



Heinrich Rudolf Hertz

1857-1894

The way for the development of radio, television, and radar was opened by the German physicist Heinrich Rudolf Hertz with his discovery in 1886 – 1888 of electromagnetic waves. His work confirmed the 1864 theory of the great English physicist James Clerk Maxwell that such waves existed.

Hertz was born in Hamburg, the oldest of five children in a prominent and prosperous family. After graduation from high school he spent a year with an engineering firm in Frankfurt, a year of volunteer military service in Berlin, and then a year at the University of Munich. Finally he entered the University of Berlin as a student of the great physicist Hermann von Helmholtz. Later Hertz received his doctorate and was a professor at Karlsruhe when he began his quest for electromagnetic waves. It was there that he met Elizabeth Doll, the daughter of one of his fellow professors, and after a 3-month courtship they were married. Only a few years after his famous discovery, Hertz died on New Year's Day in 1894 of a bone malignancy at the young age of 37. His researches ushered in the modern communication age, and in his honor the unit of frequency (cycles per second) was named the *hertz*.

(Source: D. Johnson, J. Johnson and J. Hilborn, *Electric Circuit Analysis*, Prentice-Hall, 1989)