



**Ordnance Corps
Hall of Fame**

1976 Inductees



Major General Amos A. Fries

Major General Amos A. Fries was born in Wisconsin on March 17, 1873 and graduated from the United States Military Academy in 1898. He was instrumental as an engineer lieutenant fighting in the Philippines in 1901 under Captain (later General) John J. Pershing. General Fries organized America's first gas service as part of the American Expeditionary Force in France in 1917, and directed its activities through the 1918 campaigns. In 1919, as a Brigadier General, he headed the Chemical Warfare Service, Overseas Division. Most of that division was organized as the First Gas Regiment (originally the 30th Engineers), which conducted extensive gas, smoke, and incendiary operations in the American sectors of the Western Front in World War I. Upon activation of the permanent Chemical Warfare Service on July 1, 1920, General Fries became its first peacetime Chief, remaining in that capacity until his retirement in 1929. As one of the founding fathers of the U.S. Army Chemical Corps, General Fries was the first Chemical officer to be inducted into the Ordnance Hall of Fame.



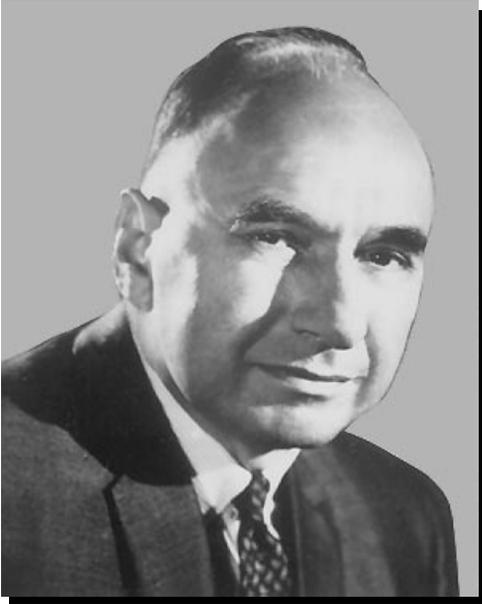
Major General Thomas J. Hayes, Jr.

Major General Thomas J. Hayes, Jr., was born in Ohio on September 18, 1888 and graduated from the United States Military Academy in 1912. He began his military career with the 4th Infantry at Fort Crook, Nebraska, in 1912. All subsequent assignments were in ordnance training, maintenance and supply, or procurement. The more significant of his many contributions were in the fields of procurement and production. As the Director of Procurement, Office of the Under Secretary of War, in 1941, he acted energetically and boldly to speed up the procurement programs during that critical period of our Nation's history. During his assignment as Chief of Industrial Service, Office Chief of Ordnance, from June 1942 until May 1945, he was responsible for the procurement and production of over \$30 billion worth of ordnance materiel to support millions of U.S. troops and to help supply our Allies. The success of the tremendous ordnance procurement program during World War II can be attributed primarily to General Hayes.



Colonel William H. Jaynes

Colonel William H. Jaynes was born in Pennsylvania on October 5, 1914 and graduated from the United States Military Academy in 1938. Colonel Jaynes was instrumental in establishing the Ordnance Replacement Training Center at Aberdeen Proving Ground in 1941 in preparation for the massive training mission of World War II. He served as its Director of Military Training. He assisted in the conversion of the Santa Anita Race Track, California, into a large Ordnance Training Center. In October 1942, he became the Director of Technical Training of that Center, which handled a peak training load in excess of 12,000 soldiers. He was responsible for the programs of instruction for 4 different small arms courses and more than 80 different automotive and tank mechanic courses. In September 1943, Colonel Jaynes assumed command of the 62d Ordnance Battalion (Ammo), which became operational in Italy three days after the Allied landings at Salerno, and which had the distinction of being the first U.S. Ammunition Battalion Headquarters to operate in the combat zone in World War II. In December 1943, he commanded the 6694th Ordnance Group, which was composed of three ordnance battalions. In August 1945, at the close of hostilities, he became Ordnance Officer of U.S. Forces in Austria. Here, he was an early contributor to the rehabilitation of war-torn Europe. Under his direction, the Setyr Automobile Factory was returned to operation, producing commercial cars and trucks. Colonel Jaynes retired from the service in 1946 but was recalled to active duty during the Korean Conflict.



Mr. C. Walton Musser

Mr. C. Walton Musser was born in Lancaster County, Pennsylvania on April 5, 1909 and served as a research advisor at Frankford Arsenal from 1941 until his resignation in 1956. He was co-inventor of the 57mm, 75mm, and 105mm recoilless rifles which were used so effectively in World War II. He was also the co-inventor of many patents in pioneering the development of various escape systems used for the ejection of personnel from military aircraft. After leaving Frankford Arsenal, he pioneered the development of the harmonic drive, which uses the controlled elastic deflection of one or more parts for the transmission, conversion, or modification of mechanical motion of machine systems. He also pioneered the development of numerous cartridge actuated devices and associated lifesaving equipment. He was the founder of elastokinesis—the field of mechanics dealing with elastic bodies—and promulgated the various laws covering its use as modifiers of force and motion. Mr. Musser has been granted over 100 patents, has lectured at educational institutions and professional societies, and has authored numerous publications.



Mr. Lavern G. Soper

Mr. Lavern G. Soper, President of National Presto Industries, Inc., a major producer of ammunition components for the Defense Department in war and in peacetime, made significant contributions to our country's national defense program. He was awarded the Outstanding Civilian Service Medal by the Department of the Army in recognition of his service to the Army during the period 1952 to 1975 as a member of National Presto. At his direction, National Presto established a new production method for the manufacture of projectiles. This new process, developed in 1953, reduced the amount of steel used in the manufacture of each artillery shell by 10 pounds, thus saving steel, time, money, and other vital national resources in times of national emergency. It is estimated that this process, known as the Hot Cup-Cold Draw Process, has saved the Government more than \$200 million in procurement costs for field artillery projectiles. Mr. Soper contributed significantly to many other Defense-related programs, among which were the redevelopment of the M19B1, 90mm steel cartridge case, and production of 2 million units, eliminating the requirement for the use of more expensive and scarce brass; development of a new type grenade for the Ordnance Department; and development and production of major components and assemblies for aircraft and aerospace vehicles.