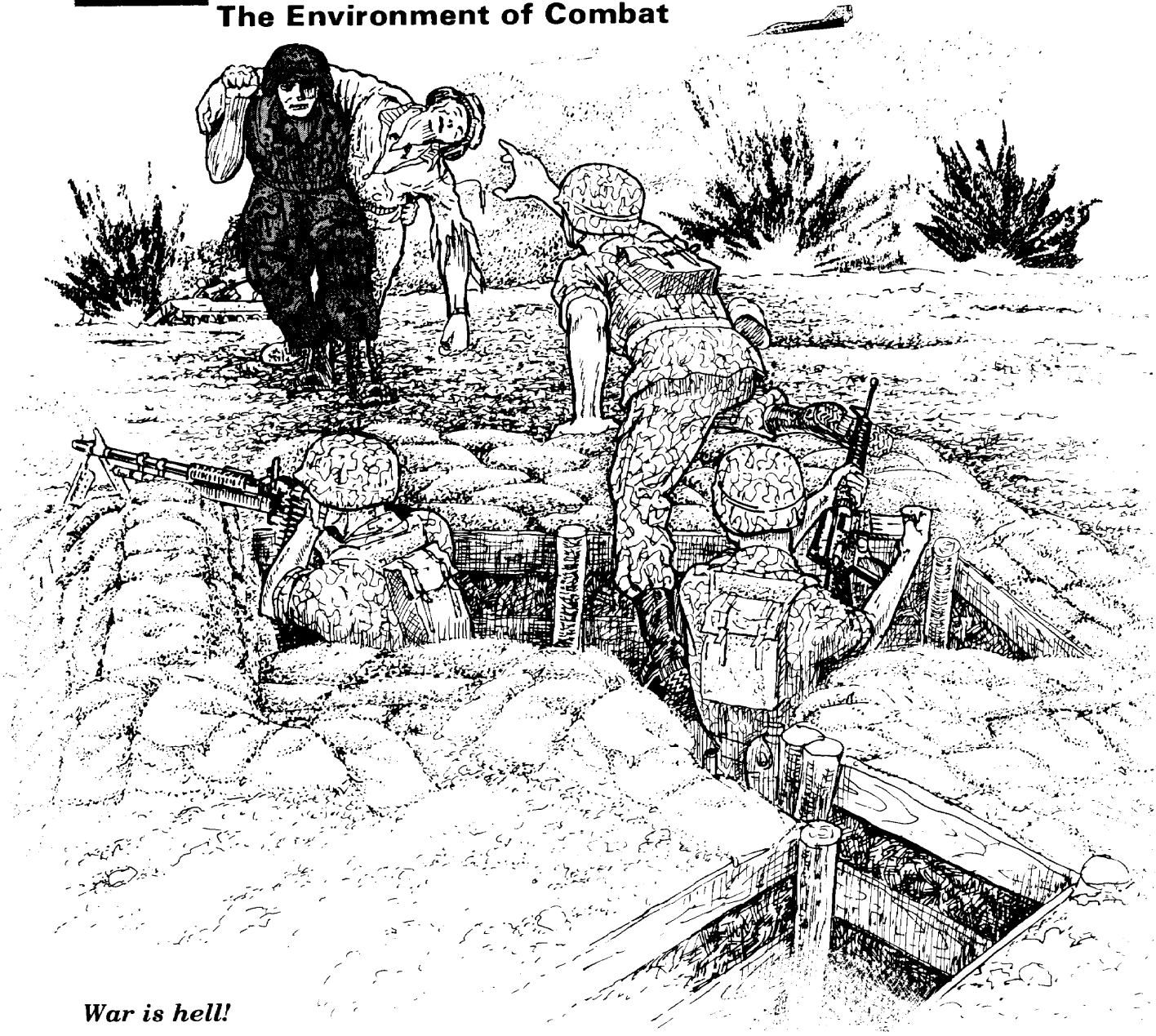


The Environment of Combat



War is hell!

General William Tecumseh Sherman (1820-1891)
Civil War Corps Commander for the Union Army

Weather, terrain, and the day-night cycle form the basic setting for all military operations. This setting, coupled with high-technology equipment, affects the firepower, maneuver, protection, and leadership of units in battle. You must also recognize the effects combat itself has on soldiers and units. The danger, destruction, and confusion of combat; the effects weapons and obstacles have on terrain; and the chaos associated with the unexpected all cause simple things to become

difficult. This chapter will help you understand the effect of the combat environment on soldiers, equipment, and weapons.

WEATHER AND TERRAIN

Weather affects soldiers, equipment, operations, and the ability to maneuver on terrain. Temperature extremes, wind, rain, snow, fog, mud, and dust all combine in various ways to affect soldier efficiency and limit the use of weapons and equipment.

Leadership

Leading soldiers is more difficult in bad weather and in difficult terrain. The time and effort you need to care for soldiers increase in bad weather. You must think about cold and hot weather injuries. Security of positions and fighting formations are harder to maintain and successful operations require more planning. You must rehearse simple plans when possible and then execute aggressively.

CONTINUOUS OPERATIONS

Continuous land combat is a reality. Our potential enemy's doctrine calls for rapid advance, deep penetration, relentless attack, and the bypassing of strongly defended points. The battlefield may not have a clearly defined forward line and could reach a depth exceeding 100 kilometers. The demands of continuous operations compound the normal battle stresses soldiers must cope with. The expected effects of these demands are so significant that FM 22-9 is devoted entirely to soldier performance in continuous operations.

FM 22-9 points out that the adverse conditions associated with continuous operations will degrade the fighting performance of you and your soldiers. These conditions do not respect military rank or position. Because of your leadership responsibilities, performing continuously without rest will exhaust you sooner than it will your troops. You may be the first battle fatigue casualty. Force yourself to rest.

Soldier Performance

Continuous operations can reduce critical human abilities as a result, of sleep loss. Many predictable effects occur as a result of insufficient sleep which you must be aware of and take into consideration. You and your soldiers will—

- Be less alert.
- Be slow to make sense of things you see or hear.
- Start to see things that are not there.
- Be unable to concentrate, perform complex operations, or readily understand instructions.
- Be unable to remember events clearly.
- Begin to skip routine tasks.
- Have difficulty deciding what to say, and how to say it.
- Experience mood changes and become irritable, depressed, or apathetic.

Expectations about future warfare point to a tremendous challenge during the first few days or weeks. Extended periods of continuous ground combat operations reduce soldier performance, adding to the problems caused by casualties and illness. There are actions you can take to slow down the rate of performance decline. You cannot use these actions haphazardly or selectively; their effectiveness in wartime depends on sound planning, execution, and assessment of training prior to commencing combat operations.

Lead Your Unit. The single most important element to sustained unit excellence is the leadership you provide. Successful preparation depends *on* applying the kind of fundamental leadership described in this manual. You must plan for the well-being of your soldiers and your unit and know when and how to shift your leadership style to meet the situation. The directions you give should be simple, clear, and complete. Recognize that if your soldiers are tired you may have to repeat orders and directions, double-check yourself and others, and be prepared to spend more time reassuring soldiers to restore their confidence.

All soldiers must learn to cope with the adverse conditions of continuous operations. In all training and combat plans, consider the human need for you and your soldiers to sleep. Encourage, not discourage, sleeping when the opportunity arises. Severe problems develop after several days if you and your soldiers cannot get at least three hours of sleep every day. Ideally, these three hours should be continuous; however, the tactical situation may make this impossible. Taking catnaps at every opportunity, even for brief periods, is the best technique for reducing the effects of sleep loss. Falling asleep quickly and waking up quickly and alert are skills that improve with practice.

Build Cohesion. Although enduring the strain of combat builds cohesive soldier teams, you must build cohesion before battle so that your unit can fight, defeat the enemy, and stand the strain of prolonged combat. One of your primary peacetime responsibilities is to create the trust and strong bonds with and among soldiers that will sustain them, and you, in battle. You must constantly stress bonding, learning, training, teaching, coaching, caring, and teamwork because they lead to cohesion.

Your goal is to develop the full potential of every soldier in your unit so that individually or collectively they could continue and complete the mission in your absence.

Develop Confidence. Withstanding the adverse conditions of continuous operations is easier when soldiers are optimistic and confident. Confidence gives your soldiers the deep-seated belief the unit can and will accomplish the mission, no matter how unfavorable the odds. Confident, cohesive units withstand adverse conditions far better than other units do.

You cannot order confidence. Soldiers develop confidence through realistic training and simulated combat experiences that make them optimistic about themselves, their equipment, their unit, and their leaders.

Train Your Unit. Effective training improves the performance of soldiers and units. Well-trained soldiers and units can better resist the adverse effects of continuous operations. Training also improves soldiers' ability to maintain self-control and to think when exhausted. Therefore, preparing for continuous operations requires carefully designed training plans and vigorous assessment of progress toward standards. Practicing continuous operations helps everyone recognize the problems that arise and learn how to cope. As training progresses, the unit demonstrates its ability to achieve extraordinary results. Making a reasonable sleep plan is easier if you have cross trained your subordinates. You will probably never have enough people to setup two full shifts for every job, so cross training will allow a person to sleep a few hours while someone else performs his job. Tough training experiences furnish convincing evidence the unit is combat ready and help develop a winning attitude.

Develop a Physically Fit Unit. You must develop the physical fitness of your soldiers. Physical strength and endurance improve their ability to "bounce back" from exhaustion. Fit soldiers can call upon their minds and bodies to perform strenuous activity for extended periods and return to normal effectiveness after a relatively short period of rest.

Develop a Winning Attitude. Finding better and easier ways to perform important tasks in

continuous operations is a leadership challenge. You must reassure your soldiers that they, their unit, and their country will prevail. Remind soldiers they must depend on one another. Winning depends on all soldiers working together to perform beyond what they believe possible until the mission has been accomplished.

SIX ACTIONS A LEADER MUST TAKE TO DEFEAT BATTLE STRESSES ARE:

- **Lead your unit.**
- **Build cohesion.**
- **Develop confidence.**
- **Train your unit.**
- **Develop a physically fit unit.**
- **Develop a winning attitude.**

HIGH TECHNOLOGY

Technology has brought great change to waging war. With night vision devices, armies can now fight in darkness and fog, conditions that have traditionally forced lulls in battle. Further, violence and confusion on the battlefield will be greater than ever because of the potential to fight under NBC conditions, the sophistication of electronic warfare capabilities, and the increased use of smoke as an obscurant. Every one of these advances in technology has an accompanying effect on soldiers—the human side of warfighting.

Electronic Warfare

Since our command and control systems depend heavily on radios and radar, the enemy will certainly try to destroy them or disrupt their use at critical times. Because tactical radios produce electronic signals that can be detected, the enemy may identify the location of radio transmissions coming from tactical operations centers and then attack with air strikes, artillery, or land forces. Our tactics and SOP will help cope with the enemy's electronic warfare efforts, but you must recognize the effect on soldiers and leaders. Disrupted communications will make it more difficult to transmit or receive battlefield intelligence,

process calls for fire, or request resupply and medical evacuation. These restraints will cause a feeling of isolation on the battlefield that can lead to panic. You must recognize this as fact and make your tactical training in electronic warfare as realistic as possible. Train under electronic warfare conditions so that your soldiers will know what to expect. Teach your soldiers how to defend your unit from electronic warfare, and ensure they are confident in your ability to lead them. Follow up with an after-action review. Discuss the results and make this a learning experience for you and your subordinates.

New Weapons on The Battlefield

Emerging technology may develop weapons for the future battlefield that are more devastating than any used in previous wars. Directed-energy weapons could become an entirely new class of tactical weapons using powerful energy beams to detonate ammunition, destroy vehicle electronic systems, and disrupt communications. Exposure to directed-energy weapons could also lead to disorientation, blindness, brain damage, or even death. Because the technology is still being developed, it is too early to predict their use or exact destructive power. One thing is certain. If directed-energy weapons are used, they will have an impact on the human side of warfighting and make the demands on leaders even greater.

NBC Warfare

The threat of NBC warfare will be a major source of stress. Fear of the unknown and knowledge of the lethality of NBC weapons cause significant psychological stress. Since unsupported rumors aggravate this stress, you must ensure accurate information passes through the chain of command to every soldier.

You cannot wait for war to prepare. Likewise, you cannot wait for the enemy to use NBC weapons to prepare to defend yourselves. You must be a leader of strong will and prepare yourself and your troops to operate under NBC conditions. To prepare for NBC warfare, you must—

- Talk with your soldiers. Tell them what to expect from you and their equipment. Tell them what you expect from them.
- Develop procedures so that you can recognize each other while in MOPP gear. For example,

have soldiers wear name tags or colored tape marking that will not damage the protective suit,

- Keep plans simple. Follow SOPS and well-rehearsed drills.
- Enforce a sleep and rest program to protect from exhaustion.
- Ensure soldiers drink plenty of water to protect from dehydration.
- Learn to pace yourself and to delegate. Do not allow you or your troops to become casualties of physical exhaustion.
- Discipline yourself to give calm patient leadership. Your troops will certainly panic if they sense panic in your voice or actions.
- Promote physical fitness for endurance to protect you and your soldiers from early exhaustion.
- Train in MOPP gear to gain confidence and experience.

Command and Control. Command and control suffers significantly under NBC conditions because activities, such as directing fire, maneuvering, operating equipment, and reading maps, take longer and are more difficult. Because MOPP gear impairs navigational abilities, leaders can easily become disoriented. The result of these factors and the increased physical exhaustion that accompanies extended wear of the MOPP gear can cause irritability and frustration in leaders; simultaneously, the soldiers' confidence in their leaders can deteriorate rapidly.

Communications. Protective masks make face-to-face communications difficult; facial expressions, voice tone, and physical actions can be misunderstood. Soldiers and leaders even have difficulty recognizing one another since everybody looks about the same in MOPP gear. When radio operators are wearing protective masks, the number and length of radio transmissions increase and transmissions are difficult to understand.

Combat Power. The nature of battle changes dramatically under NBC conditions. Operations take longer or require more troops to complete successfully. Firing rates decrease for individual and crew-served weapons. Soldiers and crews often use terrain less effectively for cover and concealment, and the possibility increases of soldiers accidentally firing at friendly personnel.

Units rely more on indirect fire. Calls for fire take longer, and locating targets accurately is more difficult. The time required to process fire missions and deliver effective indirect fires increases accordingly.

Human and Physiological Considerations.

In MOPP gear, soldiers tend to omit, or poorly complete, tasks such as camouflage and maintenance. This is especially true after six hours in MOPP4. Every task requires more time and effort to complete. Fatigue, frustration, dehydration, and less effective leadership contribute to lower overall performance under NBC conditions. Soldiers in MOPP gear dehydrate without realizing it and fail to drink adequate fluids to rehydrate their bodies. Eating is not possible while in protective masks and physical endurance suffers.

SUMMARY

The environment of future combat operations will probably place greater stress on soldiers than in past wars. Our potential enemy's doctrine and equipment indicate an intent to fight around the clock and advance rapidly. Technology has also created the capability to disrupt radio and radar use and locate command posts where radio transmissions originate. Future technology will create other offensive weapons that are more devastating

than any used in previous wars. The effects of this technology on soldiers can be great.

After long periods of continuous operations and sleep loss, the ability to think and reason suffers. You must take actions to reduce the rate of performance decline. You will need to repeat instructions, give simple directions, and double-check yourself and others. You must develop soldiers' confidence through tough training that simulates combat conditions. Ensure you and your subordinates get as much sleep as the tactical situation permits; severe problems develop after several days if soldiers get less than three hours of sleep each day.

Since the enemy may use NBC weapons, you must train your soldiers to perform the mission under simulated NBC conditions. Command and control suffers significantly because of exhaustion and leader behavior changes. Communicating is difficult when wearing MOPP gear and soldiers and leaders have difficulty recognizing each other. Soldiers and crews use terrain much less effectively for cover and concealment, and land navigation and orientation are more difficult.

In peacetime, you must train under simulated combat conditions, develop SOP, and practice sleep discipline. Talk with your soldiers and let them know what they can expect from their equipment and what you will expect from them.