

Appendix E

Artillery Defense/Local Security

When conducting ground combat operations, units must be prepared to defend themselves against various threats to include both air and ground attacks. The mission of artillery is to deliver timely, accurate fire; traditionally the artillery continues its mission and repels/sustains the attack. The artillery commander has the difficult task of planning a defense that provides adequate security for his unit without needlessly reducing its ability to deliver timely, accurate fire. The artillery defense plan must use passive security measures and active defensive measures. The keys to an effective defensive plan are as follows:

- Evaluate the threat.
- Avoid detection.
- Terrain analysis.
- Provide early warning.
- Make defensive preparations.
- Execute defensive action.

a. Evaluate the Threat. Knowledge of the threat capability allows the commander to focus on those tactics and techniques that reduce his vulnerability. Unit positioning, organization of position, formation, dispersion, camouflage, employment of weapons and early warning assets, and the order of work are geared to the threat. This does not imply that the commander disregards other threats as the battlefield threat will change rapidly. The commander may be faced with multiple threats. The S-2 can provide valuable information concerning the enemy's ability to acquire and attack targets. The threats should be prioritized and sound tactical decisions made to counter them. The commander assesses the threat(s) and focuses his efforts to maximize his available time and assets. Important considerations include:

(1) Target Acquisition Capabilities

- Radio Direction Finding.
- Counterfire radars.
- Flash/sound ranging.
- Visual detection from air or ground.
- Photographic and thermal detection devices.
- Night observation devices.

(2) Means of Attack

- Fire by artillery or mortars.
- Air attack by fixed wing or helos.

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- 1 • Infantry assault.
- 2 • Mechanized assault.
- 3 • Infiltration and sabotage.
- 4 • Jamming and imitative deception.

5
6 **b. Avoid Detection.** The best defense is to not be detected. A unit that is concealed
7 or that cannot be recognized has greatly increased its survivability. The commander employs
8 various tactics and techniques to avoid detection and to enhance survivability should it be
9 detected.

10
11 **(1) Use Camouflage.** The unit avoids detection by camouflaging the six factors of
12 recognition: position, color, shape, shadow, texture, and movement. FM 5-103,
13 Survivability, provides detailed information on camouflage techniques.

14
15 **(a) Artificial Camouflage.** Artificial camouflage is used to avoid detection.
16 Pattern painting of equipment and a lightweight screening system (nets) are artificial
17 camouflage techniques. When erecting nets, break up the shape of the equipment. Nets
18 should not restrict firing capability of weapons or exit from the position. The wheels/tracks of
19 vehicles are not painted and easily detected without camouflage.

20
21 **(b) Natural Camouflage.** Natural camouflage is used to blend the unit in with
22 the environment. This is achieved in part by positioning. Make use of contours, trees,
23 buildings, debris, and other surroundings. Positioning artillery units in terrain which has
24 changed since the map was printed (i.e., ravines and gullies) increases survivability by
25 decreasing the chance of the enemy targeting the unit by map analysis.

26
27 **(2) Reduce Electronic Signature.** Properly site electronic equipment to reduce
28 signature. Position all battery equipment to decrease exposure. Use directional antennae,
29 remote antennae, and wire to avoid detection.

30
31 **(3) Maintain Light and Noise Discipline.** This includes personnel and equipment;
32 i.e., vehicle engines and generators. Position and harden noise producing equipment for
33 reduced detection and increased survivability.

34
35 **(4) Reduce Weapons Signature.** The muzzle flash of a howitzer can be seen at
36 great distances, particularly in open terrain. Use defilade positions, propellant flash reducers,
37 and gunnery techniques; i.e., massing fires, low trajectories, and accurate fires to avoid
38 detection.

39
40 **(5) Establish a Track Plan.** Use existing roads and trails, when available. If none
41 are available, roads and trails can be created with heavy vehicles to give the appearance that a
42 unit has moved through the area. The roads and trails must have logical starting and ending
43 points. Soil, debris, and movement can degrade camouflage.

44

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1 **(6) Use Dispersion.** This is the least expensive method of avoiding detection and
2 increasing survivability in terms of time and effort. Dispersion of equipment and installations
3 minimizes the effect of an air or counterfire attack. Avoid grouping differing assets in
4 proximity, as this will only increase the unit's chance of detection. For example, if the FDC is
5 detected by EW and located near a howitzer position, the artillery section's chances for
6 survival are decreased. The degree of dispersion depends on the terrain, threat, and the degree
7 of command and control required. As a guide, a battery should be dispersed with howitzers no
8 closer than 100 meters apart. The FDC should be about 100 meters from either flank
9 howitzer. However, less dispersion is desirable if the threat is a ground attack.

10 **(7) Practice Communications Security.** Signal security, information security, and
11 physical security practices degrade the enemy's capability to detect a unit. Use short radio
12 transmissions (less than 25 seconds), low power transmissions, and secure transmissions.

13 **(8) Displace.** Displace, when Possible, During Periods of Reduced Visibility.
14 Conduct survivability moves, when required.

15 **(9) Practice Deception**

16 **c. Terrain Analysis.** Analyze the terrain in order to maximize the advantage it offers
17 while reducing vulnerability. Consider the acronym **K-O-C-O-A** to analyze military aspects of
18 terrain:
19

20 **(1) K – Key Terrain.** Physically occupy or control terrain that will afford an
21 advantage over the enemy. The essential characteristic of terrain is that it permits the unit to
22 accomplish its mission. Operations should not be delayed by seeking a perfect position and
23 should:
24

25 **(a)** Allow all weapons to deliver fire for maximum coverage of the supported
26 unit.
27

28 **(b)** Afford defilade and concealment from ground observation. Flash defilade of
29 10 yards is sought for medium artillery. Too much defilade may limit the field of fire of the
30 weapons in close defense of the position against ground attack or may restrict low angle fires.
31

32 **(c)** Be free of obstructions which affect the firing capability of a howitzer(s); i.e.
33 a cliff, building, or high tree to the flank (i.e., XO's Min QE).
34

35 **(d)** Allow for 6400 mil firing capability.
36

37 **(e)** Be accessible and have separate routes for entrance and exit, preferably in
38 the rear. The position should not be on an enemy high speed avenue of approach. Concealed
39 routes to and from the unit are desirable, particularly if the position will be occupied and
40 resupplied during daylight.
41

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1 **(f)** Be on relatively level, firm ground. Very rocky, swampy, sandy, or uneven
2 ground will slow the occupation of the position or prevent the effective operation of howitzers.
3 The position should be trafficable by all vehicles in the unit. Consider the weather and
4 anticipated weather; i.e., rain, flash floods, snow.

5
6 **(g)** Be in small trees, in brush, or in isolated open spaces or irregular clearings
7 in vegetated terrain. Good positions can often be found along the edge of a road or trail, but
8 away from crossroads or junctions which may attract hostile artillery fire. Also, the unit
9 should not be along the edge of a primary route for supply. Positions at the forward edge of a
10 tree line, or in small clumps of woods, or under a solitary line of trees are easily spotted by the
11 enemy.

12
13 **(h)** Be away from prominent landmarks when positioned in open terrain. The
14 unit should be randomly dispersed over the ground, making good use of contours and artificial
15 camouflage.

16
17 **(i)** Be in quarries, in ruins, or under the roofs of buildings in a town.

18
19 **(j)** Allow for good communications, preferably by wire, with the supported unit
20 and higher headquarters.

21
22 **(k)** Be large enough for dispersal of weapons and other installations if there is
23 an air or counterbattery threat or in barren terrain.

24
25 **(l)** Be in a compact, easily defended position in mountains or heavily wooded
26 areas, when friendly forces have air superiority, or when the battery is threatened by guerilla
27 or infiltration tactics. The unit position should be away from enemy concealed routes of
28 approach.

29
30 **(m)** Allow for shelter and comfort of unit personnel.

31
32 **(n)** Have survey control established or survey must be available in a short time.
33 Hasty survey may be required.

34
35 **(o)** Be selected in consideration of the unit's future mission or displacement.

36
37 **(2) O – Observation and Fields of Fire.** Establish and maintain continuous
38 surveillance in all directions through use of observation posts (OPs) and listening posts (LPs).
39 Deny the enemy the advantage of surprise. Properly site weapons to allow clear fields of fire.
40 Ensure all likely avenues of approach are covered by fire and observation.

41
42 **(3) C – Cover and Concealment.** Maximize use of available cover and
43 concealment when positioning the unit and establishing defensive positions. All vehicles,
44 howitzers, and equipment should be properly camouflaged with netting or indigenous

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1 vegetation. Use protection afforded by defilade. Deny use of cover and concealment to the
2 enemy. Identify dead spaces and cover these areas with observation and fire.

3
4 **(4) O – Obstacles.** Identify all obstacles in the area, both natural and man-made,
5 which could impede movement. If possible, utilize these obstacles in support of unit's defense
6 plan.

7
8 **(5) A – Avenues of Approach.** Identify all avenues of approach the enemy may
9 utilize. Determine if each one is suitable for mechanized or dismounted infantry attacks.
10 Based on this determination, emplace appropriate defensive mechanisms.

11
12 **d. Provide Early Warning.** Early warning increases a unit's survivability and its
13 capability to respond to an attack. Emphasis on this aspect of artillery defense must be
14 continuous. Early warning is obtained from all available sources: organic sentinel posts
15 (SPs), LPs, OPs, patrols, and other measures; adjacent units; and higher headquarters (i.e. air
16 defense warnings).

17
18 **(1) SPs/LPs.** These posts are situated on terrain which provide coverage of all
19 routes of approach into the unit's position. The number of SP/LPs depends on the terrain,
20 visibility, and communications capability. SP/LP coverage should interlock with each other,
21 with obstacles, and with nearby units to prevent gaps. They should be far enough from the
22 unit's defensive perimeter that the attack warning will allow time for implementing the
23 defensive plan (i.e., reaction force). This distance will vary with terrain, visibility, likely
24 threats, and reaction time of the unit. At night, these posts should consist of at least two-man
25 teams armed with small arms and antitank weapons, dug in, have good cover and concealment,
26 protected by obstacles (i.e., barbed wire), have good fields of fire, and covered by fire from
27 within the position.

28
29 **NOTE:** SPs/LPs should be augmented with night observation and intrusion devices. A
30 continuous wire circuit (hot loop) should be established between all posts and the unit.
31 Alternate methods, such as sound devices, pyrotechnics, and runners should be ready. These
32 posts are withdrawn on attack using planned withdrawal routes.

33
34 **(2) Patrols.** Avenues of approach and areas which might provide cover and
35 concealment for enemy forces should be patrolled or kept under surveillance. Patrolling
36 should be irregular but, at a minimum, conducted at dusk and dawn. The patrol route should
37 intersect areas covered by SP/LPs and should be coordinated with adjacent units. The patrol
38 composition will vary. If the patrol locates an enemy force, they should not engage the enemy
39 unless necessary, but should keep the enemy under surveillance and notify the unit. For more
40 detailed information of patrolling see the Patrolling section of this appendix and MCWP 3-
41 16.3, *Scouting and Patrolling*.

42
43 **(3) Monitoring the Tactical Situation.** By monitoring the tactical nets of the
44 supported unit, artillery can keep abreast of potential threats. As the threat becomes

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1 increasingly more defined, the artillery can then increase the manning of its defensive
2 perimeter appropriately.

3
4 **(4) Other Measures.** The unit employs detection systems and guards as required;
5 i.e., NBC detection and monitoring teams, air sentries, and entrance points for control access
6 into the position.

7
8 **e. Make Defensive Preparations.** The unit must prepare to defend itself. The unit
9 establishes fortifications, obstacles, and a reaction force. The unit must be prepared to occupy
10 its alternate position, if required. As time permits, defensive plans are made for the alternate
11 and supplementary positions.

12
13 **(1) Organizing the Defense.** The local security chief organizes the unit's defensive
14 preparation under the guidance of the commander. In developing the plan, the local security
15 chief walks the surrounding area and determines how the unit might be attacked. Then, he can
16 develop his plan with emphasis on this avenue of approach(s). The organization of the defense
17 includes:

18
19 **(a)** Defining the perimeter, designating primary (and supplementary) fighting
20 positions and sectors of fire.

21
22 **(b)** Assigning howitzers supplementary positions. When possible, howitzers are
23 employed in pairs for continuous engagement and increased probability of hit. Consider how
24 the howitzer(s) will be moved to their supplementary position (route, prime mover) and how
25 ammunition will be moved.

26
27 **(c)** Positioning weapons at key locations with good cover, concealment, mutual
28 support, and overlapping fields of fire. Machine guns are given primary and alternate
29 positions. Principle direction of fires (PDFs) and an final protective lines (FPLs) are
30 designated.

31
32 **(d)** Positioning tank-killer teams with antitank weapons and in well-concealed
33 and hardened positions. These positions are covered by fire from other weapons. Primary and
34 alternate positions are assigned to cover avenues of approach into the position. The ranges to
35 likely engagement points are determined.

36
37 **(e)** Covering gaps by obstacles, barriers, observation, and mutual support of
38 adjacent units, when possible.

39
40 **(f)** Planning defensive fires on avenues of approach to delay the enemy attack.
41 These fires can be delivered by other units.

42
43 **(g)** Assigning air sentries sectors to scan. They should be rotated periodically to
44 enhance alertness. If LAAD teams are available, they should be positioned in depth.

45

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1 **(h)** Considering the coordination of infantry support (or attachment) to protect
2 artillery against a severe ground threat.

3
4 **(i)** Arranging for ammunition distribution, communications, and signals.

5
6 **(j)** Providing protection of ammunition, personnel, and equipment from blast
7 and small arms.

8
9 **(k)** Coordinating a manning requirement for an adequate degree of security, but
10 not degrading the ability to deliver fire. Minimum, but adequate, personnel may be employed
11 in perimeter security; they may be reinforced when a threat develops. The perimeter may also
12 be reinforced in reduced visibility. The key to such a defense is responsiveness.

13
14 **(l)** Ensuring all personnel know the defensive plan and rehearsing the plan as
15 time permits. Each individual must know his responsibility and be ready to react rapidly to a
16 threat. A defensive diagram is prepared to depict the defense.

17
18 **(m)** Ensuring the unit is prepared for triage, first aid, and evacuation of
19 casualties to the aid station, if required.

20
21 **(n)** Designating a reaction force(s).

22
23 **(2) Defensive Diagram.** To assist in organizing the defense, the local security chief
24 prepares a defensive diagram. The defensive diagram is a graphic depiction of the position,
25 surrounding terrain incidental to the defense, the positioning of weapons and other defensive
26 resources (such as mines), the location of early warning assets, planned fires, and key
27 installations (see figure E-2). MCWP 3-16.3, *Tactics, Techniques, and Procedures for the*
28 *Artillery Cannon Battery* provides detailed instructions for constructing a defensive diagram to
29 scale.

30
31 **(3) Range Cards.** After sectors of fire are assigned, a range card is prepared (in
32 duplicate) for each direct fire weapon (howitzer and crew-served weapons). The range card
33 has a sketch of the sector of fire and necessary data for the engagement of targets. The local
34 security chief collects completed range cards and uses them to construct sectors of fire on the
35 defensive diagram. Partially completed range cards are prepared for alternate and
36 supplementary positions. Range cards should be revised continually throughout the occupation
37 of the position. The AN/GVS-5 laser rangefinder or TLDHS should be used to determine
38 accurate ranges to targets when possible. MCWP 3-16.3, *Tactics, Techniques, and Procedures*
39 *for the Artillery Cannon Battery* provides indepth instruction on how to construct a range card
40 (see figure E-3). Range cards should depict the following:

- 41
42 • Location of weapon.
43 • Left/right sector limits with azimuth.
44 • Key terrain.
45 • Identifiable targets in sector.

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- Dead space.
- FPL or PDF.
- List of targets with firing data.

(4) Fortifications and Obstacles. As time and resources permit, obstacles should be constructed to delay, stop, divert, or canalize an attack. Barbed and concertina wire, tank ditches, barricades, trip flares, and boobytraps and mines (when authorized) may be employed to supplement natural obstacles. These must be covered by observation and fire for effectiveness and beyond hand grenade range of protected installations.

(5) Hardening of Positions. Hardening is protection to ensure that a unit can function during and after an enemy attack. Hardening can be achieved by digging in, by using cover such as sandbags, timber, rubble, etc., or by berming up (parapets). The degree of protection depends on time, material, manpower available, and the amount of equipment and personnel to be protected. As a minimum, hardening consists of digging fighting positions on the perimeter, burying wire, sandbagging sensitive equipment such as collimateors and tires, and protecting propellants. As time permits, howitzers, the FDC and BOC, and projectiles are protected. Engineer assets and/or local civilian earth-moving equipment can be used in the hardening efforts.

(6) Reaction Force. A group of unit personnel are designated as a reaction force. The reaction force is capable of immediate reaction to any enemy threat within and around the position. The size of the group varies with the threat but normally has approximately 25 personnel from the sections of the unit. The reaction force mans their normal working stations. When signaled, they muster at a pre-designated location (FDC, COC, etc.). They repel an enemy attack and/or reinforce the perimeter. The reaction force counters the threat at a sufficient distance outward to allow a buffer for the unit perimeter to be fully manned or to gain time for the unit to conduct a hasty or emergency displacement. The reaction force should be capable of employing in two teams. The reaction force should not pursue the enemy if the attack is repelled. The reaction force conducts day and night rehearsals for responsiveness and familiarization with the defensive area.

(7) Coordinate with Adjacent Units for Mutual Support. Coordination with all adjacent units greatly enhances the defensive plan. By sharing information and incorporating elements from other units (patrols, air defense weapons, indirect fires, FPFs, etc.), each unit involved can take advantage of a defense which as a whole is better than the part. Also, in order to prevent fratricide, coordination is critical to ensure each unit is aware of all friendly patrols operating nearby.

e. Execute Defensive Action. When an attack occurs, the commander or senior man in position quickly assesses the situation and determines a course of action. He considers the strength of the enemy and its effect on the unit's operational capability. Depending on this analysis, the commander determines one of the following courses of action:

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1 **(1)** The unit **can** repel and/or sustain the attack. If this is the decision, the
2 necessary actions are taken to counter the threat.

3
4 **(2)** The unit **cannot** repel and/or sustain the attack. If this is the decision, the unit
5 executes a hasty displacement. The unit notifies its higher headquarters and proceeds to its
6 alternate position. Consider preplanned fires/smoke to assist disengagement, if required.

9 **Reconstitution of the Unit**

10
11 If a unit becomes ineffective as a result of enemy action, specific actions must be taken to
12 reconstitute the unit or return it to a desired level of operational readiness. Cross training and
13 an SOP facilitates reconstitution. The following actions are taken:

- 14
- 15 • Report the situation to higher headquarters.
- 16 • Render first aid and evacuate casualties.
- 17 • Assess damage, repair equipment, when possible, and redistribute assets, as
18 required.
- 19 • If attacked by NBC, decontaminate personnel and material.
- 20
- 21

22 **Patrolling**

23
24 Patrols will be incorporated into the unit defense plan. They should be established
25 immediately upon occupation of a position and continuous around all firing positions. Patrols
26 are a vital means of detection and provide advanced warning and additional security to a unit's
27 position. Security patrols will be planned and conducted outside the unit's defensive perimeter
28 in accordance with the commander's guidance, and the unit should be prepared to conduct all
29 forms of patrols to include: raid, ambush, contact, economy of force, when necessary.

30
31 The patrol leader (PL) will coordinate with the CO/XO and the local security chief. The
32 CO/XO or security chief will coordinate with friendly units immediately affected by the
33 patrol's actions. These actions include movement within friendly areas, departure/reentry of
34 friendly lines and fire support.

35
36 The PL will ensure that all Marines in the patrol know the patrol's chain of command and that
37 each Marine know's everyone else's responsibility within the patrol.

38
39 The local security chief will control the departure and reentry of patrols in/out of the unit
40 position.

41 **a. Organization for Movement**

42
43

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1 (1) Formations must be planned for the patrol's movement to and from the objective
2 area. The location of units, teams, and individuals in the formation must be identified and
3 rehearsed.

4
5 (2) Organization for movement is based on the patrol leader's estimate of the
6 situation. Other factors which will influence the patrol's formation are the need for speed,
7 flexibility, control, and 360 degree security.

8
9 (3) Patrol formations should be in accordance with MCWP 3-11.3, Scouting and
10 Patrolling.

11 12 **b. Control**

13
14 (1) The success of a patrol depends on the ability of the PL to clearly communicate
15 his order, intent, and to effectively integrate the actions of his subordinate units throughout the
16 preparation and conduct phases of the patrol (see figure E-5 for patrol order format).

17
18 (2) When not in contact with the enemy, patrol members should use a low voice
19 when it is necessary to verbalize commands. Whispering can cause a loud hissing noise and
20 can often be misunderstood. When in contact with the enemy, voice commands can be shouted
21 as loud as necessary to be heard and understood. Bird and animal noises should be avoided.

22
23 (3) Radios will be used to submit reports via the unit's command net.
24 Transmissions must be short and concise. Brevity codes should be utilized whenever possible;
25 they reduce transmission time and enhance the clarity of all message traffic. For larger
26 patrols, radios will be used to control subordinate units and teams only when absolutely
27 necessary.

28
29 (4) Hand and arm signals are the primary means of silent control. Hand and arm
30 signals should be given close to the body and below the head. They should be simple and
31 easily understood and known by all patrol members. All patrol members must remain alert to
32 receive and pass all signals. It is not sufficient for patrol members to merely repeat signals;
33 they must ensure adjacent patrol members receive and pass them on as well.

34
35 (5) Head counts are normally conducted after crossing danger areas, security halts,
36 enemy contact and any other time the PL deems necessary. Head counts can be conducted by
37 team and unit leaders who account for their Marines and report to the PL or assistant patrol
38 leader (APL).

39 40 41 **c. Departure of Friendly Lines/Unit Position**

42
43 (1) When the PL is ready to depart friendly lines, he moves his patrol forward to
44 the assembly area. The assembly area is located behind friendly lines and provides cover and
45 concealment. Here, the APL will conduct last minute preparations while the PL moves

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1 forward to make final coordination with the security chief. The security chief is responsible
2 for the front lines in the area of the point of departure and the point of reentry.

3
4 (2) Prior to conducting a leader's recon, the PL will leave the APL with a
5 contingency plan which includes: where he is going, who he is taking, how long he will be
6 gone, actions taken on enemy contact, and what to do if he does not return.

7
8 (3) During the leader's recon, the PL should take at least two men with him for
9 security. It is also recommended that he take along the navigator who will then be able to
10 move to a vantage point and see as much of the ground in front of the position as terrain and
11 vegetation permit. During final coordination with the unit commander, the PL should request
12 the latest information on the enemy, terrain, known obstacles beyond the forward unit's battle
13 positions and the location of any friendly security posts or patrols. The PL will confirm
14 frequencies, call signs, challenge and password, and any fire support the unit can provide. A
15 guide should be requested if any minefields or obstacles must be negotiated. The unit
16 commander and the security chief are notified of the location of the patrol's assembly area and
17 initial rally point (IRP). The PL should also inform the security chief of the patrol's size,
18 general area of the route (specific details of the route are not normally given), whether the
19 patrol will return through the departure point and if a guide will be required upon reentry.

20
21 (4) After the leader's recon, the PL will leave one patrol member with the security
22 chief to meet the guide, if necessary, while he and the other patrol members return to the
23 remainder of the patrol. Upon his return, the PL will brief the patrol on any updated
24 information and any possible changes to the original plan.

25
26 (5) The PL will move the patrol tactically (the formation and speed of movement
27 will be based on the estimate of the situation) from the assembly area to the point of departure,
28 ensuring that the patrol departs at the prescribed time. During movement to the point of
29 departure, the PL will designate the IRP, a location within friendly lines providing the patrol
30 with a covered and concealed position where they can reorganize if enemy contact is made
31 prior to departing friendly lines. The IRP may be in the same location as the assembly area.

32
33 (6) At the point of departure, the APL will move forward to count each patrol
34 member as they depart friendly lines. The patrol will assume a dispersed file as it passes
35 through minefields or other obstacles. Upon reaching the outer limits of minefields or
36 obstacles, the patrol will immediately assume its initial formation.

37
38 (7) Outside of friendly lines, the patrol will conduct a short security halt so that all
39 patrol members may adjust to the sights and sounds of the area. This security halts should be
40 conducted beyond any friendly posts and beyond the effects of small arms fire.

41 42 **d. Reentry of Friendly Lines**

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1 (1) The patrol is halted outside of friendly lines, beyond the range of friendly local
2 security, in a position providing good cover and concealment. The PL will establish a long
3 security halt and designate this position as the reentry rally point (RRP).
4

5 (2) The PL will request permission, via the radio, to reenter friendly lines, using a
6 code word for security and brevity. Near and far recognition signals will be utilized. Ensure
7 that permission has been granted before continuing.
8

9 (3) At this point the PL will move forward to make contact with the friendly lines at
10 the pre-designated reentry point. Generally, the PL should take at least two men along for
11 security.
12

13 (4) Once contact has been established and the PL has been recognized, the PL will
14 move back to bring the rest of the patrol forward. A guide may be necessary to lead the patrol
15 through friendly minefields or obstacles.
16

17 (5) While returning back into friendly lines, the PL will count all members back
18 into friendly lines to ensure that they are accounted for and that no infiltrators are following.
19

20 (6) The PL will provide the unit commander with a patrol brief (see MCWP 3-11.3,
21 *Scouting and Patrolling*) containing combat information of immediate tactical value (i.e.,
22 enemy contact or sightings).
23
24

25 Special Considerations for Command Elements

26
27 Command posts and logistics areas are particularly vulnerable to enemy attack due to a lack of
28 organic firepower and susceptibility to target acquisition threats. Proper COMSEC and
29 OPSEC techniques are essential to mask a CPs signature. Vehicular traffic in and out of the
30 position should be limited and strictly controlled. All sections of a headquarters battery must
31 plan to man local security posts even if it degrades certain operational capabilities.
32

33 If the threat of air attack or artillery fire is minimal, command elements may consider
34 collocating with other units to enhance survivability and common defense. For example, a
35 battalion FDC may occupy a position in the vicinity of its supported infantry regimental COC.
36 Similarly, logistic elements may consolidate defensive responsibilities with their supporting
37 CSSD in a low intensity conflict. This arrangement would be undesirable in a high threat
38 environment where tactical dispersion would be maximized to enhance survivability.
39

40 Because the sections in the headquarters battery will seldom be collocated, it is imperative that
41 all elements are identified with respect to size, capabilities and position on the battlefield. At a
42 minimum, local security must be considered and planned for the following elements:
43

- 44 • Forward COC

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- 1 • Main COC
- 2 • Logistical Trains

3

4 For each of these elements, the following must be determined:

5

6 • The mission and tasks assigned.

7 • Personnel that will be located at each site.

8 • Vehicles and other section equipment needed to support its mission

9 • Crew-served weapons required to provide adequate protection.

10 • Fire support available.

11 • Will this element operate independently, be attached to another unit, or be
12 collocated with another unit?

13 • Who is in charge?

14

15 Once these requirements have been determined, the local security plan must be tailored to meet
16 the specific needs of each element. Over and above the considerations mentioned above, local
17 security plans must take into account that the threat may be different to each element.

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LOCAL SECURITY CHIEF CHECKLIST

1. POSITION LAYOUT

- Fields of Fire
- Deadspace
- Cover, Concealment, Camouflage
- LZ/PZs Marked

2. ALTERNATE AND SUPPLEMENTARY POSITIONS

- Recon
- Routes Briefed
- Positions Prepared
- Passed to Battalion/Higher Headquarters

3. COVER/CONCEALMENT

- Use of Terrain
- Camouflage Nets Up
- Spectral Reflectors Covered
- Dispersion of Vehicles
- Generators, Aiming Circles, and Collimators Sandbagged
- Wire buried
- Light and Noise Discipline

4. AERIAL DEFENSE

- Machine Guns
- Dispersion
- Cover and Concealment
- Howitzers/Log Trains not on Line
- ADA Support

Figure E-1. Example Local Security Chief Checklist.

MCWP 3-16.1 Marine Artillery Operations

- 1 **5. MECHANIZED DEFENSE**
- 2
- 3 AT-4s
- 4
- 5 M198 Supplementary Positions
- 6
- 7 Obstacles
- 8
- 9 **6. COUNTERBATTERY FIRE DEFENSE**
- 10
- 11 Only Essential Equipment Offloaded
- 12
- 13 Battery Prepared to Conduct Hasty Displacement
- 14
- 15 **7. MACHINE-GUN EMPLACEMENT**
- 16
- 17 Cover and Concealment
- 18
- 19 Range Cards Prepared
- 20
- 21 Interlocking Fires
- 22
- 23 Weapon Maintenance
- 24
- 25 Ammunition Prepared
- 26
- 27 **8. GRENADE LAUNCHER EMPLACEMENT**
- 28
- 29 Cover Deadspace
- 30
- 31 Weapons Maintenance
- 32
- 33 Ammunition Prepared
- 34
- 35 **9. OBSTACLE PLAN**
- 36
- 37 Concertina Wire
- 38
- 39 Antipersonnel Mines
- 40
- 41 Ditches
- 42
- 43 All Obstacles Covered by Fire
- 44
- 45 **10. COMSEC**
- 46
- 47 Antenna Location
- 48
- 49 Transmit on Low Power
- 50
- 51 Low Antenna Profile
- 52
- 53

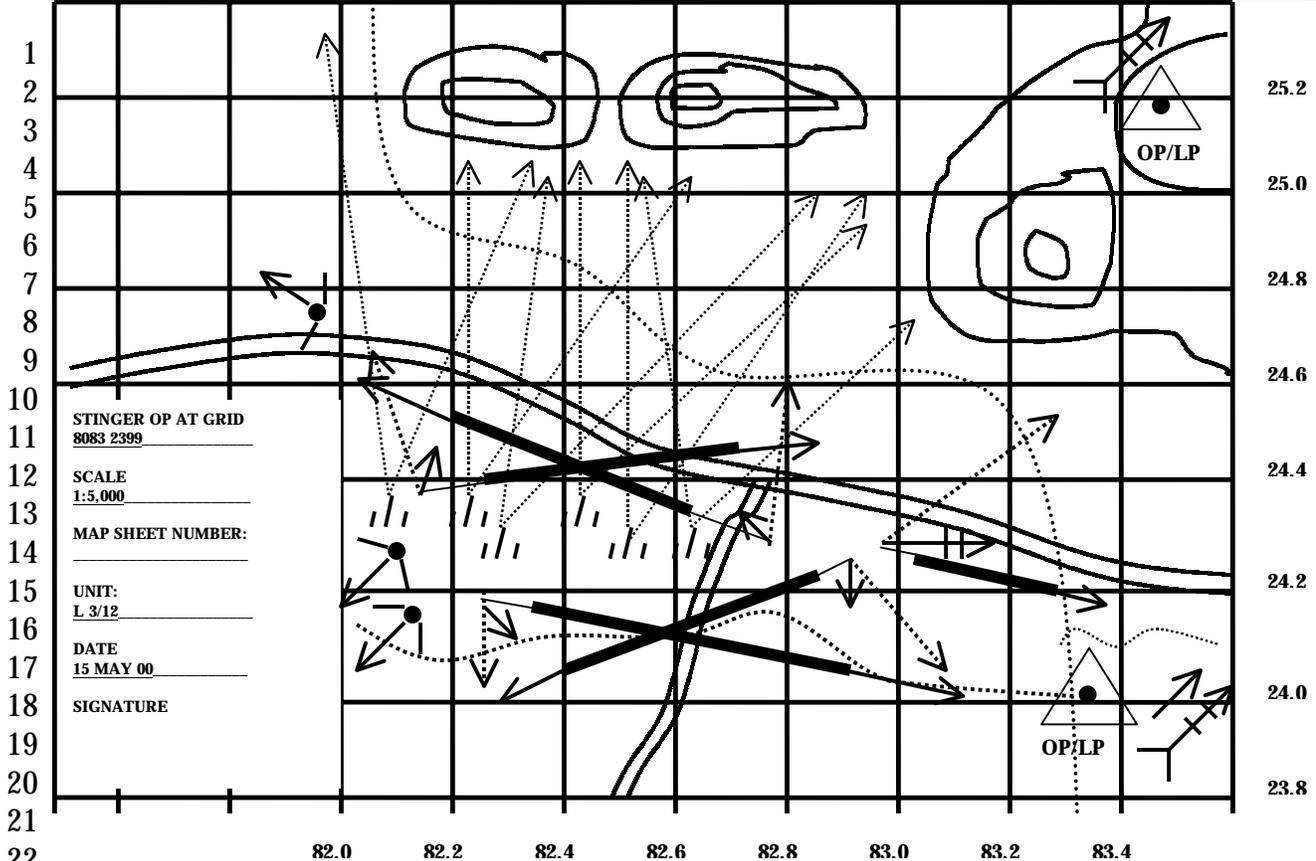
Figure E-1. Example Local Security Chief Checklist (cont).

MCWP 3-16.1 Marine Artillery Operations

- 1
- 2 Low Antenna Signature
- 3
- 4 Minimize Radio Transmissions
- 5
- 6 **11. REACTION FORCE**
- 7
- 8 Briefed on Immediate Actions
- 9
- 10 Briefed on Battery Signals
- 11
- 12 Air, Ground, Armor, and NBC Attacks Rehearsed
- 13
- 14 **12. BATTERY DEFENSIVE DIAGRAM**
- 15
- 16 Position Layout
- 17
- 18 Range Cards Integrated
- 19
- 20 Patrol Routes
- 21
- 22 Obstacle Plan
- 23
- 24 Mine Locations
- 25
- 26 Alternate/Supplementary Positions
- 27
- 28 Fire Plan with Targets for Position Defense, FPFs
- 29
- 30 Coordination with Adjacent Units
- 31
- 32 Forward to Battalion
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Figure E-1. Example Local Security Chief Checklist (cont).

MCWP 3-16.1 Marine Artillery Operations



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LEGEND:

LAW	CLAYMORE	LIGHT MACHINE GUN	HEAVY MACHINE GUN	TOWED ARTILLERY	TRAIL	OP/LP

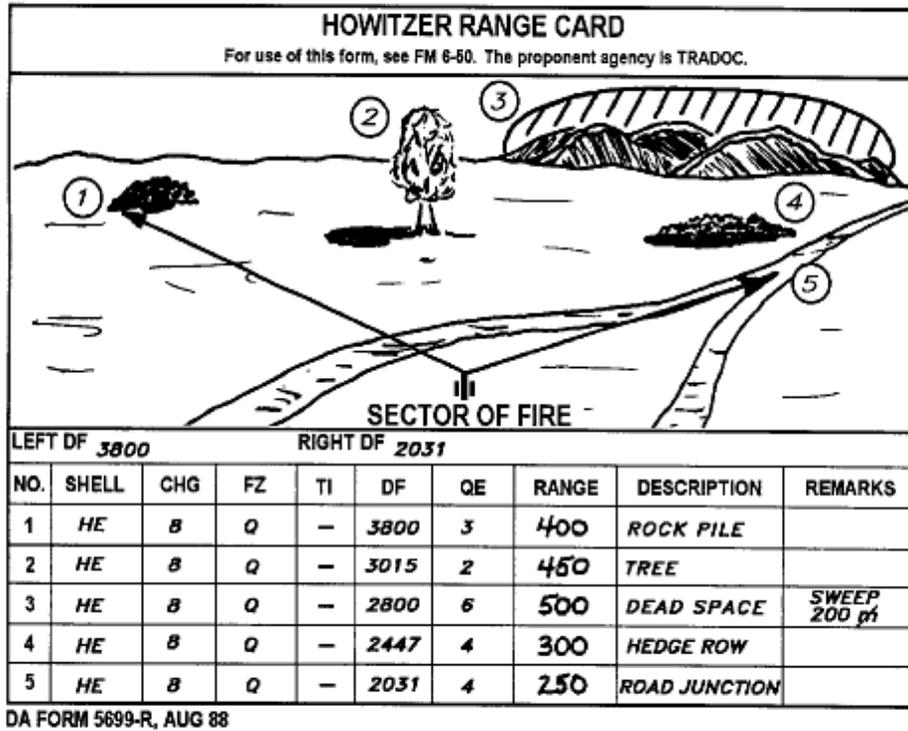
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Figure E-2. Example of Completed Battery Defensive Diagram.

MCWP 3-16.1 Marine Artillery Operations

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Figure E-3. Example Completed Howitzer Range Card.

MCWP 3-16.1 Marine Artillery Operations

STANDARD RANGE CARD
For use of this form see FM 7-2.1. The proponent agency is TRADOC.

SQD *1st*
PLT *1st*
CO *B*

May be used for all types of direct fire weapons.

MAGNETIC NORTH

DATA SECTION

POSITION _____ DATE **22 MAY**

WEAPON **M60 MG** EACH CIRCLE EQUALS **100** METERS

NO.	DIRECTION DEFLECTION	ELEVATION	RANGE	AMMO	DESCRIPTION
1	4600				PDF
2	L 3800				L DIRECTION
3	R 5900				R DIRECTION
4	R 4880		350		ROAD JUNCTION
5	L 4050		750		LARGE TREE
6	R 5100		800		OLD CHURCH

REMARKS _____

DA FORM 5517-R, FEB 86

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Figure E-4. Completed Machine Gun Range Card.

MCWP 3-16.1 Marine Artillery Operations

PATROL ORDER

The patrol order is a supplement to the warning order and should address only those items of information which have not previously been promulgated. Any of the following elements which have been addressed in the warning order should be omitted. Also, a patrol order is more detailed than a regular five paragraph squad order in that a great deal of attention is given to individual duties.

Orientation. Weather, terrain, visibility, NBC considerations, local population situation, and behavior as they impact on the patrol and enemy forces.

1. SITUATION

a. Enemy Forces

(1) Composition, disposition, and strength is based on size, activity, location, unit, time, and equipment (SALUTE)

(2) Capabilities and limitations to defend, reinforce, attack, withdraw, and delay (DRAW-D)

(3) Enemy's most probable course of action.

b. Friendly Forces

(1) Mission of next higher unit (task and commander's intent).

(2) Adjacent unit missions (task and intent)

(a) Left

(b) Front

(c) Right

(d) Rear

c. **Attachments and Detachments.** (Date and time effective)

2. MISSION

Task to be accomplished and purpose (who, what, where, when, and why). For patrols, also specify if the mission or time has priority.

Figure E-5. Patrol Order Format.

3. EXECUTION

a. Commanders Intent and Concept of Operations

(1) Commander's Intent

(2) **Concept of Operations.** The concept tells the where, how, and who and lays out the patrol leader's general scheme of maneuver and fire support plan. It outlines the following:

- Task organization of the patrol.
- Movement to the objective area, to include navigation method.
- Actions in the objective area.
- The return movement, to include navigation method.
- Use of supporting forces (including illumination, if required).

b. Subordinate element missions (task and purpose) are assigned to elements, teams, and individuals, as required.

c. Coordinating Instructions. This paragraph contains instructions common to two or more elements, coordinating details, and control measures applicable to the patrol as a whole. At a minimum, it will include:

- Time of assembly in the assembly area.
- Time of inspections and rehearsals (if not already conducted).
- Time of departure and estimated time of return.
- Location of departure and reentry of friendly lines and the actions associated with departure and reentry.
- Details on the primary and alternate routes to and from the objective area.
- Details on formations and order of movement.
- Rally points and actions at rally points.
- Final preparation position and actions at this position.
- Objective rally point and actions at this point.
- Actions at danger areas.
- Actions in the event of enemy contact.
- Details on actions in the objective area not covered elsewhere.
- Estimated time of patrol debriefing upon return.

4. ADMINISTRATION AND LOGISTICS

a. Changes/additions to uniform, equipment, and prescribed loads from that given in the warning order.

Figure E-5. Patrol Order Format (cont).

MCWP 3-16.1 Marine Artillery Operations

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b. Instructions for handling wounded and prisoners.

5. COMMAND AND SIGNAL

a. Signal. Challenge and password, arm and hand and special signals, and radio frequencies and call signs.

b. Command Relationships. Location of key leaders and chain of command.