

# "Men died where they stood"

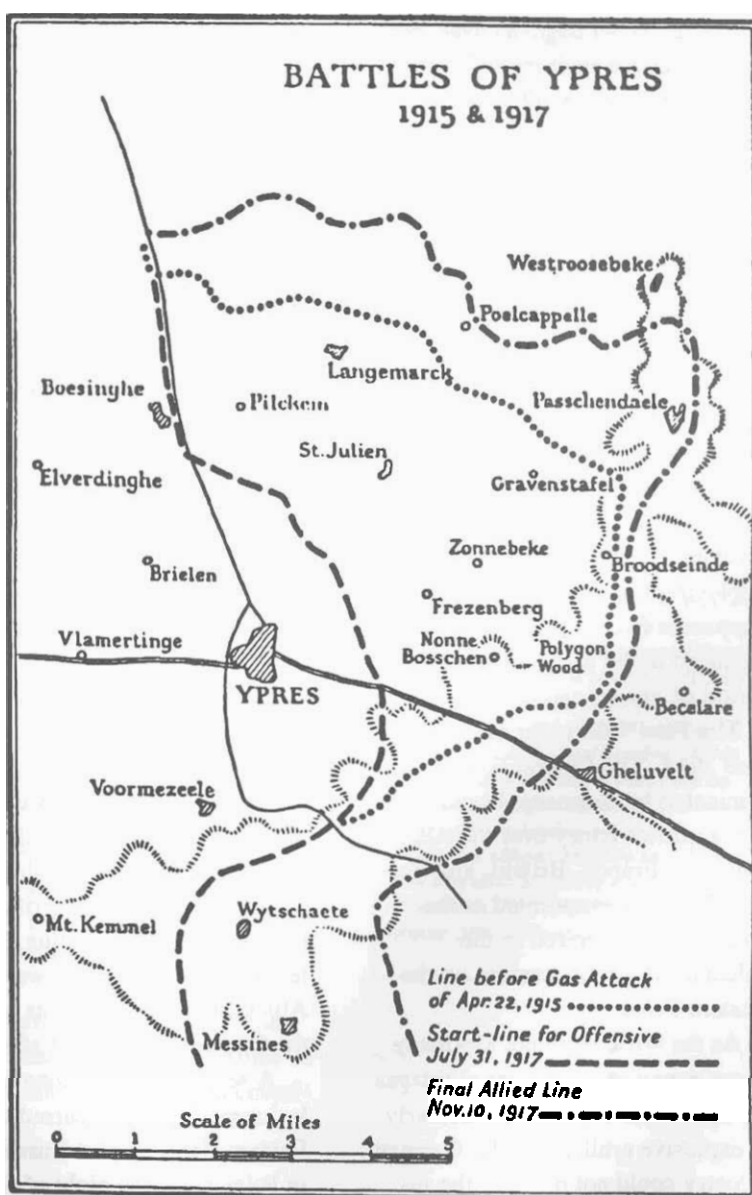
## —chemical weapons in World War I

By CPT David L. Wilcox

**T**he Twentieth Century has been a period of incredible scientific progress for mankind. During this century agricultural production rose geometrically to meet the needs of a growing population. Medical science saved the lives of millions, offering new medicines and surgical technologies. Science took man from the horse-drawn carriage to the moon within the first 70 years of this century. Science has been used as a tool to improve man's quality of life.

However, science has also become a tool of war. Nuclear, biological, and chemical weapons, tools of mass destruction, were invented. Of these three, chemical weapons are the oldest and have seen the greatest use. How were chemical weapons first conceived? Why were they developed? How were they first used? The answers to these questions can be found in the history of warfare.

Primitive chemical weapons were first conceived and used long before the birth of Christ. In 431–436 BC, the Spartans attempted to defeat the cities of Platea and Velium using toxic sulphur fumes to choke their defenders. During the Dark Ages, opposing forces employed poisonous smoke clouds. In the Nineteenth Century, the English considered plans to employ organoarsenical and phosphorous shells at the siege of



elimination of the enemy's NBC delivery systems, his C<sup>2</sup>, and logistic sustainment of such systems. Accurate, responsive, lethal, and long-range delivery systems will be required to support offensive operations. Equally long-range and accurate sensors and surveillance systems will be needed to assess the effectiveness of our attacks. In conjunction with our attack of enemy systems, we must ensure that our own combat, combat support, and combat service support units remain dispersed to decrease their vulnerability and increase their survivability. Also, our troops must be trained and equipped to both survive and operate effectively on an NBC battlefield.

### Decisive Operations

The traditional seizure of the high ground is less significant to AirLand Operations. Our forces will orient on the enemy, not the terrain. Achieving decisive results will require good information on enemy locations and dispositions, and our ability to mass fires and forces quickly and effectively.

Once these operations are set in motion, we cannot afford to have them distracted or delayed. On an NBC battlefield, this will require individual and collective protective systems that reduce degradation of our forces and their weapon systems, and an inherent ability to avoid contaminated areas by rapid reconnaissance and identification of clean routes of advance.

### Force Reconstitution

Reconstitution on an NBC battlefield to perform necessary reorganization, personnel, supply, and maintenance tasks will require NBC reconnaissance and surveil-

lance systems to locate clean areas, which are then organized to avoid the creation of lucrative targets. The use of smoke to obscure these areas and to provide deception as to target location also will be necessary. Appropriate areas for the organization and use of efficient, less logistics-dependent decontamination systems must also be available.

The above stages of AirLand Operations must be addressed in light of the doctrine, training, organization, materiel requirements, and leader development programs necessary to support the concept. Widely dispersed units on an extended battlefield will have to be more self-sufficient in terms of support and leader decisions. As Silvasy said, "...risk taking by thoughtful professionals will be the rule."<sup>10</sup>

The key to this statement obviously is "thoughtful professionals." Leaders at the lower levels will have a heavier burden to know, with confidence, areas outside their basic proponenty, one primary area being the NBC defense area. In the coming period of force reductions, it is likely that the organic chemical unit force structure also will be proportionately reduced. Thus, leaders must have the materiel resources to perform basic NBC defense tasks within their units.

To assist in the organization, training, and employment of these resources, leaders must have well-trained, highly motivated professional chemical specialists. Senior leadership must preserve the current Chemical Corps infrastructure in our nonchemical units. Our combat, combat support, and combat service support unit commanders will be even more dependent upon this level of support on the battlefield envisioned by AirLand Operations.

### NOTES

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6. MG Stephen Silvasy Jr., "AirLand Battle Future: The Tactical Battlefield," *Military Review* (February 1991):11.
7. US Department of the Army TRADOC Regulation 71-18, *Combined Arms in a Nuclear/Chemical Environment (CANE) Implementation Program*, Headquarters US Army Training and Doctrine Command, Fort Monroe, Virginia 25 May 1990.
8. US Department of the Army TRADOC Pamphlet 525-5, *AirLand Operations, Final Draft*, Headquarters, US Army Training and Doctrine Command, Fort Monroe, Virginia 28 June 1991.
9. GEN John W. Foss, "The Challenge: Superb Quality While Using Fewer Resources," *ARMY 1990-1991 Green Book* (October 1990):60.
10. Silvasy, 8.

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