

CHAPTER 1

THREAT

The rear area threat is very complex. The threat includes --

- Controlled agent activity.
- Terrorist and dissident groups.
- Special purpose forces.
- Naval infantry.
- Reconnaissance elements.
- Airborne and heliborne forces.
- Aircraft, artillery, and missile strikes.
- Radioelectronic combat.
- NBC warfare.

FM 90-14 provides details on the rear area threat.

CAPABILITIES

The Soviets are capable of disrupting, disabling, or neutralizing fixed site operations with their conventional and NBC weapons arsenal. This is accomplished by killing troops, denying use of equipment or facilities (airfields, ports, and so forth) through contamination, or degrading combat efficiency by forcing troops into mission-oriented protective posture (MOPP) and requiring time-consuming decontamination operations. The delivery means for conventional and NBC weapons are aircraft, multiple rocket launchers, tube artillery and missiles. Figure 1-1 shows these Threat employment capabilities on a typical US Army front and expected chemical persistency throughout the front. In addition, Threat special purpose forces (spetsnaz) and agents are capable of using chemical and biological (CB) munitions, as well as conventional weapons, in sabotage operations.

Figure 1-2 illustrates Soviet missiles by range and deployment level used in deep-battle attack on US forces. For the first time in history this Soviet chemical threat has been verified. In October 1987 the Soviets invited delegates from 40 nations to a display of chemical weapons at Shikhany, their central chemical test facility. This display (see Figure 1-3) included

	SS-21	SS-1 SCUD B	SS-23	SCALEBOARD
				
RANGE (KM)	120	300	500	900
DEPLOYMENT LEVEL	DIVISION	ARMY/ FRONT	ARMY/ FRONT	FRONT/ THEATER

Figure 1-2. USSR surface-to-surface missiles.

chemical warheads with persistent nerve agent for the SCUD-B and FROG-7. Also displayed were a variety of aerial chemical bombs (100 to 1,500 kilograms), chemical-filled artillery shells (122 mm, 130 mm and 152 mm), and chemical munitions for multiple rocket launchers.

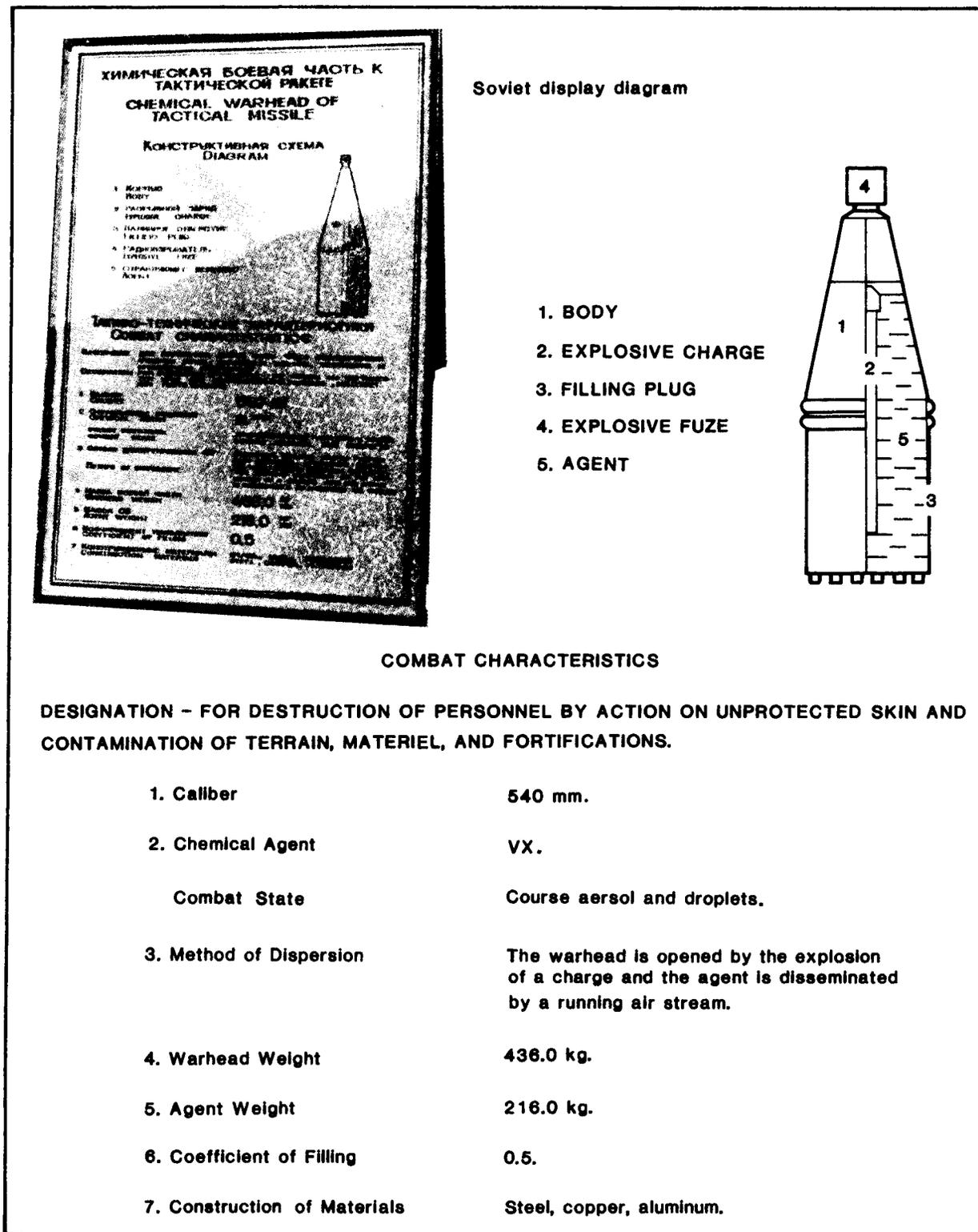


Figure 1-3. Chemical warhead of tactical missile.

CB weapons are spreading to a number of nations outside the Warsaw Pact. This CB weapon proliferation presents a significant threat to US forces in all hemispheres. Other countries developing an offensive chemical weapon capability are concurrently improving their NBC defensive posture. The proliferation of CB weapons in other countries increases the opportunity for dissident forces and terrorists to obtain these weapons; this means US forces in low-intensity conflict missions are at an increased risk from CB weapons.

The basic Soviet principle of chemical warfare is to achieve surprise. They would use massive quantities of chemical agents against unprotected troops or equipment. Chemical agents also may be used to restrict the use of terrain.

Initially, the use of chemical weapons may be subject to the same level of decision as nuclear weapons, but they are likely to be used more freely once the initial authority for employment has been given. In a nuclear war, chemical weapons are used to complement nuclear weapons. However, they may be used in a nonnuclear environment against an enemy whose chemical defenses are weak or where their use would be particularly advantageous.

Airfields, nuclear storage sites, and nuclear delivery systems are targets for chemical attacks since such targets can be neutralized without the necessity of pinpoint strikes. Also, contamination of key points along rear area lines of communication can seriously disrupt rear area resupply and reinforcement, while simultaneously keeping those points intact for subsequent use by attacking Soviet forces. See FM 100-2-1, Soviet Operations and Tactics, and FM 100-2-3, Soviet Army Troops, Organization, and Equipment, for further details.

TARGETING PRIORITIES

The Soviets do not perceive clear delineations between conventional, chemical, and nuclear warfare. If biological weapons are employed, they would be targeted against rear area objectives as well as front-line troops. Therefore, there is an overlap of priority targets for these particular weapons. They include --

- Nuclear delivery systems and storage sites.
- Command, control, communications, and intelligence (C³I) facilities.
- Reserve and large troop concentrations.
- Supply installations.

The first targets for spetsnaz and other Soviet agents may be radar and communication sites to prevent early warning. All of these sites should expect persistent chemical attacks in which the persistency could last from days to weeks. Nuclear delivery systems will receive the highest priority for targeting by nuclear weapons. The suitability of targets for nuclear weapons is determined by their priority category, missions, the current tactical situations, and weapons available for use.

Priority targets for biological weapons will be food supplies, water sources, convoys, and urban and rural population centers.

Priority targets for chemical weapons include airfields, naval bases, seaports, storage depots, and supply routes.

The targeting priority is assessed as follows to help fixed site commanders accurately determine their site's potential target value to the enemy. The result of this assessment is entered into the vulnerability analysis matrix on page 9. For some fixed sites the target priority may change as the war progresses. For example, the pre-positioned material configured to unit sets (POMCUS) sites in the European theater are extremely important to US forces in the early stages of hostilities, but after the equipment is issued to incoming units their value decreases.

Low (L) -- This site is in a lower section of enemy target priorities; it would be a secondary target for air-delivered systems. This priority indicates that the enemy is reluctant to commit valuable resources to a target with a low payback value to their primary objectives. The mission that the site performs is redundant and can be duplicated by another site within the theater of operations.

Mid (M) -- This site is higher on enemy target lists; it may not be of sufficiently high priority to use scarce, expensive weapon systems (for example, missiles) on the target. This priority indicates that there exists a need to assess the replacement value the site might possess.

High (H) -- This site is very high on enemy target lists; it would receive priority consideration for all means of attacking the target. This priority assumes that there is an imminent NBC threat. This target value could also result from a site being located in the vicinity of a known high priority target; hence, there is the prospect of becoming a collateral hazard.

VULNERABILITY ANALYSIS

Rear area operations involving the flow of personnel, equipment, and supplies will be faced with the task of sustaining these operations during hostilities under all types of conditions. The employment of NBC munitions will in most cases disrupt these rear area operations.

After reading and understanding the doctrine and capabilities for a particular theater and opposing force (geographical location), the installation commander must look at his site's day-to-day functions and any unique capability provided to the force structure. The installation's vulnerability will be based on the Threat capability and the target's (installation) priority. A vulnerability analysis of the installation should be done to help the commander decide what survivability actions are needed. The following areas will be assessed: target priority (importance of site to enemy), replacement value (importance of site to US allied forces), and NBC threat. However, vulnerability can be lessened by using alternative operating locations. Sites that possess the following replaceability characteristics exhibit greater mission redundancy:

- Quantity of sites available to perform a certain mission.
- Mission substitution through outside sources. Medical and maintenance missions are two examples where suitable facilities and expertise may exist within the civilian economy and be available for substitution of the primary facility.

REPLACEMENT VALUE TO FRIENDLY FORCES

A fixed site commander must be able to determine whether his site provides any unique functional/mission areas that are necessary to support a mission area. The fixed site commander can also assess this value internally (analyzing one function versus another).

Low (L) -- Site destruction has little immediate or delayed impact on force effectiveness. Redundant capabilities exist at other sites. This value indicates that friendly operations would not be degraded by the loss of this site.

Mid (M) -- Site destruction has significant indirect or delayed impact on force effectiveness. Redundant capabilities exist, although destruction of this site may result in a reduced mission capability.

High (H) -- Site destruction has significant direct impact on force effectiveness or significant delayed and/or indirect impact. No redundant capability exists.

The mid and high values indicate a need to invest in a site's survivability. The enemy may view the site as a high value target even though it is not at the top of their target priority list.

NBC THREAT

At this stage of the analysis, a fixed site commander must assume that an NBC threat exists. Therefore, this threat is best analyzed as either an on-target or off-target threat.

Low (L) -- NBC threat is from probable off-target attack (adjacent site with probable on-target attack).

Mid (M) -- NBC threat is from probable off-target, possible on-target attack.

High (H) -- NBC threat is from probable on-target attack.

VULNERABILITY ANALYSIS MATRIX

The following matrix (see Figure 1-4) takes you through the thought process for vulnerability analysis:

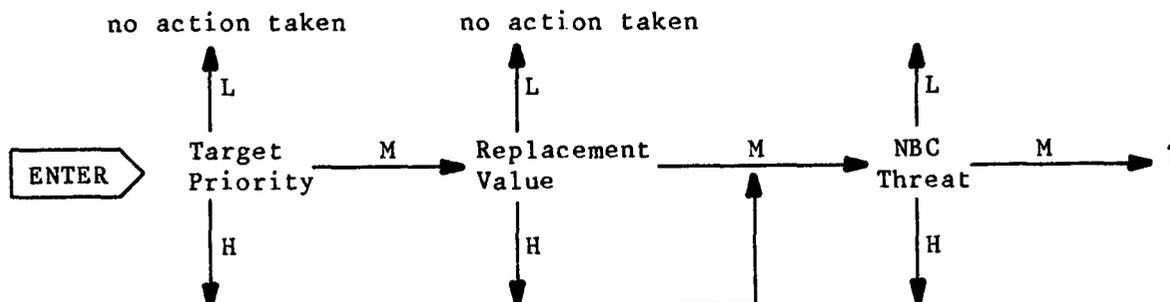


Figure 1-4. Vulnerability analysis matrix.

If you exit the matrix, then NBC survivability measures are probably a low priority and can be provided cost effectively by individual protection and curtailment or major reduction of operations in an NBC environment.

The matrix at Figure 1-4 on page 9 purposely leads you to a dead end. You have only established that survivability measures are necessary. As you read through this FM, each chapter will take you further into the matrix so you will be able to determine what survivability measures are necessary.