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NEW ORLEANS NOSTALGIA

Remembering New Orleans History, Culture and Traditions

By Ned Hémard

This marks the 200th article completed for the New Orleans Bar Association on New Orleans' unique culture and interesting history. Many thanks to my readers for their many welcome comments and warm wishes.

Ned Hémard

Rocket Town

Created in the second-century BCE by the ancient Chinese, fireworks evolved into more complicated rockets. It is believed that the first rocket to make its appearance in the pages of history was a so-called fire arrow used by the Chin Tartars in 1232 AD to fight off a Mongol assault on Kai-feng-fu. Throughout the thirteenth to the eighteenth century there were reports of numerous rocket experiments around the world. In 1804, Sir William Congreve developed a black powder rocket (fired at the Battle of New Orleans) that could reach as far as 9,000 feet.

In appearance, the Congreve was much like a modern fireworks rocket (an intimidating weapon when fired in volley). But the largest were only eight inches in diameter, with a 5-1/2 foot long iron case body and a sixteen foot wooden stabilizer stick. Launching was facilitated by a large unwieldy iron firing framework that could hold several rockets simultaneously. Extremely difficult to transport and set up, it inspired awe but was wildly inaccurate.

The British Royal Arsenal had used rockets during the Second, Third and Fourth Mysore Wars in India. The British East India Company made use of these rockets as weapons. After the wars, several of these Mysore rockets were sent to the Arsenal's laboratory in England for Congreve to do the necessary research and development for his improved solid fuel rocket.

It was William Congreve's incendiary rocket that Francis Scott Key immortalized in the first stanza of the National Anthem when he wrote about "the rockets' red glare" during the siege of Fort McHenry. Used to great effect in the battle before Washington during the War of 1812 (causing the American force to flee), the Congreves were of little use

to the British against Andrew Jackson's troops at Chalmette (the last major military action where rockets were used against Americans on American soil). Two sizes of Congreves were employed during the Battle of New Orleans, 12 and 32 pounders.

The Congreve rocket was poorly guided by its wooden tail. This led another British inventor, William Hale, to invent the stickless rocket in 1846. Hale's rocket was 2-1/4 inches in diameter and roughly eighteen inches long. Angled exhaust ports imparted spin to this new missile, like a bullet leaving a gun barrel, resulting in a flatter trajectory, greater velocity and increased range. Captain John A. Dahlgren of the Washington Navy Yard purchased Hale's patent rights for $20,000, and in 1847 sent six launchers and some 2000 rockets (plus trained crews) to the U.S. Army in Mexico. The Hale rocket was used at the battles of Vera Cruz, Cerro Gordo, and Chapultepec, among others, during the Mexican War.

An article in the August 31, 1855, issue of New Orleans' *Daily Picayune* reported that some "experiments were made at the arsenal yesterday with a view to determine the merits of a rocket lately introduced by Mr. Robert Hale (son of the inventor of the rockets known by that name) over those which have been adopted in the United States service since 1847." The paper stated that "firing commenced" on the younger Hale's "improved rocket, which we understand from its construction is not liable to the erratic flight often taken by rockets."

By 1861, Hale rocket batteries were fielded to a limited extent by both the North and South in the Civil War. Never considered a replacement for conventional artillery, the Hales did prove to be useful to Northern infantry units against Confederate picket boats where the ground was too swampy to support wheeled guns. Swampy terrain had been a major problem for the wheeled British cannons at the Battle of New Orleans, as well.

Robert Hutchings Goddard (1882–1945) was an American physicist and inventor credited with creating and building the world's first liquid-fueled rocket (which he successfully launched on March 16, 1926). His eyes were always on space since first reading H. G. Wells' classic *The War of the Worlds* at age 16. He and his team launched 34 rockets between 1926 and 1941, achieving altitudes as high as 1.62 miles and speeds as high as 550 mph. The U.S. Army rebuffed Goddard, since it largely failed to grasp his rocket research's significant military applications. He had little public support and was ridiculed by the New York Times and other publications for his theories concerning spaceflight.

But the Germans *were* paying close attention and surged past him. Goddard's pace was slower than the Germans' because he did not have the resources or the backing they did. Wernher von Braun was the central figure in Nazi Germany's V-2 combat rocket development program during World War II.

An Allied attack on the Mittelwerk V-2 factory on April 10, 1945, saw about 4,500 German factory workers flee to surrounding villages. Allied forces ultimately captured the facility intact, with incomplete missiles still on the assembly line and in various states of fabrication in warehouses.

U.S. forces quickly implemented a plan called "Special Mission V-2" to transport this hardware out of the factory, because the Soviet Union had been granted jurisdiction over that area as a condition of the Yalta agreement. 341 rail cars quickly made their way from Nordhausen to Antwerp. Although the British protested that half the captured V-2s were to be turned over to them, the Americans ignored them. Sixteen Liberty ships, bearing parts for 100 V-2 rockets, finally sailed from Antwerp, bound for New Orleans. From New Orleans it was on to the White Sands Proving Grounds, New Mexico. But the important V-2 documentation hidden by Von Braun's staff in a tunnel was still unaccounted for, and without it, the Americans would have had a hard time making V-2s operational from only their boxes of parts. Fortunately, about fourteen tons of documents containing detailed evaluations of German rocketry research (from 1932 to 1945) were recovered from this tunnel on May 21, 1945. Von Braun and others of his rocket team were taken to the United States as part of the then-secret Operation Paperclip. 127 German scientists were offered a deal and all accepted.

A month after John F. Kennedy's 1961 speech before a special joint session of Congress (announcing the worthy and ambitious goal of sending an American safely to the Moon before the end of the decade), Chrysler Corporation brought space scientist von Braun to New Orleans in June, 1961. It was to view the facility where the huge *Saturn V* boosters could be built. They were looking at one of biggest assembly buildings ever constructed. The Michoud plant had 1.8 million square feet under one roof, over 40 square acres, all enclosed and air-conditioned. NASA acquired the Michoud property, and Americans walked on the Moon before the 60s closed.

It was just a little over a century and a half since rudimentary rockets sailed noisily and clumsily over the Chalmette battlefield.

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