



Volume 59

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Centennial

Introduction

By: Kenneth H. Nelson, P.E.

July 8th, 2016 marks the 100th anniversary of our founder's birth. In the years just prior to his passing away in 2005, Waldemar wrote an autobiographical history of the company. We celebrate the centennial anniversary of his birth by publishing here the introduction to that history, and in subsequent issues we will publish other excerpts written by him. We hope you will enjoy this glimpse into the man who is responsible for the company that has made all our livelihoods possible. (Note: He wrote his autobiography in the third person.)

His Story / Our History:

Waldemar Stanley Nelson was born on July 8th, 1916 in his parents' home on 7319 Panola Street in New Orleans, Louisiana. His father, Bernard Stanley Nelson, was an engineer who had attended Tulane University of Louisiana, graduating in 1907 with a degree in mechanical engineering. Waldemar's mother, Mary Lockett Hutson Nelson, was also an engineer, who in 1903 with her twin sister, Sophie, completed the course in civil engineering at Texas A. & M. University. Their father, Dr. Charles Woodward Hutson, was Professor of History and Languages there, and the two sisters were allowed to attend as courtesy students, and thus, were not awarded diplomas.



Waldemar S. Nelson, P.E.

A picture of Mary and Sophie, in their cadet uniforms, hung on the wall of the alumni house, and years after they had completed their studies, the "Aggie" Alumni Association awarded them certificates in 2002 confirming their education.

With this heritage, it is easy to understand how Waldemar Nelson developed such an early interest in engineering. Family discussions included engineering topics, and many picnics and outings were held at pumping stations or drainage projects under construction. Bernard had a workshop in the basement of their

home which included an overhead line shaft, belt-driven, screw-cutting engine lathe, a grinder, a forge, a table saw, a band saw, and other tools. The shop was located directly beneath Waldemar's bedroom, and as a child, he was lulled to sleep by the rumble of machinery below.

Five of Waldemar's uncles were engineers. Lawrence Kitchener Nelson, a graduate of The Tulane University of Louisiana, was a mechanical engineer who performed much pioneer work on air conditioning for office buildings, department stores, and plants such as textile mills. Henry Lockett Nelson, a graduate of Texas A. & M. University, was Chief Engineer for A. M. Lockett & Company, Limited. Miles Brewton Hutson was an electrical engineer and was employed by the local power company. Later he was the electrical genius for the Industrial Electric Company, a motor repair shop which rebuilt equipment for speeds, voltages and frequencies other than that for which they had been manufactured.

Arthur Cary Hutson, a civil engineer, was employed by the National Board of Fire Underwriters in New York, and on visits to New Orleans he would discuss problems and policies concerning the testing and rating of equipment, fire protection, and alarm systems. William Ferguson Hutson, a civil engineer, worked for the Texas



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Mary Hutson Circa 1913 (Waldemar's Mother)

Department of Highways, and on visits would talk about his early experiences surveying railroads from Louisiana to Texas and down to Galveston Island. He would describe the problems of constructing highways in the difficult, expansive, slick-sided clay soils in Texas and the policy of the State of Texas which required that abandoned road rights-of-way be restored to their original pristine condition as a range for cattle. Miles, Arthur and William Hutson were all graduates of Texas A. & M. University.

Waldemar had a sixth uncle, Albert Hutson, who was an officer in the United States Navy. He was also a graduate of Texas A. & M. University, and had taken engineering courses, but he was not an engineer. When his vessel would dock at the Port of New Orleans for Mardi Gras and other holiday visits, he would regale his young nephew with accounts of seaplanes on reconnaissance missions being catapulted from the decks of battleships, later to be recovered at sea by steam winches on the vessels.

With an interest in engineering nurtured by all of this family background, Waldemar attended New Orleans public schools which offered an excellent, well-rounded education. He began his matriculation at R. M. Lusher Elementary School in the

Carrollton area, continuing through the eighth grade with instruction in reading, writing, arithmetic, history, geography, health habits, civics, and manual training in woodworking. The Carrollton area, at that time, was a farming and service community with truck gardens and cattle pens on vacant lots. There was a mule yard several blocks away from the school, and Waldemar could hear the ring of the blacksmith's hammer on anvil steel as he ate his lunch from a paper bag.

High schools at that time were overcrowded, and the Orleans Parish School Board was having difficulty in accommodating all of its students. As a result, although Waldemar lived in the Carrollton area of uptown New Orleans, he was sent to the Warren Easton Annex which was located downtown at Esplanade Avenue and Bayou Road. He attended this school for one semester, commuting there by streetcar and obtaining a transfer at Canal Street. For the next semester and the following year, Waldemar attended the Warren Easton Boys' High School at its present location on Canal Street. For the remaining year and a half, forced to switch schools again by the Orleans School Board, he attended the newly completed Alcee Fortier High School located uptown on Freret Street. There he graduated, completing his high school education in three years.

The new Fortier High School had excellent physics and chemistry labo-

ratories equipped with college-quality instruments, and Waldemar and his friends reveled in experimentation, building a meteorological observatory on the roof of the school to house a barometer and other weather instruments provided by the physics lab. While at Fortier, Waldemar received instruction in English, Latin, public speaking, which was then called expression, algebra, plane and solid geometry, geography, history, civics, mechanical drawing, physics and chemistry. It was a superb curriculum strongly anchored in scientific subjects, leaving him well-equipped for a career in engineering.

While attending R. M. Lusher Elementary School, Waldemar became friends with John Gilchrist Bedell. John's father was Captain Victor J. Bedell, an officer in the United States Army Reserve and a veteran of World War I. Captain Bedell, a civil engineer, was born on August 23rd, 1884 in Woodstock, New Brunswick, Canada. Following graduation from the University of New Brunswick in 1905, he moved to the United States where he became an American citizen. He had been with the Southern Railway System in Houston, Texas and had moved to New Orleans to become Chief Engineer for the New Orleans Public Belt Railroad Commission which serves the Port of New Orleans.

John was also attending Lusher, and he, born on December 4th, 1915,

was about the same age as Waldemar. The two boys played together in the afternoons after school, and when they were twelve years old, both John and Waldemar joined Boy Scout Troop No. 22. John's father was Scoutmaster of the troop, and because of his experience and active duty in the military, he ran an active and iron-disciplined scout troop requiring close-order drill at meetings and had a policy of making an overnight hike and camping trip every month, and in any weather. Boy Scout Troop No. 22 met weekly on the grounds at Lusher School, and it happened that another scout troop also met there at the same time. It was here that Waldemar and John became friends with a young, skinny boy from Natchez, Mississippi named Richerson Devereux Rhodes. (Editor's Note: *Rhodes would later become the first draftsman employed by the company.*)

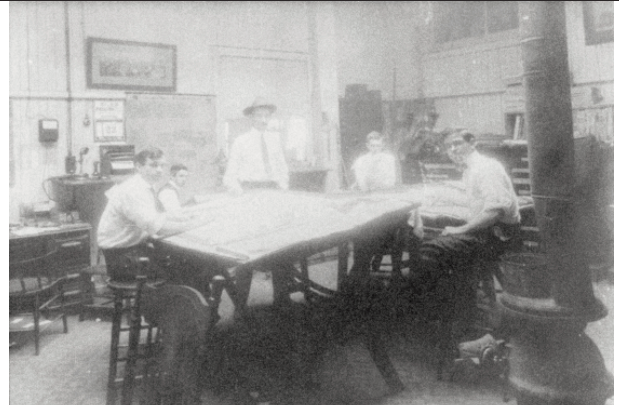
The State of Louisiana was building a bridge across the Mississippi River in Jefferson Parish, and Captain Bedell, as the senior engineering representative for the Public Belt, was overseeing construction aspects of the railroad portion of the project. The bridge, later named after Governor Huey P. Long, was the first combined railroad and highway bridge to span the Mississippi River in Louisiana. Many of the camping trips by Boy Scout Troop No. 22 involved hiking up the old river road from New Orleans, past the city's water intake structure and pumping station, and on to a camp site on the river bature from which the bridge construction could be readily observed. There Captain Bedell would explain the operations underway. An adequate supply of potable water was always a problem, and at the request of Captain Bedell, a construction tug boat would often deliver drinking water to the camp site.

After completing his elementary education in New Orleans, John Bedell attended high school at the Gulf Coast Military Academy in Pass Christian, Mississippi where he became attracted to a military career. On graduating from the academy, he went on to the Georgia Institute of Technology enrolling in the College

of Civil Engineering. John later transferred to Louisiana State University and Agricultural and Mechanical College in Baton Rouge, Louisiana where he continued in the civil engineering curriculum and enrolled in the United States Army Reserve Officers' Training Corps. As the involvement of the United States in World War II became imminent, he left the university and was commissioned an army officer. Discovery of a persistent sinus problem during a routine physical examination, however, caused his discharge from the service, and to his great disappointment, he returned to civilian life. Later, he completed his engineering education, and taking the state board examination, became a registered professional civil engineer.

Meanwhile, in 1932 Waldemar Nelson, following in his father's footsteps, attended Tulane University where he enrolled in mechanical engineering. Dr. Douglas Anderson, Chairman of the College of Engineering at Tulane, believed that every mechanical turbine was connected to an electric generator, and every electric motor was connected to a pump or other mechanical device. If the engineer wasn't familiar with both ends of the machine, Dean Anderson surmised, he was in trouble at the outset. Mechanical and electrical engineering, therefore, were taught as one course at Tulane, and the student was required, perforce, to take the combined curricula. Waldemar also took courses in business law and contracts and specifications, and although surveying was not required by the College of Engineering, he attended Tulane's summer survey camp for civil engineering students at Gurley, Louisiana. These courses were very helpful to him early in his career and ensuing professional practice.

Graduating in June of 1936, a month before his twentieth birthday, Waldemar went to work for A. M.

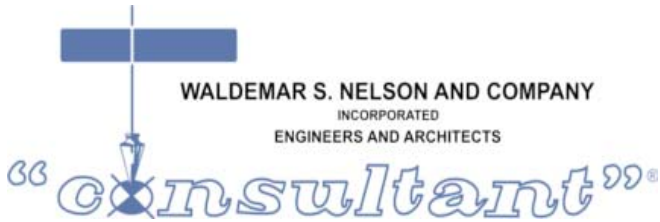


Bernard Stanley Nelson (standing) - Circa 1913 (Waldemar's Father)

Lockett & Company, Limited of New Orleans. The project was in Montezuma, Indiana, and as a field engineer, Waldemar provided resident engineering services for a new gas compressor station on the first pipeline to transport natural gas from Louisiana to Detroit, Michigan. Completing this assignment in late fall, his next task involved the relocation of a power plant for sulphur mining from Delcambre, Louisiana to Brazoria, Texas. Upon completion of this project, he remained in Delcambre as an engineer for the Jefferson Lake Sulphur Company where he learned the practical side of sulphur mining by designing and providing resident engineering services for additions to their sulphur mine production facilities.

Returning to New Orleans in 1939, Waldemar Nelson worked briefly as a field engineer and surveyor for the New Orleans Public Belt Railroad handling projects on the railway/highway grade separation program just being started. He then opened his own engineering practice. Early projects included resident engineering assignments on four drainage pumping stations under construction from Buras to Port Sulphur in Plaquemines Parish; the extension of an electrical distribution system through the same area; the expansion of a power plant at Buras; and the installation of a heating system for St. Joseph's Abbey in Covington, Louisiana.

In subsequent issues we will publish excerpts from the rest of Waldemar's autobiography. His career spanned decades and many record-setting projects.



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Cliff and Kathy Snow

Clifton A Snow, Jr., P.E., a Vice President in the electrical engineering department in New Orleans retired July 15, 2016 after nearly 37 years with the Company.

We thank him for his many contributions over the years and wish him all the best in his retirement!

Engineering News Record (ENR) Rankings For 2016

(Based on 2015 Revenue)

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- #4 Offshore and Underwater Facilities
- #30 Petroleum
- #7 Mining
- #168 Overall

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