

The Genius of Nikola Tesla

by Stella L. Jatras

Just as we acknowledge the greatness of Thomas Edison ("The Man Who Lit Up the World" by William Hoar, in *THE NEW AMERICAN*'s June 30th issue), we must also acknowledge the genius of Nikola Tesla.

As Margaret Cheney and Robert Uth write in their book *Tesla, Master of Lightning*, "This is the story of a genius — the enigmatic Nikola Tesla (1856-1943) — and his vast contribution to science. While Thomas Edison was thrilling engineers with the development of the DC (direct current) motor, Tesla had already devised the far superior AC (alternating current) model, which quickly became the industry standard."

Mr. Hoar mentions Edison's experimentation with AC by executing stray cats and dogs to prove how unsafe AC was, without mentioning that the inventor of the revolutionary alternating current was Nikola Tesla. Hoar writes, "As late as 1903, Mr. Edison complained about what he considered undue attention paid to alternating current." Cheney and Uth further write, "Edison knew little of alternating current, chose to believe it the work of the devil, and did not care to learn more about it."

AC was but one of many Tesla innovations. An August 28, 1984 *New York Times* article, entitled "Tesla, A Bizarre Genius," states: "The world of science is belatedly recognizing the genius of one of its most important, eccentric, and enigmatic inventors, Nikola Tesla. A century after he arrived penniless on the docks of New York City, Tesla is receiving credit for brilliant achievements that outdid those of his contemporaries, Edison and Marconi. And more than forty years after the recluse died in a Manhattan hotel room ... he is being elevated to the pantheon of the world's greatest inventors. It was Nikola Tesla, not Marconi, who invented the first radio; it was Tesla, not Edison, who devised the system of electric power distribution now used throughout the world. It was Tesla who invented the polyphase electric motor, the bladeless steam turbine, and the radio-guided torpedo. Some scientists say it was Tesla who conceived ideas for a 'Star Wars' type of military shield in space."

Cheney and Uth write, "Nikola Tesla, immigrant, arrived in New York in 1884 with a letter of introduction to Thomas Edison and very little else." Upon meeting Edison, Tesla recalled in 1919, "When I saw this wonderful man, who had had no training at all, no advantages, and who did it all himself, and saw the great results by virtue of his industry and application — you see, I had studied a dozen languages ... and had spent the best years of my life ruminating through libraries ... I thought to myself what a terrible thing it was to have wasted my life on these use-



less things, and if I had only come to America right then and there and devoted all of my brain power and inventiveness to my work, what could I have not done?"

It was reported that Thomas Edison felt cheated on several occasions when he did not receive compensation for his work; however, he taught Tesla a hard lesson when Edison had promised the immigrant \$50,000 if he succeeded in a certain electrical project. "When he [Tesla] asked to be paid, however, Edison seemed astonished," recalled a 1938 biography of Tesla. "He explained that the offer of \$50,000

had been made in jest, saying, 'When you become a full-fledged American you will appreciate an American joke.'" In shock, Tesla threatened to resign. Edison countered by offering him a \$10 raise, bringing his salary up to \$28 per week, and warned that if he chose to leave, he would have difficulty finding another engineering job in such hard times. Tesla thanked him icily and declared that he would rather take his chances on the streets. Unable to find employment, the proud immigrant worked for many months at the most arduous hand labor. While digging ditches in the New York streets, he found little comfort in

burying electric lines for Edison's DC system. Word quickly circulated among the rough-and-ready society of industrialists, engineers, and Wall Street traders that a foreigner of unusual talent was among them. Tesla was soon approached by investors who asked him to design improved arc lighting for the hazardous streets and factories. Although this was not the opportunity he had hoped for, the group was willing to finance a Tesla Electric Light Company at Rahway, New Jersey, with a Manhattan Branch office, in April 1887.

Tesla, the son of a Serbian Orthodox priest, was born in a Yugoslav territory called Krajina during the time of the Austro-Hungarian Empire. He became the inventor of most of the fundamental radio devices. In 1943, a U.S. Supreme Court decision ruled that Tesla especially, and a few others as well, had anticipated all the features of the American Marconi radio patent of 1904 and, by implication, the preceding British patent of 1896. Nikola Tesla, who had lived in America for the better part of his long life and was a naturalized American citizen, died in New York on Serbian Christmas, January 7, 1943. Together, both Tesla and Edison have given us a brighter world. ■

Though Thomas Edison is usually associated with the development of electricity, the genius of Serbian immigrant Nikola Tesla also helped to give us a brighter world.