Hi! I am Jack Cunningham. I am a retired professor of electrical engineering at Yale. I am now a Docent with the Friends of the Grove Street Cemetery. This is the second of several tapes that will guide you to grave sites of some of the scientists and engineers buried in the cemetery. This tape deals primarily with grave sites along Locust Avenue, but includes other nearby sites as well. The streets in the cemetery are all named for trees and are identified by signs.

We begin, standing on Hawthorn Path just inside the gate opening off Grove Street.

We are now going to walk westward along Hawthorn Path, until we reach the second street branching northward, to the right, which is Laurel Avenue. At frequent intervals along the edges of the streets small metal markers are placed in the ground carrying numbers to identify the
locations. These markers are often obscured by dirt or leaves, and may be hard to find. We are going to Number 21 Laurel Avenue, the site for the Ritter family. It is surrounded by a fence elaborately carved of brownstone, and the John Ritter grave is marked by a tall rectangular brownstone column.

**NUMBER 21 LAUREL AVENUE** is the site for John Ritter (1750–1802). Ritter was the first of a family of stone cutters who worked with brownstone, a sandstone that came from a quarry in Fair Haven. Brownstone is relatively easy to work with, but tends to disintegrate over time. This grave site is an example of the elaborate stone cutting they were able to do.

We are now going to walk northward along Laurel Avenue until we reach its intersection with Myrtle Path. Here we turn westward, to the left, and go to the next cross street, which is Locust Avenue. Here we turn northward, to the right, and stop at the corner, Number 50C, which is the site for Elias Loomis. It is marked by a tall rectangular column of pink granite.

**NUMBER 50C LOCUST AVENUE** is the site for Elias Loomis (1811–1889), who was admitted to Yale College at the age of 14. After starting in the ministry, he returned to Yale to study Latin, mathematics, and natural philosophy. He was interested in the magnetism of the earth and at one time carried out observations with Alexander Twining on the altitudes of shooting stars. He computed the orbit of Halley’s Comet.

He was away from Yale at Western Reserve College, University of the City of New York, and Princeton, for twenty-four years, returning to New Haven in 1860. He
published papers in Silliman’s American Journal of Science on the aurora and on meteorology. During the years, 1859–61, he published a series of papers on “Contributions to Meteorology,” twenty-three in all. He was one of a number of people trying to put weather forecasting on a scientific basis.

He wrote a variety of textbooks on scientific topics, and earned a comfortable living thereby. His books were translated into Chinese and Arabic, making him widely known in the Orient. He was a member of the National Academy of Sciences. In his will he left $300,000 to Yale, the largest single gift received up to that time.

We now move slightly north to the site for Othniel Marsh, still at Number 50C. His grave is marked by a large rectangular block of pink granite.

Number 50C Locust Avenue is the site for Othniel Charles Marsh (1831–1899). Marsh was a graduate of Yale College and of the Yale Scientific School, which preceded the Sheffield Scientific School. He had become interested in looking for fossils on field trips he took during vacations. In 1866 he was appointed professor in paleontology at Yale, the first such appointment in this country. He made many expeditions to the West, including Nebraska, Colorado, Wyoming, Utah, and California, where he collected a wide variety of vertebrate fossils. He put the collection and preparation of specimens on a truly scientific basis. This led to museum displays of entire skeletons rather than isolated bones, as had often been the case previously. He accumulated so much material that he could not find time to study all of it and publish about it. It is said that there are still unopened boxes of material Marsh collected. An uncle, George Peabody whose name is attached to the Yale
museum, provided much of the necessary funds for his work. Marsh was vertebrate paleontologist for the U. S. Geological Survey and a member of the National Academy of Sciences.

Marsh never married but lived the life of a wealthy bachelor in a fine house on Prospect Street in New Haven. The house is now used by the forestry school and is known as Marsh Hall. The grounds associated with it form the Marsh Botanical Garden.

We again move slightly north to the site for Alexander Twining, still at Number 50C. His grave is marked by a large rectangular block of gray granite.

Number 50C Locust Avenue is the site for Alexander Catlin Twining (1801–1884). Twining was a graduate of Yale and later attended the U. S. Military Academy where he learned astronomy and surveying. He was briefly a member of the Yale faculty, but was better known for his work as a surveyor. He made the initial surveys laying out the routes to be followed by four of the railroads that diverged from New Haven. These included the lines to Hartford, to New York, and to New London, as well as the one which replaced the Farmington Canal leading to central Massachusetts. A short distance to the west he surveyed the railroad from Norwalk to Danbury.

Twining also helped lay out a central water supply system for New Haven at a time when households depended solely upon wells. He invented one of the first machines for making ice artificially.

We again move slightly north to the site for Arthur Twining Hadley, still at Number 50C. His gravestone is a tall slender
granite column, topped with a Celtic cross, all partially hidden by tree branches.

Number 50C Locust Avenue is the site for Arthur Twining Hadley (1856 –1930). Hadley was the first president of Yale who was not a minister. His first Yale appointment was in political economy and his undergraduate course in that subject was the most popular in the college. Students found his lecturing style that of a typical absent minded professor. A story was told of his once stepping into a wastebasket during class, and continuing to lecture as he tried unsuccessfully to extricate himself. He became president of Yale at the time of the observance of its bicentennial. He was recognized as an expert in both economics and railroads. He wrote a book on railroad transportation that became a classic.

Some years after his retirement, he and his wife went on a world cruise, visiting Europe, India, and China. As the ship was approaching Japan, Hadley contracted pneumonia and died on shipboard. According to the story, the Japanese were asked to prepare the body for return and burial in New Haven. Just before burial, the Yale Secretary thought it advisable to be sure the body was actually Hadley’s. When the coffin was opened, there was Hadley clothed in a yellow Japanese kimono with a samurai sword placed alongside.

We again move north to Number 51 Locust Avenue, which is the plot for the Gibbs family. Both father and son were named Josiah Willard Gibbs. The father is marked by a rectangular granite column, while his son is marked by a large rectangular block of gray granite.

**NUMBER 51 LOCUST AVENUE** is the site for Josiah Willard Gibbs, Sr. (1790 –1861). He was a professor in the Divinity School and a language expert. He become involved
in the 1839 episode of the Amistad affair, which is a part of New Haven lore. It is the subject of a movie released in 1997, as well as several books.

The Amistad was a ship carrying some fifty-three members of the Mendi tribe from Sierra Leone in Africa, ultimately to be sold into slavery. After the ship left Havana, the Mendi were able to escape their bonds and take over the ship. Most of the Spanish crew then left the ship, leaving only a remnant to keep it sailing. After wandering about the North Atlantic, the ship finally arrived in Connecticut and the Mendi were brought to New Haven. No one could communicate with them. Gibbs was brought in because of his language expertise. He was able to make out a few words and, using these as a basis, went to the New York City waterfront and located an African sailor who could understand the language. The outcome was that the Mendi were ultimately released and allowed to return home. The episode was important in the abolition movement.

Number 51 Locust Avenue is also the site for Josiah Willard Gibbs, Jr. (1839–1903). The younger Gibbs in 1863 received from Yale the Ph.D. degree, which was the fifth such degree given in this country, and the first in engineering. His dissertation dealt with the very practical topic of the design of teeth for spur gears. Soon afterward, he was granted a patent on a kind of mechanical brake for cars of a railroad train, and wrote a paper on the design of an unusually sensitive governor to control the speed of steam engines. He then went to Europe for further study, ultimately returning to spend his career as a Yale faculty member in mathematical physics. He never married but lived quietly with his sisters in a house near the present home of the master of Berkeley College, where a plaque in the wall indicates the site. Gibbs is often described as
the preeminent American scientist of the 1800s. He did important work in the fields of thermodynamics, vector analysis, and statistical mechanics, and was a member of National Academy of Sciences.

Gibbs was modest to the extreme. Lynde Wheeler recalls that in 1896 when he was taking a course in dynamics and thermodynamics under Gibbs, the students met one morning as usual for the lecture. Gibbs did not appear, and the janitor had to explain that he was away at Princeton University receiving an honorary L.L.D. degree. The next day Gibbs was back in class, but made no reference to where he had been the day before. Wheeler goes on to say: “To the best of my knowledge Gibbs never gave out a notice of any of the honors he received. In fact I believe that most of them became known to the majority of his colleagues only when they were listed in his obituary notices.”

We again move slightly north to Number 55 Locust Avenue, which is the family plot for Joseph Sheffield. It is surrounded by an iron fence and has a small mausoleum for the St. John family. The graves of Sheffield and his wife, who was a St. John, are marked by a large rectangular stone sarcophagus.

**NUMBER 55 LOCUST AVENUE** is the site for Joseph Earl Sheffield (1793–1882). Sheffield was born in Fairfield County, but moved south as a young man and entered the cotton trade. After making a small fortune there, he returned to New Haven and lived on Hillhouse Avenue in a house located almost directly across from St. Mary’s Church, where the addition to Dunham Laboratory now stands. This house was designed and first occupied by Ithiel Town and was later modified by Henry Austin.
Among other undertakings, Sheffield became involved with the Farmington Canal running from New Haven into Massachusetts. The canal passed just north of the Grove Street Cemetery, and adjacent streets are still called Canal Street and Lock Street. The canal was later replaced with a railroad, following essentially the same route. Sheffield was connected with this railroad, and for a time the railroad terminated where St. Mary’s Church now stands, just across from Sheffield’s house. Later, Sheffield was associated with development of railroads in the Middle West.

After a school for science was started at Yale in 1846, and engineering was added in 1852, Sheffield became interested. In due time, he gave to Yale a considerable sum of money and several buildings, and Yale responded by naming the school for him as the Sheffield Scientific School. While the school effectively disappeared following World War II, the name Sheffield continues at Yale today as the name of a building and with the periodic awarding of the Sheffield Medal to worthy individuals in science and engineering.

Incidentally, while the Farmington Canal, and its succeeding railroad, are long gone, a part of its right-of-way in Cheshire and Hamden has been converted into a hiking and biking path, and there is serious talk of continuing this pathway to the New Haven harbor.

We are now going to walk northward along Locust Avenue, until it ends at Ivy Path. We turn westward, to the left, and walk to the third street intersecting from the left, which is Sycamore Avenue. We turn southward, to the left, and walk to Number 46 Sycamore Avenue, which is the site for Charles Goodyear. It is surrounded by a low stone wall. The grave is marked by a large rectangular block of gray stone.
NUMBER 46 SYCAMORE AVENUE is the site for Charles Goodyear (1800–1860). Goodyear is a story of constant frustration. His father, who had invented Goodyear’s Patented Spring Steel Hay and Manure Fork, ran a hardware business. The son joined the business, but before long the business failed because too much credit had been extended to the customers. For the next thirty years, Charles was in and out of prison for his inability to pay his debts.

In 1834 he saw an inflated rubber life preserver in a shop window in New York, and was fascinated by it. At that time, the available form of rubber would become sticky, melting and decomposing in hot weather. Goodyear determined to find a way to overcome these bad properties. He tried mixing many sorts of chemicals with the rubber. At one time he made himself a suit of clothes and a pair of shoes with one of his products.

After five years, he was trying combining sulfur with raw rubber, and accidentally dropped a lump of the mixture on a hot stove. To his amazement, the resulting heated mixture was no longer sticky. He worked five more years to learn how to make the best product, one that would not melt in summer nor freeze in winter. His first patent on the process, which he called “vulcanization,” was issued in 1844. He had spent about $50,000, all borrowed and never repaid. Somewhat later, Daniel Webster defended Goodyear in a patent case, and it was said that Webster’s legal fee was a larger sum than anything Goodyear himself ever made from his work.

In 1853, Goodyear wrote a book about his experiences. He had the book bound in rubber, with a few copies of the book having pages printed on rubber. He died with debts of $200,000, though this might not be inferred from the nature of his grave site.
We move slightly south to Number 48 Sycamore Avenue, which is the site for Chauncey Jerome. Note that here Number 48 is south of Number 46, contrary to what might be expected. The grave of Jerome is marked by a gray stone obelisk.

**NUMBER 48 SYCAMORE AVENUE** is the site for Chauncey Jerome (1793–1868). Jerome was the son of a blacksmith in very poor circumstances. He was taught how to make nails at age 9. After his father died when he was 11, he had to work for neighbors as a carpenter. During the winter months he made dials for grandfather clocks. After serving in the War of 1812, he returned to work for clock maker Eli Terry. Soon he was able to start his own company, first assembling clocks from parts made by others, and later making his own parts. His “bronze looking-glass clock” became a popular item. By 1837, his company was making more clocks than any other in Connecticut.

Jerome invented a brass clock movement that would run for one day, and could be made more cheaply than clocks with wood movements. This was a major achievement. He moved to New Haven and started what became a very successful Jerome Clock Company. He had one line of clocks that sold wholesale for seventy-five cents each. His factory was so mechanized that in one day three men could make all the wheels needed for 500 clock movements. In 1855 his company attempted to buy a Bridgeport clock company controlled by P. T. Barnum. This led to litigation, with the result that the Jerome company was forced into bankruptcy. All this occurred at the time he was mayor of New Haven. The final outcome was that he spent the last decade of his life in relative obscurity. He admitted that he was a much better inventor than business man.
The New Haven Clock Company, an outgrowth of the Jerome company, shortly after World War I became the largest clock company in Connecticut and one of the largest in the world. It, too, was forced to close soon after World War II.

We now reverse our steps and return to the north end of Sycamore Avenue, where it meets Ivy Path. We turn westward, to the left, and go to the end, where we turn southward, to the left, on Willow Avenue. We go to Number 4, which is the site for Hubert Newton. His grave is marked by an upright slab of gray stone, partially hidden by a fir tree, near the west wall of the cemetery.

**NUMBER 4 WILLOW AVENUE** is the site for Hubert Anson Newton (1830–1896). Only shortly after graduating from Yale, at the age of 23, Newton was put in charge of the mathematics department. After a year in Paris, he returned to Yale with a strong interest in astronomy. He was especially interested in meteors, and published an elaborate paper, “On Shooting Stars,” in Silliman’s American Journal of Science. He also wrote about comets, the gyroscope, and transcendental functions. Despite his scholarly nature, he served briefly as an alderman in New Haven.

His influence was more the result of his publications and personal efforts, and less his own individual research. One of his interests was the metric system of measurement. He prepared a paper advocating its adoption that was published by the National Bureau of Standards. He wrote articles for the Encyclopedia Britannica and for Webster’s International Dictionary. He was a member of the National Academy of Sciences.
As you return to the main gate, you could detour slightly to locate the grave of A. Bartlett Giamatti, president of Yale and baseball commissioner. It is located well west of Number 9 Sycamore Avenue, south of Myrtle Path. It is a polished black granite upright slab not far from the west wall of the cemetery.

This completes the second tour through a part of the cemetery.