



Aleksandr Popov

1859 - 1906

Aleksandr Stepanovich Popov was a Russian engineer and physicist who is claimed to be one of the inventors of radio communication.

Radio signals travel as invisible electromagnetic waves through the air, other materials and even empty space. Radio waves are produced by a circuit carrying an electric current, and sent out by a transmitting aerial (antenna).

Soon after the first radio waves were produced and detected in the laboratory by the German physicist Heinrich Hertz, people began to think how to use them for communication. It was not strange that engineers in different countries at about the same time started to design transmitters and detectors of radio waves for long distances. One of them was Aleksandr Popov.

Popov was born in 1859, in the small mining village of Bogoslov near Ekaterinburg, about 3 thousand kilometres east of Moscow. The son of a priest, Aleksandr received a free seminary education. His father encouraged him to follow his profession and become a priest too. **After graduating from the seminary, however, he turned to physics and mathematics**, which he studied at the University of St. Petersburg. At the same time he worked at the Electrotechnique enterprise, which ran the first small electric power station in Russia.

Popov declined an offer to remain at the University and to prepare for an academic career because there was no opportunity to do research in electrical engineering there.

In 1883 he joined the staff of the Torpedo School at Kronstadt, where naval specialists were trained in all branches of electrical engineering and where he was able to conduct his own research. He began experiments on the transmission and reception of radio waves somewhat earlier than the Italian engineer, Marconi.



He was the son of a priest and trained in a seminary.



He refused to take action against demonstrating students

He made the first operating detector and modified it continuously. Connecting his detector to a wire antenna, he was able in 1895 to receive and detect the waves produced by an oscillator circuit and the description of this was published in January 1896. Before the summer of 1896 his improved apparatus had been demonstrated several times in Kronstadt and St. Petersburg. In 1897 he transmitted signals from the ship to the shore over a distance of 5 km and by the end of 1899 he had increased the distance to 48 km.

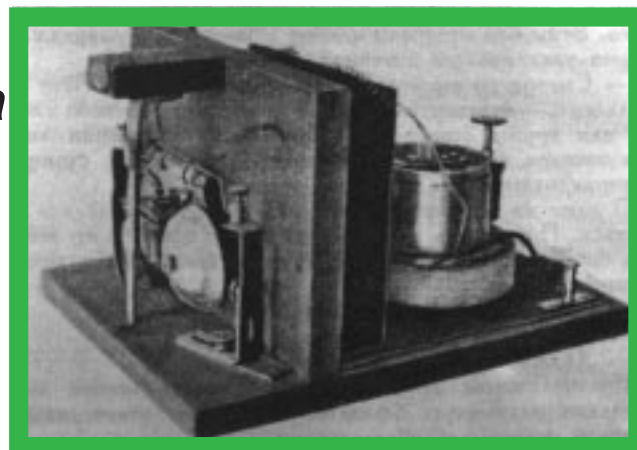
Popov received little encouragement or support from the Russian government and did not commercialize his discovery, unlike Marconi.

In 1901, Popov became Professor at the St. Petersburg Institute of Electrical Engineering, and, in 1905, he was appointed its director.

Popov was an extremely shy and modest person. He was married and had children. In his wife, Popov found a good friend, she helped him to translate and write papers and letters. Comfortable domestic life allowed him to devote himself to his work. Popov was one of the first amateur photographers and he took many photographs. Popov loved Siberian meat dumplings and never drank alcohol. It is said that he was very absent minded. It is reported that after he moved to a new house he often left work and went back to his old house.

In December 1905 he was ordered by the governor of St. Petersburg to take severe action against student political disturbances. Popov refused and the problems following this event severely affected his health. He died soon afterwards.

S.E.



Popov's original receiver