

Tube Of The Month

## TUBE WARS - EPISODE 2

### The Kaiser Awakens: der Telefunken RS-5

The German military was much better prepared for wireless communications than the French. Special tubes were developed for both receiving and transmitting. Germany had a very large fleet with many "U" boats that depended on good communication so tubes were developed to handle the different requirements. Kaiser Wilhelm II had noted a problem with several of the German communications firms making equipment for the military using different standards. His solution was to organize a new engineering company that would be partially owned by the component (and later tube) makers and this company would be the exclusive source for military purchases. Telefunken was born.

For the troops to use in the trenches, a small transmitting tube that could be powered by auto batteries and a crank generator called the RS-1 was developed. RS means Röher Sende or transmitting tube. Improvements eventually lead to the RS-5 that was put in mass production. The RS-5 is a tube made for quick replacement. This wasn't a tube made in a light bulb factory but a precision assembly incorporating excellent glass work. All elements were supported on both ends and the grid was wound directly over a glass arbor shaped like a curved rectangle. In use with 400 volts on the plate, an output of 5 watts was achieved and with 800 volts, the output would be about 20. This was a lot of power for early CW equipment. At least 5 variants of the RS-5 have been found. This example is an early version made in 1918. It is marked Telefunken RS-5 CIIa and on the back its maker, AEG (Allgemeine Elektrizitäts Gesellschaft) the principal owner of Telefunken. The RS-5 was also made by Siemens & Halske.

More photos at <http://n6jv.com>.

