



DuPont – 200 Years of Service to the U.S. Government in Times of Need

- 1802 E.I. du Pont starts a business in Delaware to manufacture black powder at the urging of Thomas Jefferson who advised him of the new American nation's need of a domestic supply of high quality gun powder. Jefferson gave DuPont his first order, for the refining of some saltpeter (an ingredient in black powder).
- 1812 In the War of 1812 DuPont ignores civilian demand for its product in order to supply the Army and Navy, and in so doing sacrifices market share to competitors. DuPont powder was rushed to Lewes, 80 miles from Wilmington, to repel a British squadron invading Delaware Bay.
- 1842 DuPont powders help the U.S. achieve its objectives in the Mexican War.
- 1860 DuPont reserves the right to nullify contracts with states threatening to secede from the Union. After secession, unpaid inventories in the hands of agents in the southern states had to be written off and southern civilian markets were lost to less patriotic competitors because DuPont refused to do any business with or within the Confederacy.
- 1861 The U.S. War Department discovers that it has less than a year's supply of saltpeter, a main ingredient of gunpowder. All commercial quantities of saltpeter are imported from India through Britain. After a secret meeting in Washington, Lammot du Pont, grandson of the founder, is sent on a mission to London to corner the market ostensibly for his own company, but in fact for the government. He secures enough of the raw material to provide for U.S. needs for the rest of the war.
- 1862 DuPont develops "Mammoth Powder" with baseball-sized grains that enables the development of the first truly heavy artillery and big naval guns. During the Civil War, DuPont, is the largest supplier of munitions to the U.S. government, producing an average of one million pounds of powder per year. Admiral Samuel Francis Du Pont becomes a hero of the U.S. Navy. (Du Pont Circle in Washington is named in his honor.) Captain Henry Algernon du Pont wins the Medal of Honor at the Battle of New Market.
- 1871 United States Life Saving Service (predecessor to the U.S. Coast Guard) is established. DuPont manufactures United States Life Saving Service Powder, a special grade of black powder for the service's Lyle guns, small cannon that shot rescue lines from the beach to shipwrecks up to a 1,000 yards off shore.
- 1880s The U.S. Army and Navy learn that a new kind of "smokeless" gunpowder is being used in field exercises by European armies. U.S. Ordnance officers call upon DuPont to investigate and study this material. DuPont begins testing guncotton for the Navy and by 1893 has a smokeless gun powder for sporting use. DuPont eventually develops and becomes the sole civilian producer of smokeless powder for U.S. military use.
- 1898 At the start of the Spanish-American War, the U.S. military had not yet converted from black powder to smokeless powder, so the war is fought with brown prismatic powder, all the patents for which are owned by German companies. DuPont licenses the rights and scales up its capacity by a factor of 8. Between April and August, DuPont produces more powder for the U.S. than it did in the entire Civil War.
- 1904 DuPont dynamite is used in the construction of the Panama Canal. Meanwhile the chemistry of nitrocellulose, so important to explosives manufacture, becomes the basis for developing early plastics, films, lacquers and fibers. DuPont begins the diversification that will make it a leading industrial materials producer.

- 1914 DuPont supplies 40 percent of the smokeless powder used by the Allies in World War I.
- 1917 All of DuPont's capacity is taken to supply the Allies. The U.S. enters World War I without a single world-scale munitions plant for its own needs. DuPont undertakes the largest wartime engineering feat in U.S. history up to then and constructs a plant at Old Hickory, Tennessee, capable of producing 900,000 pounds of powder per day. Between March 1918 and the Armistice in November, DuPont completed six of the nine 100,000 pound units. It constructed a plant of 1,112 buildings and a city of 3,867 buildings to house the total 250,000 persons employed there during ten months. Seven and a half miles of railroad track were laid in thirty days and a 540 foot suspension bridge built over the Cumberland River.
- 1925 Building on its now world-class base in chemistry, DuPont begins its new age of research by looking for a synthetic rubber. Rubber had become a strategic material of vital importance to the U.S. which was the largest consumer of the world supply that came from East Asia. DuPont builds its first plant to make neoprene rubber in 1931. By 1939 every automobile and airplane made in the U.S. had neoprene parts.
- 1928 DuPont begins research to synthesize polymer materials with properties similar to natural materials. By 1930, the company has a polymer material that researchers believe can be spun into fibers.
- 1934 DuPont develops the first truly synthetic fiber, introduced to the world in 1938 as nylon.
- 1941 Both neoprene and nylon are declared strategic materials by the U.S. government. After Pearl Harbor both materials become indispensable to the U.S. war effort since their natural analogs – rubber and silk – are no longer available.
- 1942 U.S. involvement in WWII scales up. During the war DuPont will manufacture more than 4.5 billion pounds of explosives – 20 percent greater than the entire volume of explosives used by all the allies in WWI. Yet explosives accounted for less than 25 percent of the total output of DuPont during the war. Neoprene, nylon, cellophane, dyestuffs, paints and plastics made up the majority. Teflon® finds one of its early applications in the wiring of B-29 bombers late in the war. From January 1942 to August 1945, DuPont engineered 54 plants at 32 different locations for the U.S. Government.

In the early stages of the Battle of Guadalcanal, the only way Marines on the beachhead can be re-supplied is at night by fast boats dropping boxes into the water for the tide to carry in. The glue holding the boxes together dissolves in the seawater causing the contents to sink before reaching the beach. A Marine general visits DuPont and says Marines are dying and desperately need a glue that can hold the boxes together in seawater for one to two hours – and they need it by the end of the week. DuPont scientists work around the clock. They invent a new glue in one week. It holds the boxes together *four* hours.

Major General Leslie Groves asks DuPont to play a key role in the development of atomic energy in a race with Germany. DuPont, already stretched to the limit, takes on the challenge of building the Hanford Works in Washington State to produce plutonium for the atomic bomb. It was DuPont's outstanding contribution to the war effort.

- 1950 In the midst of the Cold War, DuPont begins to construct – and will operate for the next 39 years – the massive Savannah River Plant in South Carolina to manufacture weapons-grade plutonium and tritium for America's nuclear arsenal. Two massive, uniquely designed chemical separations facilities have been remotely operated and maintained without human access since they began operation.
- In Korea, U.S. troops rely on much of the same equipment used in World War II and the DuPont materials that constitute it.
- 1960s DuPont embarks on scores of new business ventures that would result in new materials that became part and parcel of American life. In Vietnam, DuPont materials are used in parachutes, ballistic nylon for flack jackets, fibers for uniforms, plastics and advanced materials for helicopters and aircraft.

- 1969 During the Space Race, virtually every U.S. launch vehicle, satellite, and manned spacecraft incorporates a plethora of DuPont materials. When Neil Armstrong steps on the surface of the moon he is wearing a space suit of 25 separate layers; 23 layers are DuPont materials.
- 1991 Though DuPont no longer makes munitions, in the Gulf War, every U.S. combat soldier wears a helmet of DuPont Kevlar®. Every aviator wears a flight suit and gloves of DuPont Nomex®. An array of DuPont materials can be found in personal equipment, medical supplies, high tech electronic gear, and military vehicles and aircraft.
- 1995 Air Force Capt. Scott O'Grady, shot down over Bosnia, finds his way on the ground using a map printed on DuPont Tyvek®.
- 2001 In the aftermath of the terrorist attacks on the World Trade Center and The Pentagon, DuPont rushes Tyvek® and Tychem® hazmat suits to Ground Zero. Kevlar® booties are sent to protect the feet of rescue dogs. DuPont hazmat teams provide on-site assistance in dealing with the CFC coolants in the Trade Center wreckage.

As it has in every crisis the nation has faced for 200 years, DuPont is ready to help again.