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The ASC History Newsletter

This ***MONTH*** *in military history …*

1754: Washington surrendered Fort Necessity

1782: American privateers raided Nova Scotia

1798: US Marine Corps reactivated

1863: Battle of Gettysburg

1863: Confederates surrendered Vicksburg

1898: Battle of San Juan Hill

1926: Congress authorized the Distinguished Flying Cross

1942: 1st American bombing of Nazi Europe

1944: US ships bombarded Imo Jima

1950: 1st US troops arrived in Korea

1955: USAF academy opened

1960: USSR shot down US RB47

1964: Pentagon announced 5,000 more troops

1971: US troops turn over DMZ defense to Korean troops

1976: US troops leave Thailand

1988: USS Vincennes shot down an Iranian airliner

100th Anniversary of World War I:

Gas, Gas, Gas!

By the last two years of World War I, all belligerent armies relied heavily on poison gas to create confusion in or behind an enemy's lines, weaken the fighting efficiency of opposing troops, temporarily rendering areas of the front untenable, and, of course, cause casualties. By 1916, all armies incorporated poison gas into their attack plans, and in the last year of the war, chemical artillery shells formed between a quarter and a third of all artillery ammunition. With new delivery systems and deadlier gases, the use of chemicals more than doubled from 1915 to 1916 and quadrupled from 1917 to 1918.

Desperate to find a solution to the deadlock of the trenches on the Western Front, the Germans turned to poison gas, despite its use having been banned at the 1899 and 1907 Hague Conventions.

The Battle of Bolimov is Russia on January 31, 1915, was the first attempt by the Germans to employ gas on a significant scale. The Germans fired some 18,000 shells containing xylyl bromide, a type of tear gas, but the bitter cold weather prevented the gas from vaporizing. It froze and sank into the snow.

Conditions were far better on the Western Front in the Ypres sector when at about 5:30 p.m. on April 22, 1915, with the wind finally in the correct direction and following a brief artillery bombardment, Allied pilots overhead and troops of the 45th Algerian Division and 87th Territorial Division holding a section of line in the salient around Ypres spotted an advancing greenish-yellow cloud. The Germans had opened the valves of some 4,000 gas cylinders, releasing 168 tons of chlorine gas. At some points the opposing trenches were only about 100 yards apart, and the resultant cloud wiped out the two French Divisions on a four mile section of the front, killing and incapacitating the defenders or causing them to flee their positions and initiating the Second Battle of Ypres (April 22-May 25). Fortunately for the Allies, the Germans had regarded this as a mere experiment and had not brought up sufficient manpower to exploit the situation.

With their advanced prewar chemical and dye industry, the Germans, under the direction of future Nobel Prize-winning chemist Fritz Haber, led in chemical weapons throughout the war. In December 1915, the Germans introduced phosgene gas, which was eight times more lethal than chlorine. Invisible and nearly impossible to smell, phosgene (and later diphosgene) inhibited the transfer of water in the lungs. Victims could be gassed without even knowing it; within hours, a seemingly healthy man would begin to choke and vomit up fluid. It was a painful and grisly way to die.

During the Battle of Verdun in 1916, both sides employed chemical artillery shells filled with lethal gas, but it was the Germans who, in that battle, perfected their use. Gas could now be effectively delivered to a spot on the battlefield. This increased flexibility and reliability also meant that fire plans could include a combination of high-explosive, shrapnel, and gas bombardments.

Both sides quickly realized the importance of chemical weapons and most importantly the methods to mitigate the loss of soldiers. With respirators and better antigas discipline preserving most soldiers from chemical attacks, the Germans again changed the nature of the gas war by introducing mustard gas in July 1917. Mustard gas burned not only the lungs, as with conventional agents, but also the skin. Even low doses of the vapor were sufficient to cause festering blisters and temporary blindness. Here was a terror weapon that seemed to negate all that soldiers had been told up to this point of the war– that with a respirator one would be safe.

While mustard gas vapor burned and blinded, it was also a persistent compound. Unlike chlorine and phosgene that dissipated within minutes or hours depending on the weather conditions, mustard gas remained active, lying dormant in the mud, dirt, and water of the battlefield. Days or weeks later, a soldier marching through the area, especially after the sun had warmed the ground and released the still-potent vapor, could fall victim, going blind, suffering burns, or developing hacking coughs and subsequent bronchial infections. Numerous cases of mustard-gassed men infecting one another as they huddled together in their dugouts soon resulted in this insidious agent being viewed as a chemical plague.

Soldiers had to be trained to survive in the chemical environment of the Great War. Russian infantrymen, who received desultory instruction at best, were gassed to death in the tens of thousands, and a full one-fourth of all U.S. battlefield casualties came from poison gas.

Poison gas would be the only major weapons system of the Great War (including submarines, tanks, tactical airpower, and strategic bombing) that was not employed on a large scale during World War II. This came about due to a complex series of factors, primarily because all sides realized that its effects would be far more widespread and devastating and would involve civilian populations. Likewise, chemical weapons were perceived in the interwar period as little more than scientific barbarity.

Evaluation of the effectiveness of poison gas in the Great War must lead to the conclusion that most soldiers survived its use. But the Great War soldier, wearing his respirator while going in for the attack or while huddled in his trench under a chemical deluge, would never have accepted British historian Sir James Edmond's observation that gas was little more than a nuisance. It is estimated that poison gases claimed more than one million casualties during the war.

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