APPENDIX B

THE USE OF SMOKE AND OBSCURANTS IN MEDICAL EVACUATION OPERATIONS

B-1. General

a. This appendix provides guidance for AMEDD personnel in the use of smoke and obscurants in medical evacuation operations.

b. The AirLand Battle extends from the rear area of friendly units, across the main battle area, deep into the enemy's territory. Throughout the battlefield, forces acquire and engage targets based on visual, IR, and millimeter wave technologies. Friendly and enemy units use smoke and obscurants across the battlefield as a combat multiplier. The use of smoke and obscurants to mask combat operations is dictated by the tactical commander. He normally provides the operational guidance for units or elements operating in an area requiring obscuration. Permission to employ smoke and obscurants solely to mask medical evacuation operations may not be approved. However, if the tactical commander's plan indicates that smoke operations are to be employed in a given AO, the HSS planner should consider both the advantages and disadvantages posed by their employment. Factors to consider are the—

- Phase of the tactical operation in which smoke and obscurants will be employed.
- Effect on ground and air evacuation routes when operating in an obscured environment (such as limited hours of use, checkpoints or convoy requirements, or the elimination of NOE approaches).
- Potential for exploiting the use of the cover and concealment provided for clearing the battlefield of casualties, especially in retrograde operations.
- Potential requirements for smoke generation to perform the medical evacuation mission which would not detract from the tactical capability and requirements.

c. Smoke can also be used to identify unit areas or LZs for which a medical evacuation request has been received. Further, smoke can indicate wind direction at a landing site for air ambulance operations.

d. For specific information on the employment of smoke and smoke generation equipment, refer to FM 3-50.

B-2. Operational Concept for the Emplyment of Smoke and Obscurants

Smoke and obscurants are employed to protect friendly forces from attack during offensive, defensive, and retrograde operations.

a. Smoke and obscurants disrupt enemy combat operations throughout the depth of the battlefield and across the operational continuum. They–

- Degrade the ability to see.
- Disrupt the ability to communicate.
- Conceal friendly forces.
- Deceive the enemy.
- Identify and signal.
- Defeat DE weapons.

b. The benefit to medical forces is derived through the tactical commander's use of smoke to obscure friendly tactical maneuvers. This obscuration—

- Prohibits the enemy from knowing how many casualties have been inflicted.
- Aids the movement of medical units and equipment.
- Enhances the ability to resupply forward deployed medical elements.
- Aids in the tactical deception plan.

B-3. Geneva Conventions and the Use of Smoke and Obscurants in Medical Evacuation Operations

a. The 1949 Geneva Conventions for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (GWS) provides protection of medical personnel and units from intentional attack so long as they carry out no duties harmful to the enemy (Article 21, GWS). In order to facilitate their identification so as to prevent their intentional attack, medical units, equipment, and personnel are authorized to display the distinctive emblem of the Red Cross (Article 42, GWS). Under tactical conditions, when requirements for concealment outweigh those for recognition, all distinctive emblems may be obscured or removed from medical equipment if ordered by competent military authority and authorized by Army regulations. Display of the distinctive emblem is not required to afford the right against intentional attack; attack of medical units, equipment, and personnel not displaying the distinctive emblem is prohibited if opposing forces realize that the forces about to be attacked are medical units performing humanitarian duties.

b. The use of smoke or obscurants in medical evacuation operations does not differ from the use of camouflage techniques and is not prohibited by the GWS. Its only effect will be to obscure the identity of units as they perform their humanitarian mission. Given the lethality of the modern battlefield, however, it would be difficult, if not impossible, to say that such obscuration of these units, equipment, and personnel would necessarily increase their risk from unintentional attack.

c. It is recognized that, with the advent of precision-guided munitions and electro-optical or laser target acquisition devices, there will be a substantial use of smoke and other obscurants on the modern battlefield as a result of normal combat operations. The legitimate use of obscurants by combatants to thwart the accuracy of precision-guided munitions may increase the risk to units and equipment not employing obscurants. This may possibly place medical units and equipment at greater risk if they fail to employ them. Further, medical evacuation operations will have to be carried out on the battlefield as medical personnel find it, which will include obscurants employed for normal combat operations.

d. For additional information on the protections afforded by the Geneva Conventions, refer to Appendix A and FM 8-10.

B-4. Use of Smoke in Aeromedical Evacuation and Hoist Rescue Operations

a. Smoke can be used effectively in aeromedical evacuation and overland hoist rescue operations to—

- Identify the landing site.
- Ensure the LZ is controlled by friendly forces.
- Determine surface wind direction.
- Provide cover and concealment.

(1) Colored smoke is an excellent daytime marking method. The smoke generated from a smoke grenade is difficult to detect more than 2 to 3 miles away, but an aircraft in the area should have little difficulty in noting its location. As more than one unit may be operating in a given area, it is important that the unit requesting an aeromedical evacuation mission be able to signal the aircraft as to the correct landing site to use. Radio communications produce an electronic signature. The electronic signature created from a prolonged transmission to guide an air ambulance to the landing site may not be an acceptable tactical risk.

(2) When a unit employs colored smoke to mark a landing site, the aircrew should identify the color and confirm it with the ground personnel. The transmission time required for this procedure is limited, thereby reducing the electronic signature.

(3) The employment of smoke at the landing site also enables the aircrew to determine the wind direction.

(4) In some environmental conditions (such as desert operations), the phenomenon of inversion occurs. When this occurs, the smoke and obscurants used in normal combat operations may

provide an upper layer of smoke under which the air ambulance can operate.

b. The use of smoke on aeromedical evacuation operations can be a disadvantage if incorrectly employed or if the smoke generated in the tactical operation interferes with the medical evacuation mission. Smoke can obscure the landing site and make NOE approaches unusable. Further, smoke on the battlefield can force aircraft to fly at higher than planned heights. This increases the risk of being acquired by the enemy.

c. In overwater hoist rescue operations, the employment of smoke for marking the patient pickup area, for determining surface wind conditions, and for spatial orientation is essential. The smoke employed by the aircrew must not interfere with the conduct of the operation or mask the location of the individual to be rescued. For additional information, refer to paragraph 11-8.

B-5. Employment of Smoke in Ground Medical Evacuation Missions

The employment of smoke during ground evacuation missions must be in consonance with the tactical commander's plan. Smoke can mask medical evacuation operations on the battlefield, but must not interfere with the tactical mission. In all combat operations, but especially in MOUT, smoke can be employed to cover and conceal—

- Movement across open areas.
- Extraction of casualties from vehicles.
- Entry and exit into/out of structures.