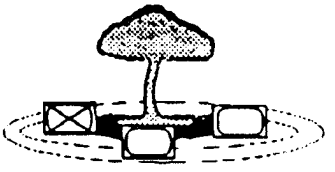
Chapter 10

Offensive Operations

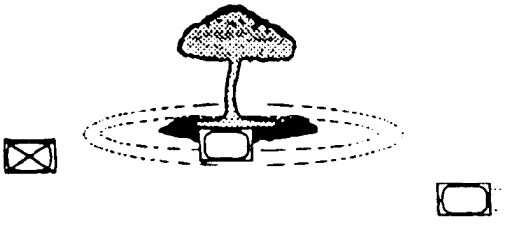
"The initial hesitancy by the AEF to employ gas was judged understandable by an officer of the 1st Gas Regiment The American Army was unprepared to engage in gas warfare when President Wilson committed it to battle. As a result, the use of chemical weapons and the defense against them became a deadly learning process for all branches of the Army under the stress of battle."

--Leavenworth Papers No. 10, Chemical Warfare in World War I: The American Experience, 1917 - 1918, 1984.

purpose of the offense is to defeat, destroy, or neutralize the enemy force. Because tactical offensive operations often expose the attacker, they normally require local superior combat power at the point of the attack. Massing of combat power can create a window of vulnerability to enemy WMD.



Initial nuclear effects on a massed unit



Initial nuclear effects on a dispersed unit

CHARACTERISTICS OF THE OFFENSE

Surprise

By achieving surprise, the enemy's opportunity to use WMD are reduced. The proliferation of modern surveillance device makes achieving outright surprise more difficult. Use of obscurants can assist the commander in achieving tactical surprise. Visual and infrared obscurants can defeat or hamper many battlefield surveillance and targeting systems.

Concentration

While surprise may contribute to offensive success, concentration is the ability to mass effects without large formations. Concentration of any size force is a vulnerability that the enemy can exploit with WMD. Forces must be dispersed and then concentrated for the attack. Dispersed forces are not lucrative targets for attack by WMD.

Contents

Tempo

Tempo is the rate of speed of military actions. Controlling or altering rate is essential for maintaining the initiative. Enemy WMD can alter the tempo and allow him to seize the initiative. Smoke can also affect the tempo of military operations. Use of NBC recon elements to avoid contamination can mitigate the effect on tempo.

Audacity

Audacity is a key component of any successful offensive plan. Integration of NBC defense, chemical unit support, and smoke all contribute to the execution of audacious operations. Commanders must understand where and when they are taking risks on the NBC battlefield and their chemical staffs will assist them in understanding the risks.

OPERATIONS IN DEPTH

Offensive operations are conducted throughout the depth of the battlefield. Commanders arrange the battlefield into three closely related activities — deep, close, and rear operations. Under NBC conditions, the attacking force commander uses NBC defensive principles — avoidance, protection, and decon — to preserve his force. He plans for the use of friendly smoke and for countermeasures to enemy use of obscurants. He defends his force against enemy flame weapons. If national command authorities authorize release, the commander incorporates nuclear fires into their offensive plans.

commanders integrate NBC defense, smoke, flame, and recon elements throughout this framework. When authorized, nuclear attacks support close and deep operations. These fires destroy or contaminate defensive positions and cause casualties. Nuclear attacks may also contaminate deep terrain to restrict or canalize the defender's movement.

Recon elements of the attacking force detect contamination along the routes of advance. Attacking forces bypass or adopt protection to cross this contamination. Forward forces breach obstacles under the concealment of obscurants. These obstacles may include chemical and flame weapons. If attacking forces become contaminated, they continue the attack in MOPP4.

Under the threat of enemy NBC use the attacking force commander conducts his approach with dispersed forces. This dispersion limits possible damage by an enemy NBC attack. However, dispersion also limits immediately available combat power. Attacking forces must quickly mass to assault the objective. The attacking commander uses obscurants to conceal his disposition and intentions.

NBC recon elements in the rear area monitor lines of communication. If they find contamination, they search for clean, alternative routes. Logistics activities move forward using these routes during limited visibility or under the concealment of smoke.

FOCUS OF NBC CONSIDERATIONS IN THE OFFENSE

The key to success in an offensive campaign lies in defeating the enemy before the offense reaches its culmination. Culmination occurs because the attacker consumes resources and commits forces through successive battles. Eventually the attacker no longer has the combat power to sustain its momentum. Under chemical or biological conditions culmination may come earlier than in a conventional offense. Successful attacks may require more people and more time. Attacking forces require more fire support. Personnel in MOPP become exhausted more rapidly. These factors drain an attacker's resources and slow its momentum. The focus of friendly NBC considerations is to conserve combat power in the attack, so the attacking force can defeat the enemy before reaching its culminating point.

Characteristics of NBC Weapons

NBC weapons share the following characteristics that drive offensive and defensive actions—

- Mass casualties.
- Large-area coverage.
- Persistent hazard.
- Slow operations.
- Complementary effects.

NBC weapons cause mass casualties over large areas. For example, the single atomic bomb dropped on Hiroshima caused 144,000 casualties. The first chemical attack at Ypres in World War I resulted in 15,000 casualties. More recently, Iran reported 13,358 chemical casualties from January through March 1988 alone in their ten-year war with Iraq. Nuclear radiation, biological agents, and chemical agents can reach targets hidden from conventional weapons. For example, nuclear radiation can penetrate armored vehicles. chemical agents can seep through cracks and openings in vehicles and

structures. Neither side can predict areas of contamination with complete assurance; effects of weather and terrain vary contamination patterns.

NBC weapons may remain effective long after they have been used. The length of time they produce casualties can be controlled to some extent by the user. Chemical and biological agents are particularly useful in this way. Commanders can select agents whose casualty-producing effects last for a few moments or a few weeks. Nuclear weapons can produce short-term blast, heat, and initial radiation. With a surface burst radioactive fallout will forma long-term hazard.

NBC defensive measures will slow operations. The threat or use of many NBC weapons may force an army to take time-consuming protective measures. Troops disperse to reduce the effects of an attack. They practice a high degree of personal hygiene to prevent infection. This may increase logistics requirements. NBC recon will consume resources, especially time. In addition, personnel in protective gear find it more difficult to work or fight. Protective measures degrade combat power. The use of PSYOP can assist in the avoidance of NBC attacks by targeting both the enemy decision makers and public opinion with the objective of preventing NBC attacks.

Nuclear, chemical, and conventional weapons complement each other; using them together increases total effects. For example, using smoke to conceal visual indicators of a chemical attack increases casualties. Using chemical weapons against forces on the edge of a nuclear attack increases the effects manyfold.

NBC Considerations

During the Offense

The defending force commander will plan to disrupt the attacker's coremand and control. He may use NBC weapons to cause casualties and contaminate equipment and/or terrain, thus degrading the attacker's combat power. The attacking force commander preserves synchronization and the strength of his force through the fundamentals of NBC defense.

Avoidance

The key fundamental of all NBC defense activities is to avoid NBC attacks and their effects whenever possible. Avoidance includes passive and active avoidance measures.

Passive

Avoidance

Measures

Commanders ensure operations, communications, and electronic security. Leaders prepare their soldiers to survive and operate under NBC conditions. Offensive forces use natural concealment, camouflage, and smoke. They conduct deception operations, using feints, demonstrations, dummy equipment, and manipulated electronic signature. Commanders continuously analyze present and planned dispositions for NBC vulnerability. They actively seek available intelligence on the specific NBC threat.

Active

Avoidance

Measures

Active measures are those NBC defense measures that reduce the likelihood of exposure to NBC hazards and the impact of those hazards. These measures include:

Detecting contamination. Attacking force recon and security elements check for contamination. Each unit uses its organic capability to check its route, zone, or area. If nuclear weapons have been used, units conduct continuous radiological monitoring. Advance parties of displacing units use chemical and radiological detection equipment to check primary and alternate positions for hazards. Positive identification of hazards supports the commander's analysis of the situation.

Marking contamination. Forward elements mark all likely entry points into a contaminated area so follow-on forces can avoid the contamination. Where appropriate, forward elements may leave a guide to assist successive echelons through the contamination. Commanders must train their forces to recognize enemy contamination markers.

Passing alarms and signals. The enemy situation dictates the type of alarm to be used. Visual or vocal alarms will be most often used. Where appropriate, units may pass the alarm over the radio. However, they must consider communications security so that they do not prematurely reveal their location.

Warning and reporting. Units report NBC hazards to the controlling headquarters. The headquarters further disseminates reports as necessary. It also disseminates nuclear and chemical attack warnings to affected units.

Limiting contamination. Bypassing is the preferred method of limiting contamination. However, when a unit must cross contamination, it carries as much equipment as possible inside its vehicles. Critical items left outside are covered or left in containers wherever possible. When a unit crosses a contaminated area, it avoids vegetation, such as small trees, brush, and tall grass. The faster it crosses, the shorter the hazard contact time.

Protection

Avoidance and protection are closely linked. Many avoidance techniques also provide some measure of protection against NBC weapons effects. However, the attacking force commander can take several specific measures to improve survivability of the force.

Hardening Positions and Readying Personnel

Most attacking forces will be moving and will be unable to construct hardened positions. These forces continuously locate potential shelters while moving and schedule stops near them. These shelters include overpasses, tunnels, culverts, and built-up areas. Forces displacing from position to position, such as artillery or combat service support, search for locations that provide blast or radiation protection. Personnel prepare for a nuclear or chemical strike at any time. Troops keep sleeves rolled down and wear headgear (helmets, communications equipment, and patrol caps) when possible. They wear earplugs or headsets to provide protection from eardrum rupture or hearing loss. Personnel fix detector paper to their vehicles according to their SOPS for early signs of chemical attack.

Assuming MOPP

Leaders use standardized MOPP levels to increase or decrease their unit's level of protection. Because the levels are standardized and all soldiers understand them, leaders can order changes in protection without long explanation. They may place elements in differing MOPP levels or authorize variations within a given level. In particular, on the move advance forces and recon elements may maintain a higher MOPP level than following forces. The leader whose immediate subordinates are directly exposed to chemical hazards needs to be the one who directs whether his personnel should go into or come out of **MOPP levels 3 and 4.** Once the force has been subjected to NBC hazards, individual leaders must limit the MOPP degradation of their force. Leaders will determine the hazard, take needed actions, and make decisions on whether to order unmasking, relocation, decon, and so forth.

Leaders must consider the degradation experienced in MOPP. Command and control suffer under MOPP conditions due to exhaustion of leaders, behavioral changes, and increased periods when no one is in charge. Communications are less effective because of the mask, so plans are more difficult to change. A unit in MOPP4 tends to rely heavily on indirect fires. Additional calls for fire make it more vulnerable to enemy interception and direction finding. As a general rule it takes almost twice as long and twice as many people to conduct a successful attack in MOPP4. Training and acclimation increase the ability of the individual soldier and unit to operate in MOPP.

Reacting to NBC Attacks

The defending force may use NBC strikes to weaken the attack. The defender will attempt to cause casualties. It will try to separate the attacking forces and prevent their reinforcing each other. It will try to disrupt the momentum of the attack.

The attacker must continue its operations with a minimum of disruption. Attacking forces take immediate action in response to a nuclear or chemical strike. Following initial actions the attacker must maintain the initiative. Soldiers and units react using their battle drills to ensure successful mission accomplishment. Commanders must continually update their plans to solve trafficability problems. Residual effects of a nuclear weapon include tree blowdown, tires, and rubble. Contamination from chemical strikes restricts mobility. Attacking forces may need to wear MOPP4 until the mission is completed.

Decontamination

When avoidance is not possible, personnel adopt protection. However, that protection decreases combat power. Soldiers cannot see as well and cannot acquire and kill targets as efficiently. Mobility is reduced. Heat builds up in the MOPP suit. Troops experience physical and psychological stress. As the troops remain in MOPP, protection begins to break down. Heat, stress, and chemical casualties occur. The longer a unit stays

contaminated, the greater its chances of sustaining casualties.

The commander of the attacking force must use METT-T to recognize how contamination will affect the culminating point. If the culminating point will occur unacceptably early, he plans for decon according to the principles of speed, need, limit, and priority. Decon of units in the attack is normally not conducted until consolidation on the objective.

Speed. The attacking force decontaminates as soon as possible. At a minimum, soldiers conduct the immediate decon required for survival. When enemy contact is not imminent, operational decon allows temporary relief from MOPP4. It also speeds up weathering of the agent. Conducting operational decon lessens spread of contamination.

Need. The attacking force decontaminates only what is needed for its immediate mission+ However, the attacking force commander must take great care not to underestimate his needs. An offensive action in MOPP4 may need more resources and more time than a similar action under conventional conditions.

Limit. The force commander decides whether to move contaminated vehicles and equipment. Where possible, he conducts decon near the site of the original attack to limit the spread of contamination. If this is not possible, the unit segregates contaminated items from clean items.

Priority. The force commander prioritizes his decon efforts according to the importance of the contaminated items to his mission. Typically, he gives highest priority to critical weapon systems in the main attack. He may also give high priority to special requirements for the offense, such as air defense.

PLANNING AND PREPARATION FOR OFFENSIVE OPERATIONS UNDER NBC CONDITIONS

Offensive operations depend on thorough planning and preparation. Chemical staffs and units work with the operations planners from the start of the process.

METT-T Considerations

As the commander makes his estimate of the situation for an attack, he considers the factors of METT-T.

Mission

Fighting under the hazard of enemy NBC use may require additional control and coordination. The commander normally formulates more detailed orders to support his mission and intention under NBC conditions.

Enemy

Planners must consider enemy doctrine, capabilities, and probable intentions. Enemy first use of nuclear, biological, or chemical weapons maybe evident through intelligence indicators. If the enemy has already used these weapons, planners must know their agents, their delivery techniques, and their impact on the battle. Friendly forces must also understand the types of smoke and obscurants used and their impact on friendly and enemy sensors.

Terrain and Weather

Attacking forces normally have limited avenues of approach. The enemy will attempt to block these avenues. It may use contamination and obstacles containing chemical and flame weapons to restrict terrain use. Commanders identify these obstacles early and ensure that decon and smoke assets are available to support the breach.

When threatened by enemy NBC warfare, commanders exploit weather conditions that reduce the likelihood of NBC use. However, many of these conditions, such as precipitation and high winds, also impede other friendly operations, such as air support. When weather conditions favor enemy NBC use, commanders lessen the chances of employment of these weapons through speed, surprise, and rapid closure with the enemy.

Troops

The NBC readiness of friendly troops also affects the tactical plan. Planners must consider mobility under NBC conditions, protection against NBC attack, and final combat power at the objective. State of training and availability of resupply will drive success on the battlefield.

Time Available

Enemy use of NBC weapons will reduce time available to friendly units for preparation and movement. Friendly forces must take defensive actions and conduct extra recon. Friendly forces in an attack will try to gain time by slowing enemy reaction and confusing and disorganizing the defender. Smoke and obscurants disrupt the defender's operations.

Preparing for Attacks

Units require additional preparation time under NBC conditions. Units rehearse actions for responding to enemy NBC attacks. Commanders may implement additional control measures under battlefield nuclear warfare or the threat of biological or chemical strikes. These control measures support additional dispersion. They also facilitate the attack under limited visibility conditions.

Units may require additional logistics support under NBC conditions. Typically, attacks in high MOPP levels require additional artillery, since direct fire target acquisition is degraded when troops are masked. Attacks may also require additional smoke, because the forces are slowed by the physical demands of the MOPP gear.

CONDUCTING OFFENSIVE OPERATIONS UNDER NBC CONDITIONS

The attack must be violent and rapid. It integrates all available combat power, including nuclear fires when authorized. The attacker minimizes its exposure to enemy conventional, nuclear, and chemical fires through—

- Maneuvering and using counterfire supported by smoke and obscurants.
- Avoiding or rapidly crossing contamination.
- Maintaining operations, communications, and electronic security.
- Dispersing forces.

When an attack or exploitation includes a forward passage of lines, commanders ensure that forces do not congregate. Massed forces present a lucrative NBC target. The passed force provides information concerning the enemy, mine fields, and conventional or NBC obstacles. NBC recon and smoke units support these operations to provide necessary information on clean lanes and obscurant support, respectively.

Extended operations in MOPP degrade combat force performance. Commanders prepare for increased difficulty in command and control under NBC conditions. Communications are less effective when personnel are in protective posture. Transmission time increases, raising vulnerability to enemy electronic warfare.

The commander must reach his objective with the combat power required to overcome enemy resistance. The attacking forces coordinate efforts to suppress enemy artillery, air defense, electronic warfare, and coremand and control. In particular they must destroy nuclear or chemical delivery systems and defeat the reserve. When authorized, the attacker uses friendly nuclear fires for these purposes.

Smoke on or near enemy positions blinds gunners and observers. Smoke between friendly and enemy forces screens friendly maneuver. Obscurants deceive the enemy across the battle area. Smoke supports river-crossing and obstacle-breaching operations. Friendly and enemy smoke present special problems in navigation, target acquisition, and surveillance.

Offensive operations include—

- Movement to contact.
- Hasty attack.
- Deliberate attack.
- Exploitation.
- Pursuit.

Movement to Contact

A movement to contact gains contact with the enemy and develops the situation. During this movement friendly forces use the principles of NBC defense. They use obscurants for concealment and deception. They take countermeasures against enemy use of obscurants and flame weapons. Commanders continue to use sound tactics, including speed, dispersion, and communications security, to help avoid being targeted for enemy NBC strikes.

Covering force elements report any NBC contamination encountered to the task force commander and mark its limits. Lead elements breach mine fields and reduce obstacles. These obstacles may include persistent chemicals. Smoke and decon assets assist in the reduction of these obstacles. Lead elements should, when possible, bypass contaminated areas.

The task force commander sets a minimum MOPP level for the force. Subordinate commanders increase

this level where appropriate, taking care not to put soldiers into advanced levels of MOPP too soon. Personnel train to operate in limited visibility and to use minimum communications. During periods of MOPP3 and MOPP4, leaders implement command drinking and rest periods.

The use of smoke and obscurants support the movement. During planning the commander identifies areas where terrain and vegetation do not provide sufficient concealment. He uses smoke units or smoke munitions to cover these areas. In addition he uses projected smoke to obscure known or suspected enemy observation posts. At locations where terrain analysis indicates probable enemy obstacles, the commander preplans smoke. This preplanned support allows rapid breaching. Smoke is also integrated into the deception plan so that its use does not give away friendly plans.

Agile units plan for dispersal, use multiple routes, earmark reserves that are prepared for all conceivable contingencies, and adjust as necessary to enemy use of weapons of mass destruction.

FM 100-5, Operations, 1993

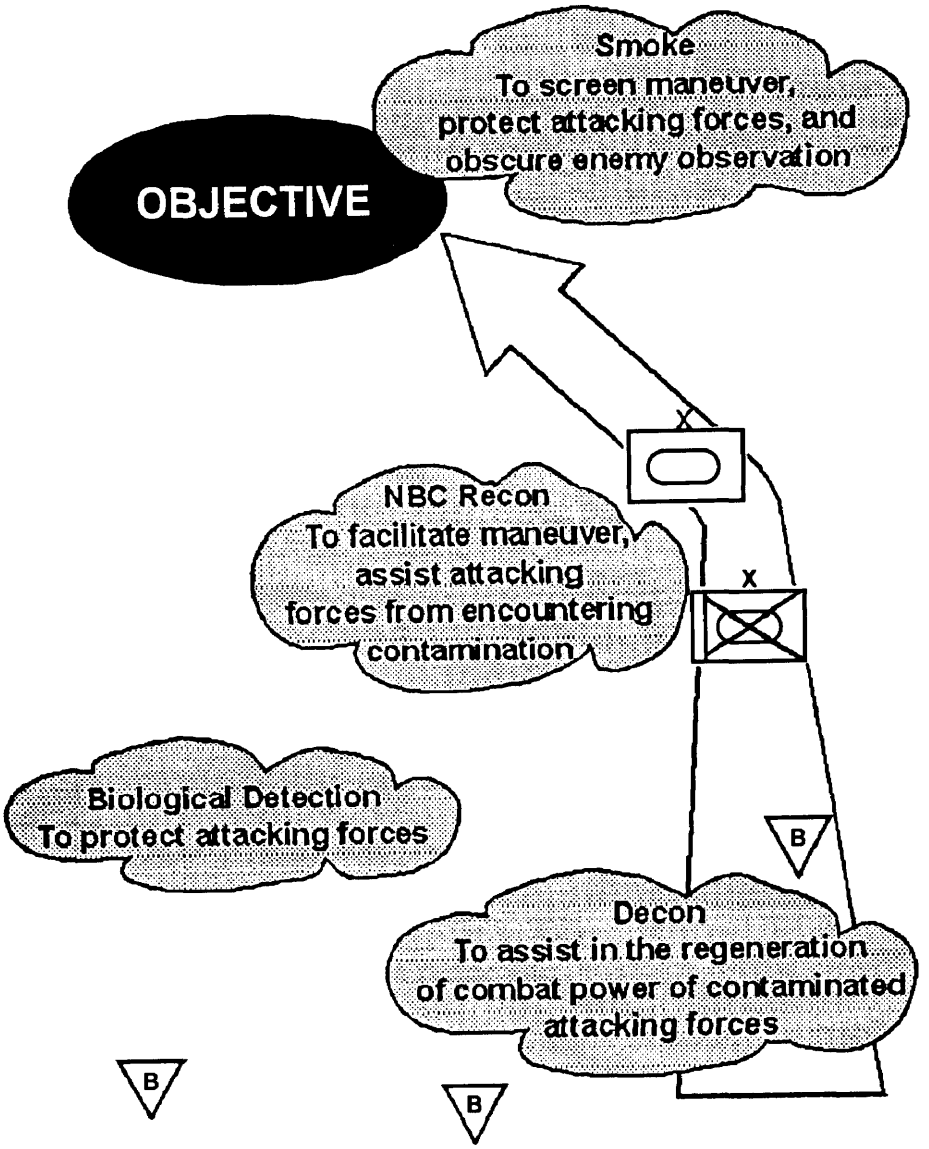


Figure 10-1. Supporting a deliberate attack with chemical support.

Hasty and Deliberate Attacks

Hasty attacks regain or maintain the initiative on short notice. Attacking forces use obscurants as a major combat multiplier in this option. They use immediate countermeasures to enemy smoke. These Countermeasures include electro-optical devices, counterbattery fires, and destruction of enemy smoke-generating equipment. Friendly troops prepare to withstand the destruction and shock effect of enemy flame weapons. They use NBC defense measures. When approved, deep nuclear fires support these operations.

Commanders conduct deliberate attacks against organized defensive positions that cannot be bypassed. The enemy may use NBC weapons to break the momentum of the attack or disrupt the synchronization of friendly assets. The attacker needs engineer support and obscurant assets to breach complex obstacle systems. These obstacle systems may include chemical mines and flame weapons.

reserves remain in concealed positions until required. These positions implement passive NBC avoidance measures, such as overhead cover, covered supplies and equipment, and a warning system. Where possible, commanders direct an NBC recon of routes into the zone of attack.

Friendly forces use obscurants in both hasty and deliberate attacks. Mortars, vehicle-launched grenades, and smoke pots obscure enemy target acquisition in the hasty attack. Additional planning time allows pre-positioning of ammunition for preplanned artillery and aerial-delivered rocket smoke. Mechanized smoke units screen routes of advance and aid in disengagement from the enemy.

Exploitation and Pursuit

Friendly forces follow initial success with relentless pursuit. Commanders use NBC recon to identify contamination along main routes of advance. A fleeing enemy may use chemical weapons more freely than one fighting a well-planned defense. The retreating enemy commander may be willing to contaminate terrain. He may also be willing to accept large numbers of civilian casualties. In addition, he may use nuclear weapons previously kept in reserve.

When nuclear weapons have been authorized, attacking forces use them to destroy enemy nuclear and chemical delivery means and attack enemy reserves. The attacker may block escape routes with tree blowdown, fires, and rubble from nuclear attacks.

Projected smoke and vehicle smoke systems increase survivability in the exploitation and pursuit. Artillery, mortars, mechanized smoke systems, and pots provide screening smoke for river-crossing and breaching operations. Obscurants also support consolidation, refueling, rearming, and casualty evacuation by degrading surveillance and target acquisition.

TRANSITION TO THE DEFENSE

Offensive objectives are of two basic types — those that focus on destroying the enemy and those that focus on seizing terrain. In either event the commander must recognize when he is approaching the culmination. At this point he will have expended so much of his strength and resources that he will lose his advantage over the enemy. He must shift to the defense long enough to rearm and refit to return to the offense. Chemical units support this shift. Smoke units conceal friendly positions and intentions. Decon units conduct thorough decon according to the command priority. NBC recon units actively patrol proposed routes to provide information to the commander. Air assault operations in an NBC environment can support the transition to the defense. Helicopters can allow combat units to bypass contamination; extract contaminated equipment and personnel; conduct air MEDEVAC of NBC casualties; and enhance the NBCWRS with aerial radiological and chemical recon.