?
❑Based on my team's status and experience, what phases of the operation are most likely points of friction? Which phase or task should I make a priority to rehearse?
❑Based on time available and security requirements, have I assigned time, type, and technique for rehearsals?



Terrain Model Requirements

- Terrain features (exaggerated)
- Routes
- Obstacles
- Major checkpoints
- Grid Lines
- Phase Lines
- OBJs and OBJ Area
- ATK, ASLT, SBF, and ABF positions
- Targets
- Friendly and ENY unit icons
- Logistics support areas/points
- Medical support areas

Pre-Combat Checks and Pre-Combat Inspections (PCCs/PCIs) are an essential part of TLPs which protect against shortfalls endangering Soldier's lives and jeopardizing the execution of the mission. Leaders must conduct PCCs/PCIs before every mission and cannot delegate this responsibility. PCC/PCI should be tailored to critical equipment, training, and knowledge for the specific unit and mission. During PCCs, leaders conduct spot checks of Soldiers in their units. During PCIs, their supervisors conduct a thorough inspection of all subordinates.

Reflective Questions

❑Have I identified the critical equipment and knowledge needed to win the next fight?
❑Have I visually inspected the critical pieces of equipment each of my Soldiers needs for the next fight to ensure that they are present and functional?
❑Do all my Soldiers have their kit set up IAW unit SOPs, secured to reduce noise, and tied down to prevent loss?
❑Do all my Soldiers know the timeline for the PCI, and have I confirmed this with them / their first-line supervisors?

Example PCC/PCI Checklist

- ❑ **Individual:**
- ❑ **Helmet (Chin Strap, NODS Mount, Strobe, Headset)**
- ❑ **NODS- (functions check, tie downs, J-Arm, Rhino mount) fresh battery)**
- ❑ **Eye protection (clear and dark)**
- ❑ **ID Card/ID Tags**
- ❑ **Fighting Equipment (fit, plates serviceable, straps secured, load carrier balanced)**
- ❑ **Weapons (clean, functions check, tie downs, fresh batteries)**
- ❑ **Ammo (carriers mounted correctly, appropriate combat load)**
- ❑ **Grenades (mounted correctly, appropriate combat load)**
- ❑ **Wristwatch**
- ❑ **Gloves (minimum shooting gloves, may need FR gloves, Cold WX gloves)**
- ❑ **Personnel Info (bump card, casualty feeder card, blood chit, pointy-talkie)**
- ❑ **Weapons cleaning kit**
- ❑ **CL I (water source for CBRN environment, MRE and water volume mission-specific)**
- ❑ **Pen and Paper (waterproof)**
- ❑ **Detainee processing kit**
- ❑ **Red and white light headlamp / tactical flashlight**
- ❑ **Navigation Tools (map, graphics, compass, protractor, grid reference guides, DAGR)**
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____

- ❑ **Rucksack:**
- ❑ **Food (DOS appropriate for mission)**
- ❑ **Water (DOS appropriate for mission)**
- ❑ **Entrenching Tool**
- ❑ **STANO EQUIPMENT (Tie-Down / Silenced)**
- ❑ **Additional Clothing (Spares, cold weather, wet weather)**
- ❑ **100 MPH Tape**
- ❑ **550 Cord**
- ❑ **Additional Ammunition (spare fighting load, crew-served weapons)**
- ❑ **Spare batteries (all personal and squad equipment)**

- ❑ **Aid and Litter:**
- ❑ **Combat Casualty Reference Card**
- ❑ **Pole less Litter**
- ❑ **Nasal Phalangeal Airway (w / Lubrication) x6**
- ❑ **Roller Gauze (vacuumed) X8**
- ❑ **Needle Chest Decompression Kit**
- ❑ **Tourniquet x6**
- ❑ **Trauma Dressing x6**
- ❑ **Abdominal Badge / Chest Seal**
- ❑ **SAM II Splint x2**
- ❑ **Trauma Shears**
- ❑ **Surgical Tape x3**
- ❑ **ACE Wrap x2**
- ❑ **Cravats x6**
- ❑ **Kerlix x4**
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____

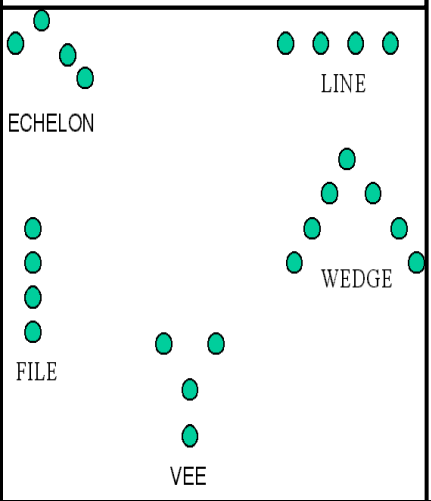
Movement is the positioning of combat power to establish the conditions for maneuver. Movement of troops and equipment is a deliberate activity which requires training, planning, orders, preparation, and rehearsals. Small unit leaders must understand the routes along which they are moving to anticipate time required between checkpoints and objectives, level of Soldier fatigue/vehicle wear, likely transition points between tactical formations and movement techniques, and danger areas. Leaders backwards plan to ensure adequate time including resupply, load plan inspections, disseminating maps and graphics, and conducting rehearsals.

Reflective Questions

❑What routes is my unit using to move from our current position to our objectives? Are there alternate routes available if our primary routes become unusable?
❑How long will it take my unit to move from our current location to our objective, given the terrain, our road and off-road rate of march, and current Soldier/vehicle loads?
❑What pieces of key terrain affect my unit's movement, either by providing cover and concealment, observation and fields of fire, or acting as obstacles?
❑Where along my unit's route is the ENY likely to gain observation of my unit, and where are they likely to make contact with UAS, EW, indirect, and direct fires?

	PLT LINE, SQD COLUMN	PLT LINE, SQD LINE	PLT COLUMN	PLT FILE	PLT WEDGE	PLT VEE
LOGIC	Line not desirable but contact	ENY situation known, contact	Default	Poor visibility	ENY situation vague, contact not	ENY situation vague, contact
FLEXIBILITY	Medium	Minimal	Excellent	Least flexibility	Small SBF, large maneuver element	Large SBF, small maneuver element
FIRES	Good to front, rear; minimal to flanks	Maximum to front; limited to flanks, rear	Limited to front, rear; good to flanks	Extremely minimal to front, rear; maximum to	Good to front, flanks	Maximum to front, flanks; minimum to rear
SECURITY	Good all around	Limited	Extremely limited	Extremely limited	Good on flanks	Extremely limited
MOVEMENT	Slow	Slow	Medium	Fastest	Slow	Slowest

BASIC FORMATIONS



FORMS OF CONTACT

1. Direct Fire
2. Indirect Fire
3. Non-hostile
4. Obstacle
5. CBRN
6. Aerial
7. Visual
8. Electronic
9. Influence

MOVEMENT ESSENTIALS

- ❑ Map and graphics
- ❑ Security plan
- ❑ Communication (HHQ, adjacent units, subordinates)
- ❑ Reconnaissance plan
- ❑ Rate, distance, time of march
- ❑ Soldier / Vehicle load plans

Movement is the positioning of combat power to establish the conditions for maneuver. Movement of troops and equipment is a deliberate activity which requires training, planning, orders, preparation, and rehearsals. Small unit leaders must understand the routes along which they are moving to anticipate time required between checkpoints and objectives, level of Soldier fatigue/vehicle wear, likely transition points between tactical formations and movement techniques, and danger areas. Leaders backwards plan to ensure adequate time including resupply, load plan inspections, disseminating maps and graphics, and conducting rehearsals.

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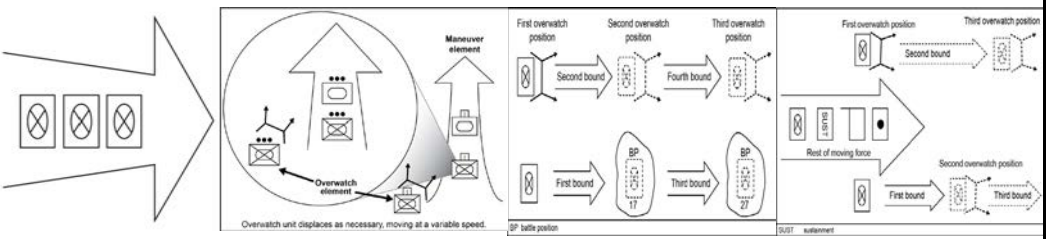


TRAVELING | **TRAVELING OVERWATCH** | **SUCCESSIVE BOUNDS** | **ALTERNATING BOUNDS**

Traveling (TL): contact not expected, least security.
Traveling Overwatch (TR): contact possible, medium security.
Bounding Overwatch: contact expected, highest security. **Alternating Bounds** (BL), **Successive Bounds** (BR).

Moving successfully requires selecting the best combination of movement formations and movement techniques for each situation. Leaders consider the factors of METT-TC (I) in selecting the best route and the appropriate formation and movement technique. Moving units must:

- Maintain cohesion.
- Maintain communication.
- Maintain momentum.
- Provide maximum protection.
- Make contact in a way that enables rapid transition to offensive or defensive action.

Moving well ensures that units can make contact with the ENY in a time and place of their choosing, with the smallest possible element (ideally a non-human element).

Small unit leaders ensure that all Soldiers, particularly drivers and vehicle commanders, understand the routes, associated control measures, chalks and serials, intervals between elements, travel speed and catch-up speed, recovery and rollover procedures, and sectors of fire during movement. Leaders also ensure that Soldier and vehicle load plans support the mission. Additionally, leaders inspect all vehicles or subordinate elements to ensure that they have appropriate navigation material, operational communications, and medical equipment. Careless movement results in ENY contact at a time and place of their choosing. Understanding the shifting interrelationship between unit movement, terrain, and weapon systems in their AO is the basis for employing movement formations, movement techniques, route selection and navigation, crossing danger areas, and security.

Mounted Movement Preparation Checklist

- ❑Administrative Requirements
  - ❑Driver and vehicle commander licensed for vehicle and trailer variant
  - ❑Vehicle dispatched
  - ❑Technical manual (TM) present
  - ❑Before Operations PMCS complete
  - ❑Manifest for each vehicle complete
- ❑Equipment stowed IAW unit load plan SOP
  - ❑Appropriate DOS CL I for mission
  - ❑Slave cable (min 1/section).
  - ❑Tow bar / recovery strap, heat shield if required
  - ❑CL III P UBL for vehicle, weapons
  - ❑Extra fuel cans O/H, full, stowed IAW SOP.
  - ❑Class IV UBL
  - ❑CL V UBL for all weapon (within reach of gunners)
  - ❑Battle Damage Repair (BDR) kit
  - ❑CL VIII: FAK/CLS Bag (stocked)
  - ❑Fire extinguisher (serviceable, in reach)
  - ❑CBRN decontamination equipment (M256 kits)
  - ❑Visual signaling/vehicle marking equipment
- ❑Vehicles fully fueled
- ❑Map of AO with current graphic control measures stowed.
- ❑Communications Requirements
  - ❑Antennas present, connections clean, secured
  - ❑COMSEC installed, equipment secured
  - ❑Communications check complete
- ❑CBRN system (e.g. JCAD) O/H, FMC
- ❑Night operations
  - ❑Night Vision for DVR/VC/GNR O/H, FMC
  - ❑Vehicle/personnel limited visibility marking
  - ❑Light sources covered/red light only
- ❑Firepower
  - ❑Sectors of fire assigned
  - ❑Weapons' mounts / turrets FMC
  - ❑Boresight complete (if needed)
  - ❑Weapons cleaned, loaded, test-fired
  - ❑Optics FMC, zeroed, spare batteries O/H
- ❑Rehearsals (daylight and limited visibility)
  - ❑Mounted battle drills
  - ❑Self-, like-vehicle, and dedicated recovery
  - ❑Crew evacuation and rollover
  - ❑CASEVAC
  - ❑Actions at short halt
- ❑Convoy/movement brief conducted
  - ❑Primary and alternate routes
  - ❑Order of march
  - ❑Checkpoints, phase lines, passage points, lanes
  - ❑Communications PACE plan, applicable FM frequencies for HHQ, adjacent units, subordinate elements
  - ❑Convoy speed and catch-up speed
  - ❑Vehicle, serial, and chalk interval
  - ❑Maintenance and recovery procedures by phase

FUEL CONSUMPTION RATE ESTIMATES (GAL/HR)

VEHICLE	CAPACITY	IDLE	CROSS-COUNTRY	ROAD
M1A2	496	12.8	61.9	59.1
M2	175	1.4	19.1	18.8
M113 FOV	95	1	7.9	8
M88	400	3.5	42.9	40.9
M109	133	1.4	18.9	18.5
MLRS	175	1.4	18.3	18.2
STRYKER FOV	53	0.25	2.9	5.7
JLTV	22.5	0.25	1.4	2.8
FMTV (M1078, M1083, M1084, M1087, M1088)	54	0.25	2.8	5.6
AH-64	370	175		
CH-47	1030	514		
UH-60	362	175		

UNOPPOSED RATE OF MARCH (KPH)

PLATFORM		DAY	NIGHT
FOOT	ROAD	4	3
	CROSS-COUNTRY	2	1
WHEELED	ROAD	80	10
	CROSS-COUNTRY	10	6
TRACKED	ROAD	60	45
	CROSS-COUNTRY	30	18

Soldier Load and Sustainment Considerations: When conducting movement and maneuver, leaders must consider how Soldiers loads over distance affect the status of troops and their ability to conduct operations at the objective area. The Determine, Review, Organize, and Prioritize framework allows leaders to manage Soldier loads effectively. and personal protective equipment posture

Determine Load:

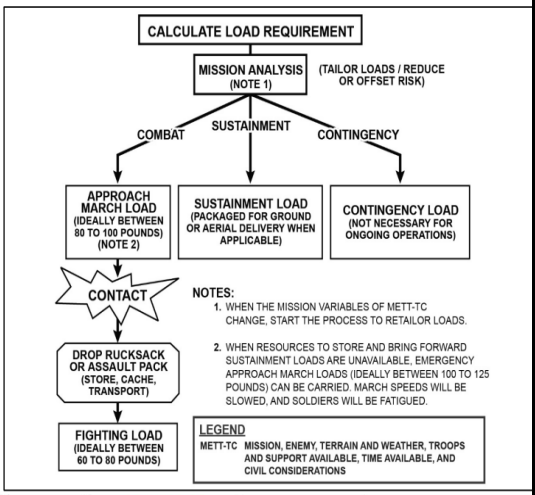
- **Physical Load**: How far and how quickly can Soldiers carry the necessary equipment while still having the ability to complete the mission at the OBJ?
- **Cognitive Load**: Do Soldiers have the mental capacity to overcome the physiological and psychological challenges of the mission?

Review: packing lists, mission essential and personal protective posture level

- Ensure Soldiers have the essential equipment for the mission.
  - Leaders must consider the most likely threats and contingencies when determining what equipment to carry/load and protective posture
  - ***Carrying equipment for every contingency increases fatigue and decreases effectiveness.***
  - Leaders mitigate risk to mission and force by continually assessing the threats posed by the ENY and environmental and adjusting load
- **Consider**:
  - Anticipated mission duration and timeline
  - Opportunities for resupply before, during, and after operations
    - What coordination is needed to ensure resupply at an advantageous time and place?
    - How quickly can assigned assets deliver resupply? Can emergency resupply occur faster if needed?
    - Does resupply require a deliberate link up?
  - Likely combat requirements at the OBJ and follow on operations

Organize Load Carriage Systems:

- Identify opportunities for motorized transportation of personnel and equipment (ground, air)
- Ensure essential equipment is readily available within bags, vehicles
- Distribute essential equipment across the formation to decrease load and increase redundancy in case of loss (maintenance, casualty)
- Prioritize assets and plan movement.



PPEP Level	*Ballistic Threat Protection*	*Example*	*Notes*
0 All Carried	No ballistic protection.	Protection level: None.	Load carriage only. All soft armor and hard armor plates readily available and transported to the Soldier when needed.
1 Soft Armor	9 millimeter and fragmentation protection.	Protection level: Broad-spectrum fragmentary, handgun, submachine gun protection.	Intended for threat levels not including rifle threat (for example, vehicle crews and patrol base activities).
2 Hard Armor Plates Only (Minimum - Front and Back Plates Only)	Low-threat rifle (7.62 x 39 AP) protection.	Protection level: Hardened steel core.	Protection from small arms while reducing overall weight. Intended for dismounted troops who may encounter small arms fire.
3 Soft Armor and Hard Armor (Minimum - Front and Back Plates Only)	High-threat rifle (7.62 x 54 AP) protection.	Protection level: Broad-spectrum fragmentary, handgun, submachine gun protection. Hardened steel core, sniper threat.	Protection from sniper caliber small arms with increased protection provided by soft armor. Increased protection while dismounted. Intended for dismounted troops who will likely encounter small arms fire with a sniper threat.

Legend: AP – armor-piercing; PPEP – personal protective equipment posture

AVERAGE RATES OF MARCH FOR:	KPH				KM PER DAY
	ON ROADS		CROSS-COUNTRY		
	DAY	NIGHT	DAY	NIGHT	
FOOT SOLDIERS	4	3.2	2.4	1.6	20 to 32

LEGEND
KM KILOMETER KPH KILOMETERS PER HOUR

SOLIDER WATER CONSUMPTION RATE (GAL/DAY)				
WATER USE	ARTIC	TEMPERATE	TROPICAL	ARID
DRINKING	2	1.5	3	3
HYGIENE	1.7	1.7	1.7	1.7
FOOD PREP	2.8	2.8	2.8	2.8
MEDICAL	0.1	0.1	0.2	0.2
MAINTENANCE	0	0	0	0.2
TOTAL REQ	6.6	6.1	7.7	7.9

Army units conduct offensive operations to defeat ENY forces, destroy ENY forces, and gain control of terrain, resources, and population centers. Fighting offensively enables units to secure decisive terrain; deprive the ENY of resources; gain information; deceive / divert ENY forces; fix an ENY force in position; disrupt ENY attacks; and set the conditions for successful future operations. Small unit leaders need to understand their unit's tasks and role in the attack, the ENY's capabilities, the terrain on which they will move and fight, the time and resources available for preparation, and the actions for which their Soldiers will be responsible after the fight.

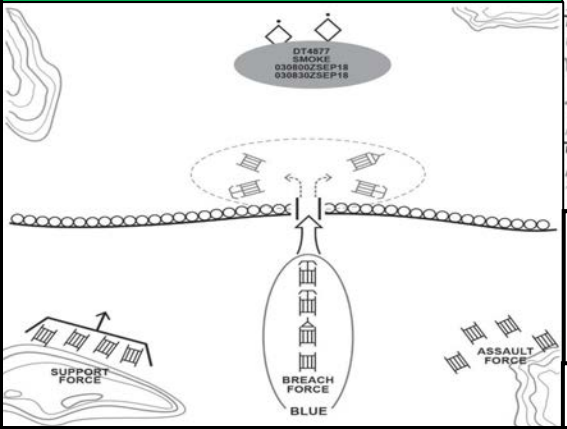
Reflective Questions

❑Given our assigned tasks, does my team have the necessary CL I, III, V, and VIII to win the next fight, including an ENY counterattack?
❑Do my Soldiers know the timeline for preparation, rehearsals, PCC/PCI, and movement for the next fight, and have I confirmed this with their first-line supervisors?
❑How will my unit maneuver around and through natural and reinforcing obstacles?
❑Where and how can my team approach ENY positions with the maximum cover and concealment, and how much time / distance do we need to cross while exposed?
❑Has my unit rehearsed transitions of formations and movement techniques for the next fight?
❑Do my Soldiers understand what tasks our adjacent units are performing, where and when, and how we will synchronize our actions to prevent fratricide and kill the ENY?
❑Have Soldiers rehearsed the transition to hasty defense after the next fight?

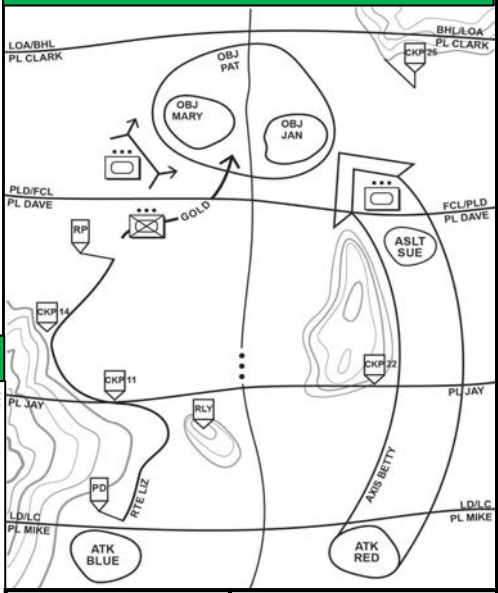
SEQUENCE OF THE OFFENSE

1. **Planning and Preparation at Assembly Area**
2. **Reconnaissance and Surveillance**
3. **Movement to Line of Departure**
   a) **Occupation of Attack Position**
4. **Movement to Line of Deployment**
   a) **Occupation of Assault Position**
5. **Establishment of Support by Fire**
6. **Assault**
7. **Follow Through**
   a) **Consolidation**
   b) **Reorganization**
   c) **Transition**

COMBINED ARMS BREACH



COMPANY ATTACK



FUNDAMENTALS

1. **Suppress**
2. **Obscure**
3. **Secure**
4. **Reduce**
5. **Assault**

TASK ORGANIZATION

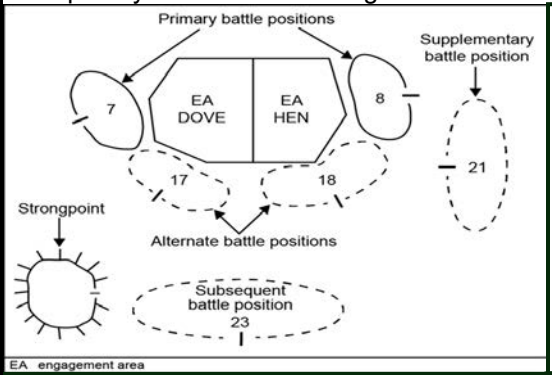
1. **Support by Fire**
2. **Breach Force**
3. **Assault Force**

Plan for (F)POL of follow-on forces, heavy casualties, and ENY CATK.

Army units fight in the defense to create conditions favorable for the offense and regain the initiative. Fighting defensively allows units to retain decisive terrain or denying a vital area to an ENY; attrit or fix ENY as a prelude to the offense; counter ENY actions; increase the ENY's vulnerability by concentrating their forces. Small unit leaders need to understand what their unit's role in the defense to ensure that they prioritize preparation time and are ready to take advantage of opportunities provided by terrain, ENY action, and friendly effects.

Reflective Questions

❑Has my unit selected the most advantageous positions available to establish a defense, and are we tied into the natural obstacles, cover, and concealment?
❑Do all my Soldiers know the locations and routes to their alternate, supplemental, and subsequent battle positions?
❑Have all my Soldiers rehearsed our plans for resupply and casualty care / evacuation under fire?
❑Do all my Soldiers know the location, schedule, signals, and composition of our reconnaissance and security patrols and observation posts?
❑Do all my Soldiers know our role in the counterattack plan?
❑Have I inspected all my Soldiers' fighting positions to ensure they have adequate cover and concealment from direct, indirect, and air-based fires?
❑Do all my Soldiers know their engagement ranges, techniques, and priorities by weapon system for the next fight?



Terrain Considerations for the Defense

- Parallel ridges across ENY line of advance.
- Natural obstacles (water, relief) on front, flanks
- High ground: good observation and long-range fields of fire
- Concealed movement routes BPs
- Limited road network forward of line of contact
- Road network behind the line of contact (enables CDRs to reposition forces, resources as needed)

Engagement Area - area where the commander masses effects to contain and destroy an ENY force.

7-Step Engagement Area Development

1. Identify all likely ENY avenues of approach
2. Determine likely ENY schemes of maneuver
3. Determine where to kill the ENY force
4. Plan and integrate obstacles
5. Emplace weapon systems
6. Plan and integrate indirect fires
7. Rehearse

Battle Position - defensive location oriented on a likely ENY avenue of approach.

- **Primary BP** - covers the ENY most likely avenue of approach into the assigned area
- **Alternate BP** - for occupation when the primary position becomes untenable or unsuitable for carrying out assigned task
- **Subsequent BP** - position unit expects to move to during course of battle
- **Supplementary BP** - covers less likely ENY avenue of approach into the assigned area

Units defend by digging in, placing obstacles, patrolling, conducting spoiling attacks, and using fires to force the ENY into an EA. Units that defend by waiting patiently won't have to wait long to be bypassed or destroyed.

Survivability Operations are activities that enhance survivability, the quality or capability of military forces which permits them to avoid or withstand hostile actions or environmental conditions while retaining the ability to fulfill their primary mission. Leaders must take both active and passive measures to ensure the survivability of their units by camouflaging their Soldiers and equipment, using cover and concealment effectively, and eliminating threats.

Reflective Questions

- ❑What systems can our enemies employ to observe and engage my unit, and how should my Soldiers react to contact by those systems to maximize their survivability?
- ❑What level of protection do my unit's current positions provide against direct-fire weapons systems and fragmentation/blast from indirect-fire weapons?
- ❑How can my Soldiers employ camouflage, natural cover and concealment, movement techniques and formations, and fires to move safely from their current positions to the next position of advantage over the ENY?

MATERIAL THICKNESS (IN) FOR INDIRECT-FIRE BLAST/FRAGMENTATION PROTECTION AT 50FT

WEAPON	MORTAR (82MM)	MORTAR (120MM)	ROCKET (122MM)	HE (122MM)	HE (155MM)	BOMB (100LBS)	BOMB 250LBS)	BOMB (500LBS)	BOMB (1000LBS)
BRICK / CLAY MASONRY	4	6	6	6	8	8	10	13	17
CONCRETE MASONRY	4	5	5	5	6	8	10	15	18
REINFORCED CONCRETE	3	4	4	4	5	7	9	12	15
TIMBER	8	12	12	12	14	15	18	24	30
SANDBAG (SAND)	8	16	16	16	18	30	30	40	40

MATERIAL THICKNESS (IN) FOR DIRECT-FIRE DIRECT HIT PROTECTION

DISTANCE TO TARGET	100M			200M	400M	
WEAPON	5.56MM	7.62MM	12.7MM	20MM AT	37MM AT	50MM AT
BRICK / CLAY MASONRY	9	16	N/A	30	60	N/A
CONCRETE MASONRY	9	16	N/A	N/A	N/A	N/A
REINFORCED CONCRETE	8	12	22	18	36	42
STONE MASONRY	8	12	22	30	42	54
TIMBER	N/A	N/A	36	N/A	N/A	N/A
WOOD	N/A	N/A	24	N/A	N/A	N/A
STEEL	7/16	5/8	1 3/8	N/A	N/A	N/A
SANDBAG (DIRT)	N/A	N/A	30	60	N/A	N/A
SANDBAG (SAND)	N/A	N/A	20	30	60	70

CAMOUFLAGE TECHNIQUE	SENSOR SYSTEMS		
	OPTICAL	THERMAL	RADAR
HIDING *(Screens target from ENY sensors)*	Earth cover, earth embankments, vegetation, ULCANS, screens, obscurants	Earth cover, earth embankments, vegetation, ULCANS, screens, obscurants	Chaff, earth cover, earth embankments, vegetation, nets, radar-absorbing material, ULCANS
BLENDING *(Alters target appearance so that it appears to become part of background)*	Paint, foam, lights, vegetation, ULCANS, textured mats	Thermal paints, foam, AC/heating, vegetation, ULCANS, textured mats, water, insulation	Vegetation, ULCANS, radar-absorbing material, reshaping, textured mats
DISGUISING *(Applies materials on target to mislead ENY as to true identity)*	Reshaping, paint, ULCANS	Reshaping, paint	Corner reflectors
DISRUPTING *(Alters or eliminates regular patterns and target characteristics)*	Camo sails, false operating surface, pyrotechnics, smudge pots, balloons, strobe lights, tracer simulators, obscurants	Flares, obscurants	Chaff, corner reflectors
DECEOYING *(Deploys false/simulated target where ENY might conclude it has found real target)*	Decoy targets, lights, obscurants	Decoy targets, flares, AC/heatining, obscurants	Decoy targets, corner reflectors, signal generators

Fighting Positions enhance the survivability and lethality of units in contact. The primary consideration when constructing a fighting positions is always the ability to employ the unit's weapons systems; cover (frontal, flank, rear, overhead) is secondary. Small unit leaders should select and prepare fighting positions with care, integrate fighting positions into existing terrain, especially when time is limited. Leaders must inspect positions' concealment, ideally from anticipated ENY avenues of approach.

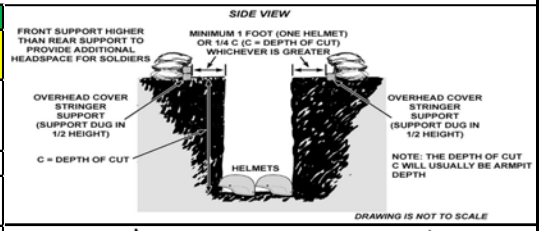
Reflective Questions

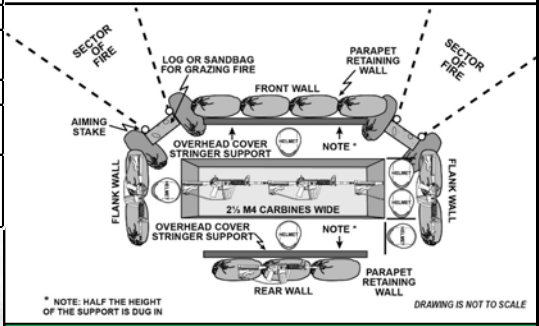
❑Have I confirmed that each fighting position enables my Soldiers to effectively engage threats in their sectors, particularly along major avenues of approach?
❑Have I provided clear priorities, timelines, and resources for improvements to our current fighting positions to my team, including any available digging equipment?
❑Have I used all available means to inspect the cover, concealment, and design safety of my unit's fighting positions?

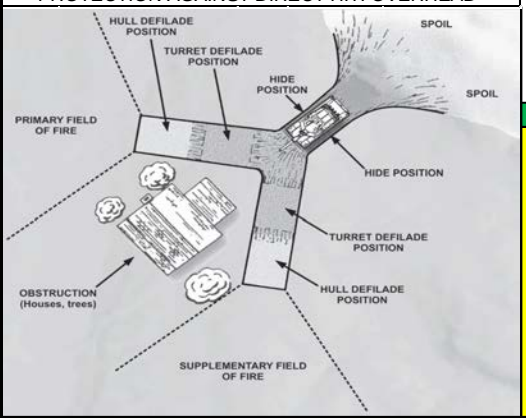
DISMOUNTED FIGHTING POSITIONS DIG TIME

TYPE	POSITION	MAN HRS	BHL/MHE (MIN)	SMALL ARMS PROTECTION
HASTY	PRONE	1		7.62MM
DELIBERATE	1-PERS	3	2 / 1.5	12.7MM
	1-PERS W/ 1.5FT OVERHEAD	8		12.7MM
	2-PERS	6	5 / 2.5	12.7MM
	2-PERS W/ 1.5FT OVERHEAD	11		12.7MM
	MACHINE GUN	7	15 / 10	12.7MM
	MACHINE GUN W/ 1.5FT OVERHEAD	12	15 / 10	12.7MM

ALL POSITIONS PROVIDE PROTECTION AGAINST NEAR MISS (≥30FT) BY 152MM ARTY; NO POSITION PROVIDES PROTECTION AGAINST DIRECT HIT. OVERHEAD







VEHICLE FIGHTING POSITIONS DIG TIME (HRS)

VEHICLE TYPE	HULL DEFILADE		TURRET DEFILADE	
	D7 / ACE	D6K	D7 / ACE	D6K
M1	0.9	1.1	1.5	2.1
M2	0.8	1.2	1.2	9
STRYKER	N/A	N/A	1.6	2.3
M113 FOV	0.6	0.8	0.7	1

- Position fighting positions to provide observation and fields of fire over ENY avenues of approach. Cover might protect Soldiers from ENY fire; killing the ENY will.
- Any fighting position is better than nothing. Build quickly and improve over time.
- Most casualties in LSCO come from indirect fires. Digging in and building overhead cover dramatically increase survivability from blast and fragmentation.

Unmanned Aerial Systems: UASs come in a variety of sizes and capabilities. Some larger UASs can have a similar lethality to cruise missiles and can launch from a wide array of locations. Smaller UASs can not only launch virtually undetected, but with their low radar and sound profiles are also difficult to detect as they maneuver across the battlefield, making them an increasingly preferred method to carry out tactical-level strikes.

Reflective Questions

- ❑ What role can UAS play in improving our mission success or survivability?
- ❑ Have I properly integrated UAS into our mission timeline and scheme of maneuver?
- ❑ Am I planning for UAS employment as a primary asset or just as an afterthought?
- ❑ How can I best use UAS for reconnaissance, target acquisition, or overwatch during operations?
- ❑ Do we routinely rehearse UAS employment alongside ground movement and fires?

Unmanned Aircraft Systems Categorization Chart

UA Category	Maximum Gross Takeoff Weight (lbs)	Normal Operating Altitude (ft)	Speed (KIAS)	Representative UAS
Group 1	0-20	< 1200 AGL	100 kts	WASP III, TACMAV RQ-14A/B, Buster, Nighthawk, RQ-11B, FPASS, RQ16A, Pointer, Aqua/Terra Puma
Group 2	21-55	< 3500 AGL	< 250	ScanEagle, Silver Fox, Aerosonde
Group 3	< 1320	< 18,000 MSL	< 250	RQ-7B Shadow, RQ-15 Neptune, XPV-1 Tern, XPV-2 Mako
Group 4	> 1320		Any Airspeed	MQ-5B Hunter, MQ-8B Fire Scout, MQ-1C Gray Eagle, MQ-1A/B/C Predator
Group 5	> 1320	> 18,000 MSL	Any Airspeed	MQ-9 Reaper, RQ-4 Global Hawk, RQ-4N Triton

Legend

AGL	above ground level	lbs	pounds
FPASS	force protection aerial surveillance system	MSL	mean sea level
ft	feet	TACMAV	tactical micro air vehicle
KIAS	knots indicated airspeed	UA	unmanned aircraft
kts	knots	UAS	unmanned aircraft system

UAS can provide:

- ❑ Intelligence, surveillance, and reconnaissance.
- ❑ Situational awareness. UAS can answer the unknown.
- ❑ Communications relay. UASs can serve to extend the comms conduits.
- ❑ Weapon delivery. UAS can delivery munitions or be a munition itself as a loitering munition
- ❑ Fire support. UAS can be used to provide forward observer functionality that can enable adjustment of indirect fire.
- ❑ Psychological warfare. UASs seen as a weapon delivery platform or conducting intelligence, surveillance, or reconnaissance prior to an attack can cause panic by their presence alone.

Counter UAS: Contact with unidentified UAVs may be a precursor to an imminent attack. All units who were in the UAV's path should assume they were observed and prepare for indirect fire on their positions. All units must react quickly, respond appropriately, and report when recognizing signs of possible enemy observation or attack. Whether a dedicated C-UAS or counter-air capability is available or not, units implement passive and active defensive measures to nullify or reduce the effectiveness of enemy UAV operations.

Reflective Questions

- ❑ How well does my team understand the current UAS threats in our operational environment?
- ❑ Can my personnel visually and audibly identify different types of UAS (e.g., fixed-wing vs. quadcopters)?
- ❑ Have we rehearsed immediate actions upon UAS detection in both day and night conditions?
- ❑ Are our camouflage, movement, and signature management techniques sufficient to counter aerial observation?
- ❑ Are we effectively integrating with higher headquarters or adjacent units for UAS defense (e.g., EW support, air defense coverage)?

Defensive Measures:

1.Hard Structure/Movement: Moving internal to a hard structure is the best defense when drones are incoming. This limits the exposure to direct fire from drone payloads.

2.Engagement with Small Arms: If you choose to engage drones, passive aiming through a reticle with Night Observation Devices (NODS) is most effective, as it avoids detection while trying to down the drone.

3.Diversionary Measures: Use of diversionary tactics like white-light, smoke, or lasers to disorient or misdirect drones can be helpful, though it can also risk attracting them if IR light is used.

4.EMP or Jamming: Blinding drones with electronic countermeasures (such as I/Jamming) could incapacitate the drone's guidance systems, rendering them ineffective.

5.Passive Detection: Using techniques to passively detect drones (without broadcasting IR signals) can help maintain a low profile while tracking them.

- ❑ Passive measures improve survivability by reducing the likelihood of detection and targeting of friendly assets and mitigating the potential effects of an air attack.
- ❑ Active defense measures are a multi-step sequence that units and Soldiers do to detect, identify, decide, and potentially engage an unknown UAS. The quicker these steps can be applied, the more effective the response against threat UAS.

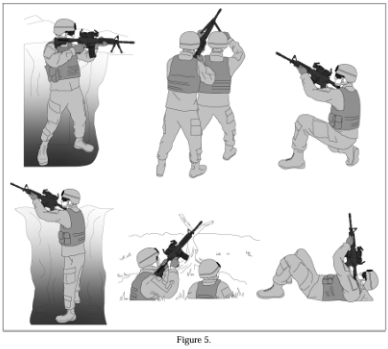


Figure 5.
Firing Positions

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Offensive Measures:

1.UAS Detection Systems: Systems can be carried by personnel or mounted on vehicles and can detect launch points, generating grid coordinates. This enables the targeting of drone launchers before they can reposition.

2.Coordination for Strike Execution: Communicate and synchronize actions to execute air-to-ground and ground-to-ground strikes against detected drone launch points.

3.Spoofing Threats: Hostile UAS teams (H/K) may try to spoof sensors and rapidly relocate to concealed positions (such as via E-bikes). This requires a quick response from Joint Tactical Air Controllers (JTACs) and Ground Fire Coordinators (GFCs) to communicate and track the mobile launch points effectively.

4.Rapid Repositioning and Relocation: H/K teams, knowing their vulnerabilities, rehearse fast relocation to new positions, making it essential for your forces to adapt and respond quickly.

Key Areas of Focus:

•**Detection and Identification**: Early detection is crucial. Sensor systems must be able to detect drones at a range and accurately classify launch points and movement patterns.

•**Coordination and Communication**: Close communication between tactical teams and forward observers are vital for targeting and neutralizing drone threats quickly.

•**Layered Sensor Integration and Responsiveness**: Having fast-response sensors that can quickly identify drone threats and potential launch locations gives a significant advantage in reducing the risk.

General Rule: Displace If Compromised

•The fundamental rule is to **displace** if compromised by drones. However, it's essential to assess the drone's behavior first to determine whether displacement is immediately necessary or if the situation can be salvaged.

Fixed-Wing SUAS (e.g., Puma):

Most Likely Course of Action (MLCOA):
•If the drone **adjusts its flight level or orbits** around your position, it's likely trying to get a closer look. This signals that the drone operator is attempting to gain more information about your location.

Rotary-Wing SUAS (e.g., Mavic):

General Patrol or Tasked Recon:
•Rotary-wing drones are often used for either **patrolling** or **reconnaissance** purposes in close proximity, sometimes in coordination with fixed-wing assets. They can be much closer and are equipped with **high-quality thermal and optical sensors**.

Capabilities:

•**Up to 30x optical zoom** and **thermal sensors** allow rotary-wing drones to identify and track targets at close range, making them a significant threat when you're near them.

Key Points for Action:

1.Cease All Movement: Both for fixed and rotary-wing drones, movement should be halted as soon as a drone is detected or suspected in the area.

2.Maximize Concealment: Effective use of cover can mean the difference between evading detection and being compromised.

3.Wait for Behavior Change: Don't displace too quickly unless the drone shows clear signs of intent, such as hovering or sparkling your position. It's critical to remain still until you're certain the drone has lost interest or made its move.

4.Displacement: Once compromised or if there's any sign of attack, **displacement** is essential. Displacing immediately prevents the drone from identifying a target or engaging with ordnance

Considerations:

•**Timing**: The key to survival when compromised by drones is timing. Reacting too quickly can draw attention, while waiting too long can allow a drone to lock on and attack.

•**Minimize Signature**: When forced to displace or remain concealed, minimizing your thermal and visual signatures is critical. Use natural terrain features, cover, or camouflage to remain as undetectable as possible.

•**Communications**: Effective use of communication channels (such as calling "RED AIR") ensures everyone is aware of the compromise and can adjust their actions accordingly

Net Call:
•The phrase **"RED AIR! RED AIR! RED AIR!"** is used to notify the team that they are compromised by hostile aerial assets.

Logistics is the movement and support of forces. In warfighting, small unit Leaders focus on the storage, movement, distribution, maintenance, and disposition of materiel needed for Soldiers to fight and win. Leaders anticipate requirements for classes of supply, movement support, and maintenance based on their assigned missions. They ensure that maintenance and supply activities occur routinely to prevent their units from becoming combat ineffective. Most importantly, Leaders reduce unit vulnerability during maintenance and resupply activities by maintaining strict discipline and security.

Reflective Questions

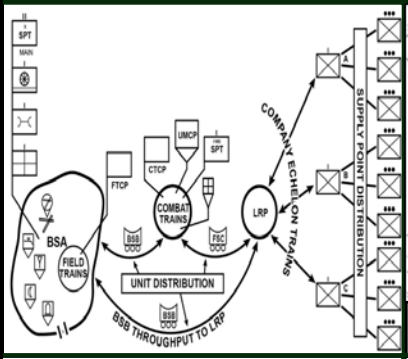
- ❑ What is the required security posture during LRP operations, maintenance, and resupply?
- ❑Has my unit completed before, during, and after operations PMCS for our weapons, vehicles, and communications equipment, and have we submitted DA 5988s?
- ❑ Have I monitored my unit's consumption of CL V, III, I, and VIII, and I have I requested resupply for all expended supplies?
- ❑ Is our next resupply tailgate, service station, or emergency, and do all my Soldiers understand their responsibilities and priorities for each resupply method?
- ❑ What supplies is my unit likely to expend before the next resupply due to movement, engagements, maintenance, and casualties?
- ❑ Do all my Soldiers understand the plan for resupply in contact and emergency resupply during the next fight?
- ❑ What limitations on available COS at the next echelon will affect my unit's ability to win the next fight?

Classes of Supply (COS)

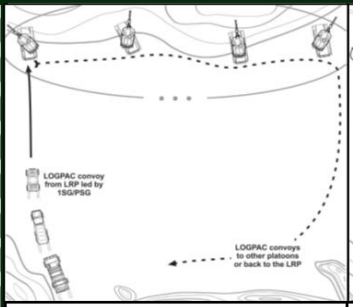
CL I (1): Food, Rations, Water
CL II (2): Equipment
CL III (3): Petroleum, Oil, Lubricants
CL IV (4): Construction Materials
CL V (5): Ammunition
CL VI (6): Personal Demand Items
CL VII (7): Major End Items
CL VIII (8): Medical Supplies
CL IX (9): Repair Parts
CL X (10): Non-Military Support

Basic Considerations by COS

- ❑ **CL I:** How many DOS of water and food do we have?
- ❑ **CL II:** Are we short BII, clothing, JSLISTs, or supplies?
- ❑ **CL III:** Are all vehicles full? Is there POL for every weapon system, engine, and generator?
- ❑ **CL IV:** Can we set a hasty defense with materials on hand?
- ❑ **CL V:** Do we have a full UBL and access to a second?
- ❑ **CL VI:** Can we perform personal hygiene?
- ❑ **CL VII:** Did we lose or destroy any critical equipment?
- ❑ **CL VIII:** Are all IFAKs, CLS bags, and medic kits full?
- ❑ **CL IX:** Do we need repair parts or spares?



Unit receives supplies, replacement personnel, RTD casualties, 5988E's at LRP; escorts to AO. Unit returns LOGPAC to LRP; backhauls routine casualties, remains, trash, 5988Es.



TAILGATE: SLOWER, MORE STEALTH AND SECURITY

SERVICE STATION: FASTER, LESS STEALTH AND SECURITY

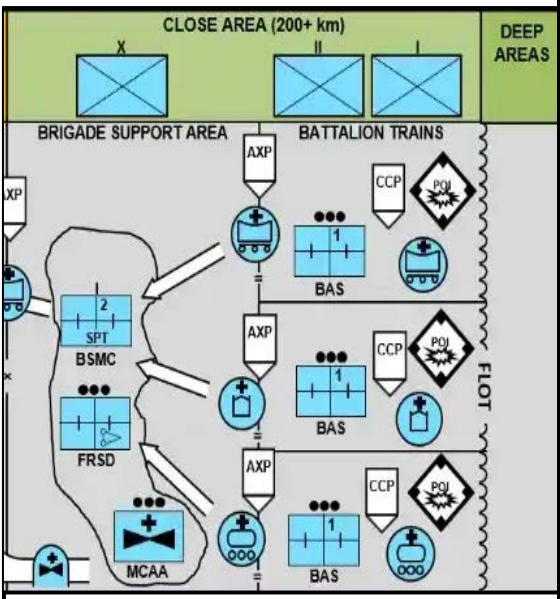
Units are vulnerable during resupply. LOGPAC movement can expose friendly positions, and Soldiers receiving resupply often lose the discipline that prevents the ENY from targeting their positions.

Combat Casualties and Disease and Non-Battle Injuries (DNBI) are inevitable during LSCO. Leaders mitigate the risks of both by ensuring that their units are prepared to treat and evacuate casualties during operations. Leaders must maintain situational awareness of the location of medical assets as well as casualty collection and ambulance exchange points to ensure Soldiers receive care as quickly as possible within the constraints of the mission. NCOs at the small unit level often perform CASEVAC duties. However, their priority must always be winning the current fight.

- ❑Have I inspected all my Soldiers required medical equipment (e.g. IFAKs, tourniquets, casualty feeder cards, CLS bags, medic bags, litters/sleds, HLZ marking materials, etc.) to ensure that their contents are serviceable and that they are located
- ❑Have I assigned aid and litter teams and CASEVAC vehicles in my formation?
- ❑Do all my Soldiers know the FM frequency for MEDEVAC requests, the location of the nearest Casualty Collection Point (CCP), Ambulance Exchange Point (AXP), and aid station?
- ❑Have all my Soldiers rehearsed evacuating casualties from all vehicles in our formation?
- ❑How long can I sustain care at the POI?

MEDEVAC PLANNING CONSIDERATIONS

- ❑ Does the medical plan nest with the maneuver and fires plans?
  - ❑ Do EVAC routes compromise fighting positions?
  - ❑ Can all supported units reach CCPs and AXPs without creating fratricide risk?
- ❑ Does the plan account for ENY COAs?
  - ❑ What level of escort do medical assets require?
  - ❑ How close to the FLOT can medical assets safely travel?
  - ❑ Do we have enough EVAC platforms for anticipated casualties? Can we make multiple trips without risking the mission? Do we need additional support?
- ❑ Where in time, space, and by unit do we expect the highest patient density? Have we prioritized support accordingly?
- ❑ Who is the launch authority for MEDEVAC Assets Grounds (air and ground), and what the launch criteria?
- ❑ Where are the nearest AXPs, CCPs, and aid stations during each phase (including adjacent units)?
- ❑ GENEVA Conventions Adhered To (no mixing wounded with KIA)
- ❑ Communications Flow For 9-Lines Have Been Identified & Rehearsed
- ❑ How are we using out own medical assets?
  - ❑ Have we identified Aid and Litter Teams, Combat Lifesavers, and CASEVAC platforms?
  - ❑ Have we inspected litters, CLS bags, and IFAKs?
  - ❑ Have we completed medical rehearsals?



Role I

- Combat Medics, Treatment Squad, Battalion Aid Station (MAS/FAS)
- Immediate lifesaving measures
- Limited DNBBI treatment/prevention
- Evacuation from Point of Injury

Role II

- BDE Medical Company
- Trauma management, patient holding up to 72hrs, medical evacuation
- Medical logistics
- Limited blood, radiology, BH, lab, preventative medicine, dental, and pharmacy
- If augmented, resuscitative surgical care

Tactical Combat Casualty Care

Care Under Fire: Return fire, move to cover, self/buddy aid (blood sweeps and tourniquet).
Tactical Field Care: Apply MARCH-E, reassess treatments, prep patient for evacuation.
Tactical Evacuation Preparation: Aid and Litter Teams assigned, Casualty Card completed, conduct 9-Line CASEVAC / MEDEVAC.

MARCH-E: Acronym to employ treatment and to assess patient. **Perform steps in sequence.**

Massive Bleeding
•Identify the bleed with blood sweeps & apply tourniquet.
-Apply as high on the effected limb as possible.
-Firmly tighten tourniquet strap.
-REASSESS BLEEDING
•Move to a Safe area of cover to continue assessment.
•Reassess tourniquet when behind cover.

Airway
•Talk to the Patient (This should start once you approach a patient)
-AVPU ***(Alert, Verbal Stimulus, Pain Stimulus, Unconscious)***
•Look in Patient's Mouth (Clear of Blood/Mucous/Dip)
•Head Tilt Chin Lift/Jaw Thrust
•Insert Nasopharyngeal Airway (NPA)
•Assess airway by listening for rate in which air is passing in and out.

Respiratory
•Expose the chest/torso
-Look for small shrapnel wounds, GSW entrance/exit wounds & other deformities to the entirety of the torso.
•Cover any trauma wounds to the upper torso with an occlusive dressing.
•Treat for Tension Pneumothorax with Needle D if MOI + Any of the following symptoms:
-Mechanism of Injury – Penetrating Trauma, Blast, Blunt trauma
-Signs and Symptoms - Rapid + shallow breathing, patient complaining of difficulty breathing, unilateral rise and fall of chest
•Needle Decompression
-Administer needle between the 2nd and 3rd rib in the 2nd Intercostal space (ICS), medial to the mid-clavicle line or between the 4th and 5th rib at the 4th ICS, anterior to the mid-axillary line.
-Reassess breathing often.

Circulation
•Check vital signs
•Documentation of vitals on T-CCC Casualty Card
•Gain IV access
•Dress wounds/any non-life-threatening bleeds

Hypothermia/Hypovolemia/Head Trauma
•Hypothermia Management (START ASAP AND RESUME MARCH)
-Package the patient in a HPMK and utilize a heating blanket.
-Improvise heating element if you don't have access to a HPMK
•Hypovolemia / Shock
-Ensure all bleeding is stopped
-Gain IV access if not gained already (A secondary site is ideal)
-Annotate all fluids pushed on T-CCC Card
•Head Trauma (Be able to recognize and report)
-Skull fractures
-Noticeable bruising (bruising around the eyes and behind the ears)
-Fixed or dilated pupils
-Bleeding or discharge from ears or nose
-Steady decrease in mental status
* Elevate head side of litter to assist in decreasing ICP (Inter-cranial pressure)*

Evacuation
•Package patient if not already achieved.
•Assign litter carry teams.
•Ensure casualty card is accurate, properly filled out, and sent with patient during handover.

Health Service Support is the support and services which promote, improve, conserve, or restore the behavioral and physical well-being of Soldiers. At the small unit level, Leaders focus on preventing and treating Disease and Non-Battle Injuries (DNBI) injuries / wounds to ensure that the maximum number of Soldiers are available for the next fight. Leaders must continuously assess threats to their Soldiers' physical and behavioral health and monitor their Soldiers' statuses for conditions which might render them unfit for duty.

Reflective Questions

❑Have I accounted for tactical and environmental conditions in assigning priorities of work?
❑Have I provided a rest plan which ensures that all my Soldiers have as much rest as the tactical situation allows?
❑Have all my Soldiers all conducted personal hygiene as the tactical situation allows?
❑Have leaders checked Soldiers for signs of common DNBI that would increase the risk to force or risk to mission?

Although individual Soldiers are responsible for their own well-being and will implement and employ all protective measures possible to preserve their health, leaders can reduce impacts by-

- Briefing unit personnel on the situation, objectives, and conditions that the mission or environment may involve.
- Making contingency plans and following standard operating procedures to reduce the effects of DNBI
- Inspecting their soldiers daily for DNBI effects and the control measures emplaced to reduce such effects.
- Ensure each soldier is properly utilizing rest and refit periods to recover performance.

To reduce DNBI effects each Soldier, as a minimum, will protect against—

- Skin diseases by washing the body as often as practicable.
- Heat injury in hot and sunny climates by following work or rest and water consumption guidelines,
- Cold injury in cold climates by wearing proper cold-weather clothing and frequently changing socks to keep feet dry, by careful handling of gasoline-type liquids, and by avoiding contact between skin and cold metal.
- Avoid arthropod-borne diseases by using insect repellents, netting, and insecticide aerosols
- Enteric (gastrointestinal) diseases by using water purification procedures whenever water quality is uncertain and by avoiding unapproved food sources, and by properly disposing of bodily wastes.

Sleep deprivation degrades performance and leads to errors in judgment. Quality sleep is essential to sustain performance, and performance is critical to the successful outcome of operations.

- Performance **will be degraded** with less than *eight hours* of sleep every 24-hours.
- Less than *seven hours* of sleep within every 24-hour period will result in **stabilizing performance at a lower level**.
- Less than *four hours* of sleep in every 24 hours will degrade performance **continuously and rapidly with no stabilization.**

9-Line MEDEVAC REQUEST FORM

LINE	ITEM 	EVACUATION REQUEST MESSAGE
1	Location of Pickup Site.	
2	Radio Frequ., Call Sign, & Suffix.	
3	No. of Patients by Precedence.	
4	Special Equipment Required.	
5	Number of Patients by Type.	
6	Security of Pickup Site (Wartime).	
6	Number and Type of Wound, Injury, or Illness (Peacetime).	
7	Method of Marking Pickup Site.	
8	Patient Nationality and Status.	
9	Chemical, Biological, Radiological and Nuclear Contamination (Wartime)	
	Terrain Description (Peacetime)	

1. Location of pickup site.	Grid coordinates of the pickup site should be sent by secure communication. To prevent confusion the grid zone letters are included in the message.
2. Radio Frequenc Call Sign, Suffix.	Encrypt the frequency of the radio at the pickup site, *not* a relay frequency. The call sign (and suffix if used) of person to be contacted at the pickup site may be transmitted in the clear.
3. No. of Patien by Precedence.	Report only applicable info & encrypt brevity codes. A = Urgent, B = Urgent-Surg, C = Priority, D = Routine, E = Convenience. (If 2 or more categories reported in same request, insert the word "break" btwn. each category.)
4. Spec Equipmen	Encrypt applicable brevity codes. A = None, B = Hoist, C = Extraction equipment, D = Ventilator.
5. No. of Patien by Type.	Report only applicable information and encrypt brevity code. If requesting MEDEVAC for both types, insert the word *"break"* between the litter entry and ambulatory entry: L + # of Pnt -Litter; A + # of Pnt - Ambul (sitting).
6. Security Pick Site (Wartime).	N = No enemy troops in area, P = Possibly enemy troops in area (approach wth caution), E = Enemy troops in area (approach with caution), X = Enemy troops in area (armed escort required).
6. Number and ty of Wound, Injury, Illness (Peacetime).	Specific information regarding patient wounds by type (gunshot or shrapnel). Report serious bleeding, along with patient blood type, if known.
7. Method Marking Pickup Site.	Encrypt the brevity codes. *A* = Panels, *B* = Pyrotechnic signal, *C* = Smoke Signal, *D* = None, *E* = Other.
8. Patient Nati ality and Status.	Number of patients in each category need not be transmitted. Encrypt only applicable brevity codes. A = US military, B = US civilian, C = Non-US mil, D = Non-US civilian, E = EPW.
9. NBC Contamination, (Wartime).	Include this line only when applicable. Encrypt the applicable brevity codes. N = nuclear, B = biological, C = chemical.
9. Terrain Description (Peacetime).	Include details of terrain features in and around proposed landing site. If possible, describe the relationship of site to a prominent terrain feature (lake, mountain, tower).

Fire Support enables units to integrate surface-to-surface indirect fires, target acquisition, armed aircraft, and other lethal and nonlethal attack/delivery systems to defeat the ENY. The combination of indirect fires with direct fires and ground maneuver enables units to disrupt, fix, close with, and destroy ENY forces. Small unit leaders must understand the capabilities, limitations, and coordination required to effectively integrate fires into their operations while minimizing risk to friendly forces and achieving desired effects on the ENY***. Under direct fire, the ENY seeks cover. Under indirect fire, they displace. Under both, they face a tactical dilemma and defeat.***

Reflective Questions

❑ Do my Soldiers know the purpose, graphic/fire control measures, and TTLODAC factors for fires planned during our next fight?

❑ Do my Soldiers understand our place in the priority of fires and how planned fire support enables our unit's maneuver / is enabled by our maneuver during the next fight?

TTLODAC FACTORS	
TARGET	TARGET NUMBER (PLANNED) TARGET TYPE (UNPLANNED)
TRIGGER	WHEN / UNDER WHAT CONDITIONS TO FIRE THE MISSION
LOCATION	MIN 6-DIGIT GRID TO TARGET
OBSERVER	PRIMARY AND ALTERNATE
DELIVERY SYSTEM	MORTAR, ARTILLERY TYPE
AMMO	TYPE (ILUM, HE, DPICM, SMK, ETC) SPECIAL INSTRUCTIONS (ANGLE, FUSE, INTERVAL)
COMMUNICATION	FM FREQUENCY FOR UNIT, FIRES NET

Unplanned / Immediate Fires

❑ Where is my unit and where are adjacent units in relation to the FLOT?

❑Are the requested fires inside the requesting unit's Area of Operations OR have they coordinated for cross-boundary fires?

❑ Is there a primary and alternate observer for lethal fires?

❑ Where is the observer relative to the target?

❑ Is the gun target line hot or cold (are there air assets in the area)?

❑ Are there any Non-Firing Areas or Restricted Firing Areas affecting this mission?

❑Am I requesting Final Protective Fires or Immediate Suppression?

- ❑FPF: "Target block, fire for effect."
- ❑IS: "Immediate Suppression, Grid, Altitude, Direction, fire for effect."

Reflective Questions

❑Have I inspected my unit's communications and optical equipment needed to request, observe, and adjust fires?

❑ Have I accounted for the Risk Estimate Distances (REDs) of planned fires when developing the scheme of maneuver during our next fight?

EXAMPLE OF CALL FOR FIRE TRANSMISSIONS

GRID MISSION	
OBSERVER	FIRING UNIT
CALL SIGN, THIS IS **CALL SIGN** ADJUST FIRE, OVER.	**CALL SIGN**, THIS IS **CALL SIGN**, ADJUST FIRE, OUT.
GRID **LOCATION OF TARGET**, DIRECTION **(MILS)**, OVER	GRID **LOCATION OF TARGET**, DIRECTION **(MILS)**, OUT.
TARGET DESCRIPTION, OVER.	**CONFIRM TARGET DESCRIPTION**, OUT.
SHOT OUT.	SHOT OVER.
SPLASH OUT.	SPLASH, OVER.
END OF MISSION, **BATTLE DAMAGE ASSESSMENT**, OVER.	END OF MISSION, **CONFIRMED BATTLE DAMAGE ASSESSMENT**, OUT.
SHIFT FROM KNOWN POINT	
OBSERVER	FIRING UNIT
CALL SIGN, THIS IS **CALL SIGN**, ADJUST FIRE, SHIFT **(FROM KNOWN POINT)**, OVER.	**CALL SIGN** THIS IS **CALL SIGN,** ADJUST FIRE, SHIFT **(FROM KNOWN POINT)** OUT.
DIRECTION **(MILS)**, RIGHT **(METERS)**, ADD **(METERS)** OVER.	DIRECTION **(MILS)**, RIGHT **(METERS)** ADD **(METERS)**, OUT
TARGET DESCRIPTION, OVER.	**TARGET DESCRIPTION** AUTHENTICATE **(PRO WORDS),** OVER.
I AUTHENTICATE **(PRO WORD)**, OVER.	
1. SHOT, OUT. 2. SPLASH OUT.	1.SHOT, OVER. 2. SPLASH, OVER.
END OF MISSION, **TARGET BATTLE DAMAGE ASSESSMENT**, OVER.	END OF MISSION, **COMFIRM TARGET BATTLE DAMAGE ASSESSMENT**, OUT.
POLAR	
OBSERVER	FIRING UNIT
CALL SIGN, THIS IS **CALL SIGN**, ADJUST FIRE, POLAR, OVER.	**CALL SIGN**, THIS IS **CALL SIGN**, ADJUST FIRE, POLAR, OUT
DIRECTION **(MILS)**, DISTANCE **(METERS)**, OVER.	DIRECTION **(MILS)**, DISTANCE **(METERS)**, OUT.
TARGET DESCRIPTION, OVER.	**CONFIRM TARGET DESCRIPTION**, OUT.
SHOT OUT.	SHOT OVER.
SPLASH OUT.	SPLASH OVER.
END OF MISSION, **TARGET BATTLE DAMAGE ASSESSMENT**, OVER.	END OF MISSION, **CONFIRM TARGET BATTLE DAMAGE ASSESSMENT**, OUT.

CONTACT REPORTS

Timely and accurate reporting ensures that units maintain the shared understanding that enables synchronizes operations and multiples effects against the ENY. Leaders report relevant activity as quickly as the situation and the need for accuracy allow. Units use standardized reports to avoid confusion. When reporting VIA FM, Leaders submit short bursts of concise information to prevent the ENY from targeting their locations. **NOTE: REFERENCE UNIT SOPs WHEN SUBMITTING REPORTS.**

CONTACT REPORT: IMMEDIATE ON CONTACT W/ ENY OR UKN FORCE

CALLSIGN:_____

CONTACT, TYPE:_____

DIRECTION/KNOWN GRAPHIC:_____

BLUE 1 – SPOT REPORT (SALT): TO INFORM CDR OF ENY ACTIVITY

LINE 1-SIZE:_____

LINE 2-ACTIVITY:_____

LINE 3-LOCATION:_____

LINE 4-TIME OBSERVED:_____

LINE 1-SIZE:_____

LINE 2-ACTIVITY:_____

LINE 3-LOCATION:_____

LINE 4-UNIT:_____

LINE 4-TIME:_____

LINE 5-EQUIPMENT:_____

LINE 5-CCIR EFFECTED:_____

LINE 6-RECOMMENDATIONS:_____

GREEN 3 (INTELLIGENCE UPDATE): PROVIDED WHEN POSSIBLE AFTER CONTACT

EACH LINE - # FMC / # O/H:_____

LINE 1-DTG:_____

LINE 2-ENY FRONTLINE TRACE:_____

LINE 3-ENY SITUATION, DISPOSITION:_____

LINE 4-FRIENDLY ACTION TAKEN:_____

RED 1 (PERSTAT): SUBMIT TWICE DAILY.

LINE 1- CURRENT STRENGTH (AUTH/ASSIGNED/ON HAND/ATTACHED/DETACHED)

_____

LINE 2-LOSS BATTLE ROSTER #'s, POSITION, LOSS TYPE:_____

_____

LINE 3-GAIN BATTLE ROSTER #'s, POSITION:_____

_____

LINE 4- UNIT STRENGTH:_____

LINE 5-DTG:_____

GREEN 2 (SENSITIVE ITEMS REPORT): SUBMIT TWICE DAILY AND AFTER CONTACT. REPORT GREEN AND LIST TOTAL # ITEMS BY TYPE. FOR MISSING ITEMS, REPORT:

LINE 1-ITEM TYPE AND SERIAL #:_____

LINE 2-DTG OF LOSS:_____

LINE 3-ASSIGNED SM BATTLE ROSTER #:_____

LINE 4-APPROXIMATE LOCATION:_____

LINE 5-ACTIONS TAKEN:_____

BLUE 4 (SLANT REPORT): PROVIDED BEFORE MOVEMENT AND AFTER CONTACT. EACH LINE - # FMC / # O/H.

LINE 1-PRIMARY COMBAT VEHICLE:_____

LINE 2-SECONDARY COMBAT VEHICLE:_____

LINE 3-SQUADS:_____

LINE 4-ANTI-TANK/ANTI-ARMOR SYSTEMS:_____

RED 3 (PERSPOT): SUBMITTED AFTER EVENT THAT AFFECTS PERSONNEL

LINE 1- UNIT:_____

LINE 2- DTG:_____

LINE 3- BATTLE ROSTER #'s:_____

LINE 4- STATUSES (WIA, KIA, MIA, EPW):_____

LINE 5- REMARKS:_____

LACE REPORT: SUBMIT AFTER CONTACT. UNIT ROLLUP AFTER CROSSLOADING.

LINE 1-LIQUIDS:_____

LINE 2-AMMUNITION ON HAND:_____

LINE 3-CASUALTIES_____

LINE 4-EQUIPMENT (SI, OTHER MISSION CRITICAL):_____

YELLOW 3 (BATTLE LOSS REPORT, CATASTROPHIC ONLY)

LINE 1-UNIT OF LOSS:_____

LINE 2-8 DIGIT MGRS LOCATION:_____

LINE 3-HOW EQUIPMENT WAS DESTROYED:_____

LINE 4-POC CALLSIGN, FREQUENCY:_____

LINE 5-DTG OF DESTRUCTION:_____

LINE 6-NOMENCLATURE, BUMPER #:_____

A.# END ITEMS DESTROYED:_____

B.# END ITEMS DAMAGED, ESTIMATED RTD:_____

C.RECOVERY / EVAC SUPPORT REQUIRED:_____

LINE 7-UTC-REPEAT LINE 6 AS NEEDED

OUTAGE 8 (COMSEC COMPROMISE REPORT)

LINE 1-UNIT:_____

LINE 2-DTG:_____

LINE 3-5 W's:_____

LINE 4-AFFECTED KEY:_____

LINE 5-CONFIRM SUBMISSION TO S2:_____

YELLOW 1 (LOGISTICS REPORT): SUBMITTED TWICE DAILY AND AS NEED FOR EMERGENCY RESUPPLY. ALL LINES REPORT O/H AND REQUESTED.

LINE 1-CL I

A. MEALS (DOS):_____

B. WATER (GAL):_____

C. ICE (LBS):_____

LINE 2-CL II (ITEM/NSN, QTY)_____

LINE 3- CL III

A. BULK (GAL):_____

B. POL (TYPE, QTY):_____

LINE 4- CL IV (ITEM/ NSN, QTY):_____

LINE 5-CL V (TYPE/DODIC, QTY):_____

LINE 6-CL VI (ITEM/ NSN, QTY):_____

LINE 7-CL VII (ITEM/ NSN, QTY):_____

LINE 8- CL VIII (ITEM/ NSN, QTY):_____

LINE 9- CL IX (ITEM/ NSN, QTY):_____

LINE 10-COMMENTS:_____

		GREEN	AMBER	RED	BLACK
CL I	FOOD	1X DOS ABOVE UBL	2X MEALS O/H ABOVE UBL	UTILIZING UBL	0% O/H
	WATER	ALL CONTAINERS 100% FULL	SOLDIER / VEHICLE LOADS FULL	SOLDIER / VEHICLE LOADS < 75%	SOLDIER / VEHICLE LOADS < 50%
	ICE	100% 1x DOS	75% 1x DOS	< 75% 1x DOS	< 50% 1x DOS
CL II		3x DOS O/H	2x DOS O/H	1x DOS O/H	< 1x DOS O/H
CL III	BULK	VEHICLES, CONTAINERS 100%	VEHICLES, CONTAINERS 75%	VEHICLES, CONTAINERS < 75%	VEHICLES, CONTAINERS < 50%
	P	3x DOS O/H	2x DOS O/H	1x DOS O/H	< 1x DOS O/H
CL IV		2x UBL O/H	1x UBL IN USE, 1x UBL O/H	1x UBL IN USE	< 1x UBL O/H
CL V		100% UBL O/H	75% UBL O/H	< 75% UBL IN USE	< 50% UBL O/H
CL VIII		100% UBL O/H	75% UBL O/H	< 75% UBL IN USE	< 50% UBL O/H

YELLOW 6 (LRP SCHEDULE)

LINE 1-DTG:_____

LINE 2-LRP DESIGNATIONS:_____

LINE 3-LRP LOCATIONS:_____

LINE 4-EFFECTIVE TIMES:_____

LINE 5-PRIORITY:_____

LINE 6-CLASSES OF SUPPLY:_____

LINE 7-REMARKS:_____

GOLD 1 (ENY OBSTACLE REPORT)

LINE 1-CONTACT DTG:_____

LINE 2-OBSTACLE TYPE:_____

LINE 3- LOCATION (CENTER/CORNER POINTS):_____

LINE 4- OBSTACLE DEPTH:_____

LINE 5- OBSTACLE WIDTH:_____

LINE 6-ORIENTATION:_____

LINE 7-BYPASS POSSIBLE (Y/N):_____

LINE 8-BYPASS LOCATION:_____

GOLD 2 (OBSTACLE CONSTRUCTION PROGRESS REPORT)

LINE 1-DTG:_____

LINE 2-EMPLACING UNIT:_____

LINE 3-LOCATION (CENTER MASS/CORNER POINTS):_____

LINE 4-COMPOSITION OF OBSTACLE:_____

LINE 5-COMPLETION STATUS:_____

LINE 6-ESTIMATE COMPLETION TIME:_____

LINE 5-DTG OF SELF-DESTRUCTION:_____

LINE 7-THRU-LANE LOCATION:_____

LINE 8-OWNING UNIT

GOLD 4 (BREACH REPORT): SUBMITTED AFTER OBSTACLE BREACHED AND LANE ESTABLISHED.

LINE 1-BREACH POINT 8-DIGIT MGRS GRID:_____

LINE 2-LANE DIRECTION OF TRAVEL (AZIMUTH):_____

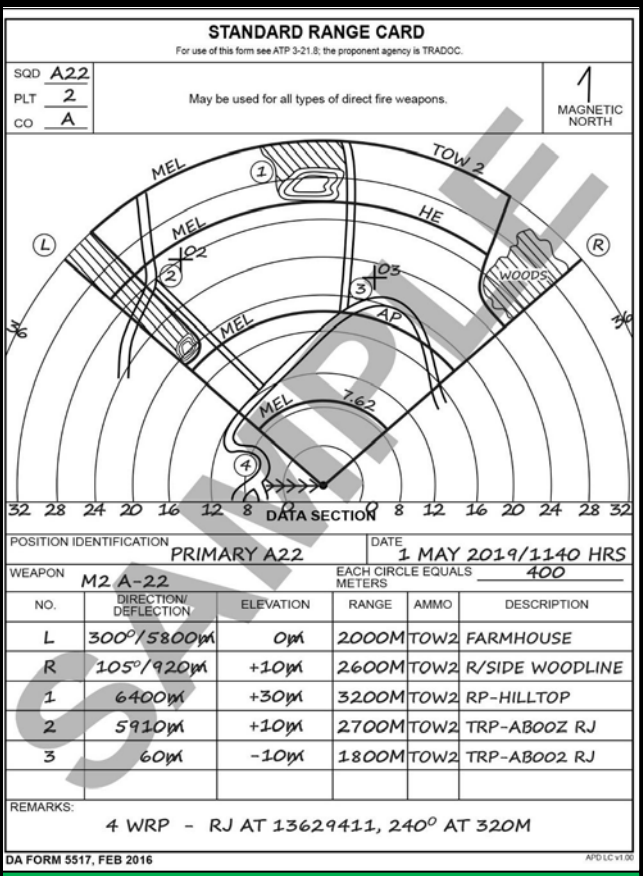
LINE 3-OBSTACLE TYPE BREACHED:_____

LINE 4-BREACHING UNIT:_____

LINE 5-BYPASS LANE 8-DIGIT MGRS GRID:_____

LINE 6-BREACH MARKING:_____

LINE 7-LANE MANNED OR UNMANNED:_____



STANDARD RANGE CARD

For use of this form see ATP 3-21.8; the proponent agency is TRADOC.

SQD A22 PLT 2 CO A

May be used for all types of direct fire weapons.

MAGNETIC NORTH

POSITION IDENTIFICATION: PRIMARY A22 | DATE: 1 MAY 2019/1140 HRS

WEAPON: M2 A-22 | EACH CIRCLE EQUALS METERS: 400

NO.	DIRECTION/ DEFLECTION	ELEVATION	RANGE	AMMO	DESCRIPTION
L	300°/5800M	0M	2000M	TOW2	FARMHOUSE
R	105°/920M	+10M	2600M	TOW2	R/SIDE WOODLINE
1	6400M	+30M	3200M	TOW2	RP-HILLTOP
2	5910M	+10M	2700M	TOW2	TRP-AB00Z RJ
3	60M	-10M	1800M	TOW2	TRP-AB002 RJ

REMARKS:

4 WRP - RJ AT 13629411, 240° AT 320M

DA FORM 5517, FEB 2016

APD LC v1.00

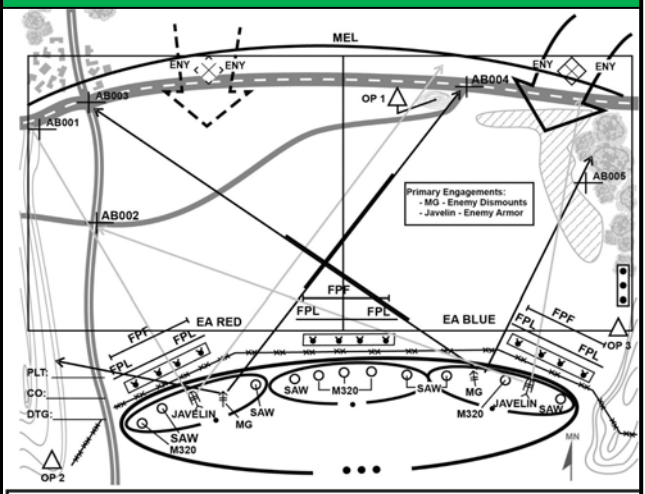
Range Cards show target areas and terrain features relative to a firing position. Soldiers should continually assess the area and update their range cards. Leaders inspect range cards to ensure they are accurate and integrate them into unit sector sketches. Range cards enable new personnel or units to quickly occupy positions and assume sectors of fire. Range cards include:

- Sector of fire.
- TRPs.
- Dead space.
- Maximum engagement line.
- Weapons Reference point.

Reflective Questions

❑ Does each fighting position in my unit have an accurate range card?
❑ Can each of my Soldiers brief the relevant limits, terrain, TRPs, and dead space in their sectors?
❑ Do all my Soldiers know their engagement ranges, techniques, and priorities by weapon system for the next fight?
❑ Have I provided by HHQ with an accurate sector sketch for my unit?
❑ Do I understand how my sector fits into my HHQ's security plan?

PLATOON SECTOR SKETCH



LEGEND

CO	COMPANY	FPF	FINAL PROTECTIVE FIRE		DEAD SPACE
DTG	DATE TIME GROUP	FPL	FINAL PROTECTIVE LINE	MN	MAGNETIC NORTH
EA	ENGAGEMENT AREA	MEL	MAXIMUM ENGAGEMENT LINE	OP	OBSERVATION POST
ENY	ENEMY	MG	MACHINE GUN	PLT	PLATOON
				SAW	SQUAD AUTOMATIC WEAPON

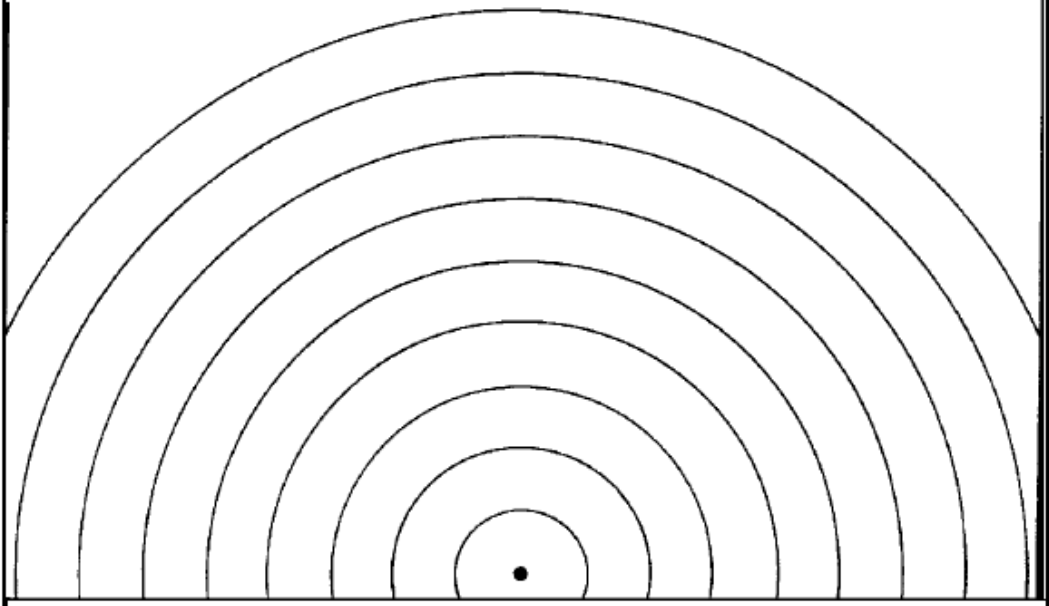
Leaders make a copy of their sector for the position and for their HHQ. Sector sketches include:

- Main terrain features in the sector and the range to each.
- Primary battle and fighting positions.
- Type of weapon in each position.
- Maximum engagement lines for all weapon systems.
- Engagement area or primary and secondary sectors of fire covering each position.
- Final Protective Line and Primary Direction of Fire for machine guns, shoulder-launched munitions.
- Reference points and TRPs in the assigned sector.
- Observation post locations.
- Dead space.
- Obstacles, including mines.
- Indirect fire targets.

STANDARD RANGE CARD

For use of this form see ATP 3-21.8; the proponent agency is TRADOC.

SQD _____ PLT _____ CO _____	May be used for all types of direct fire weapons.	MAGNETIC NORTH



DATA SECTION

POSITION IDENTIFICATION	DATE
WEAPON	EACH CIRCLE EQUALS _____ METERS

NO.	DIRECTION/ DEFLECTION	ELEVATION	RANGE	AMMO	DESCRIPTION

REMARKS:

GRID SQUARES 1cm X 1cm, SCALE_____

GRID SQUARES 1cm X 1cm, SCALE_____

GRID SQUARES 1cm X 1cm, SCALE_____