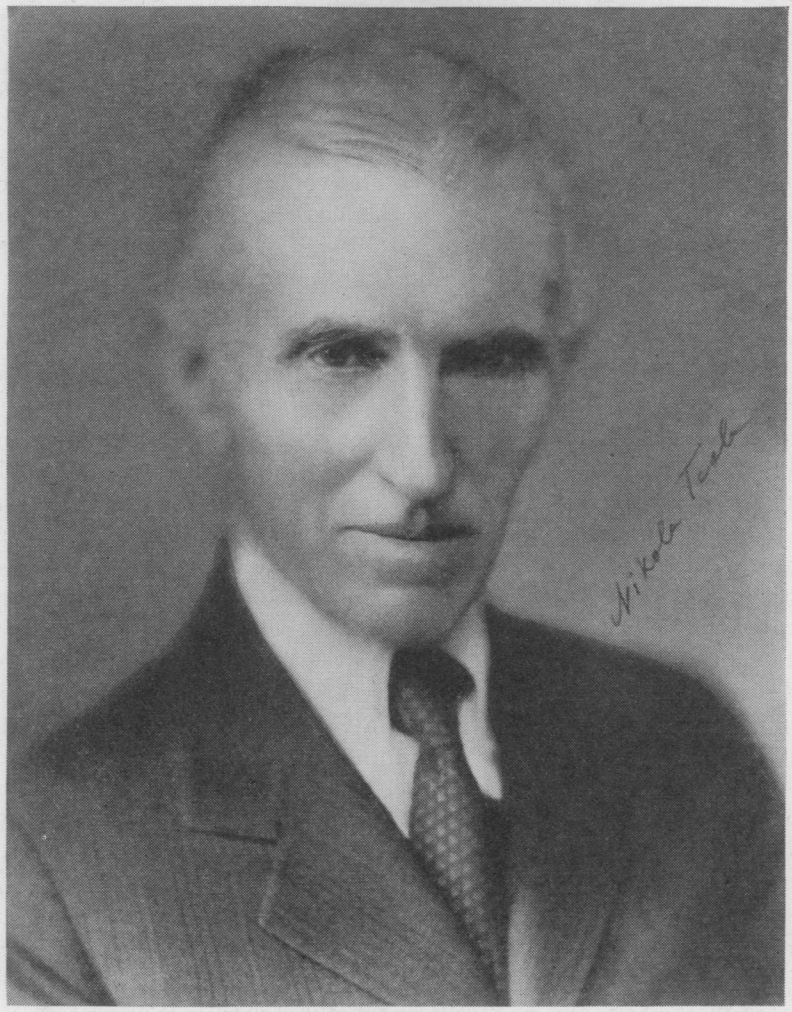

Atlas Photos

Nikola Tesla
1857-1943

An engineering career of unique and unconventional nature was brought to an end by the death of Nikola Tesla in New York on January 7, 1943, at the age of 86. Some men pursue the even tenor of accustomed ways. Others of greater originality or enterprise live more intensely and often invade the world of imagination. These are the accepted types of research workers, inventors, and advanced development engineers. But Tesla was not found among either of these types of men. He was an example of a still rarer genus—those who consistently live in a land of brilliant concepts, idealized dreams, and aspirations so lofty as to be almost foredoomed.

The earlier stages of his career were indeed of a more recognizable and usual type. In 1888 he invented the induction motor. This basic step in utilization of alternating-current power would, in itself, have been a solid foundation of his engineering fame. Within a few years later he had devised the specialized high-frequency high-voltage transformer which bears his name. This ingenious application of electrical laws which were far from generally understood in those days would as well have been a claim to highly favorable recognition.

At this stage of his career, Tesla cast off from the safe harbors of engineering thought and embarked bravely on an ocean of which each wave was a novel concept and each horizon a startling dream. In the generation starting in 1890, he tackled, among many other problems, that of the transmission of power without the use of the usual conductors. For such conductors, Tesla with characteristic audacity dared to plan to use nothing less than our terrestrial globe. He aimed to start at one point on this sphere electrical oscillations of superpotency and by means of them to create standing-wave patterns all over the surface of the earth, withdrawing energy as desired at the antinodes of potential. This theory of the transmission of radio-frequency energy is at variance with that now accepted—and Tesla was never able to bring his plans to fruition. But if he failed in practice in these attempts, none can deny that he aimed spaciously and nobly.

Two of his books were published shortly before and after 1900. These dealt with "The Inventions, Researches, and Writings of Nikola Tesla" and "Experiments with Alternating Currents of High Potential and High Frequency." They were indeed remarkable revelations of the mental processes and intuitive scope of their writer. In them he accurately described complex phenomena which in some instances were not fully understood for many years. And in one of them he envisioned that day when radio communication would truly make all the world one neighborhood. He foresaw the time when a man might selectively summon his friend by a personal radio transmitter-receiver. And from the depths of a mine, the top of a mountain, or the vast reaches of an ocean, he would hear the voice of him whom he called. And, added Tesla if he did not hear an answer, he would know well that his friend was dead!

Thus Tesla was a catalyst in the realm of technology, a daring originator, and a dreamer on the grand scale. His passing seems in a sense the end of an epoch.