German Junker precision morse key

English Translation is provided by David J. Ring, Jr., N1EA of an article in Gregor Ulsamer's book Faszination Morsetasten. Greg's is DL1FBE and his email address is dl1bfe@web.de Contact Greg for book sales. This translation is unauthorized and is provided without warranty of any type. Use at your own risk.

After his career as a decorated radio officer of the Imperial Navy, Joseph Junker founded his Funktechnische Werkstätten in Berlin in 1926. In them he produced, among other things, banana plugs with expandable contact part (patented on 31.8.1929), later tube transmitters and receivers as well as test equipment for submarines, and his now famous straight key.)

For his Morse key, Joseph Junker received German Reich Patent No. 613176 issued 11.11.1931. This key, whose precision and innovation was unsurpassed, was and still is considered a top quality product by professional radio operators and radio amateurs all over the world. For Junker a robust and fixed key was important. For this reason, it was given a base plate made of drawn steel and an injection-moulded base. To operate the transmitter unit type Lo1 UK35, Junker introduced a cover made of aluminium, for the operator’s protection because the transmitter vacuum tube anode (plate) high voltage of the transmitter tube was directly keyed by this unit.)

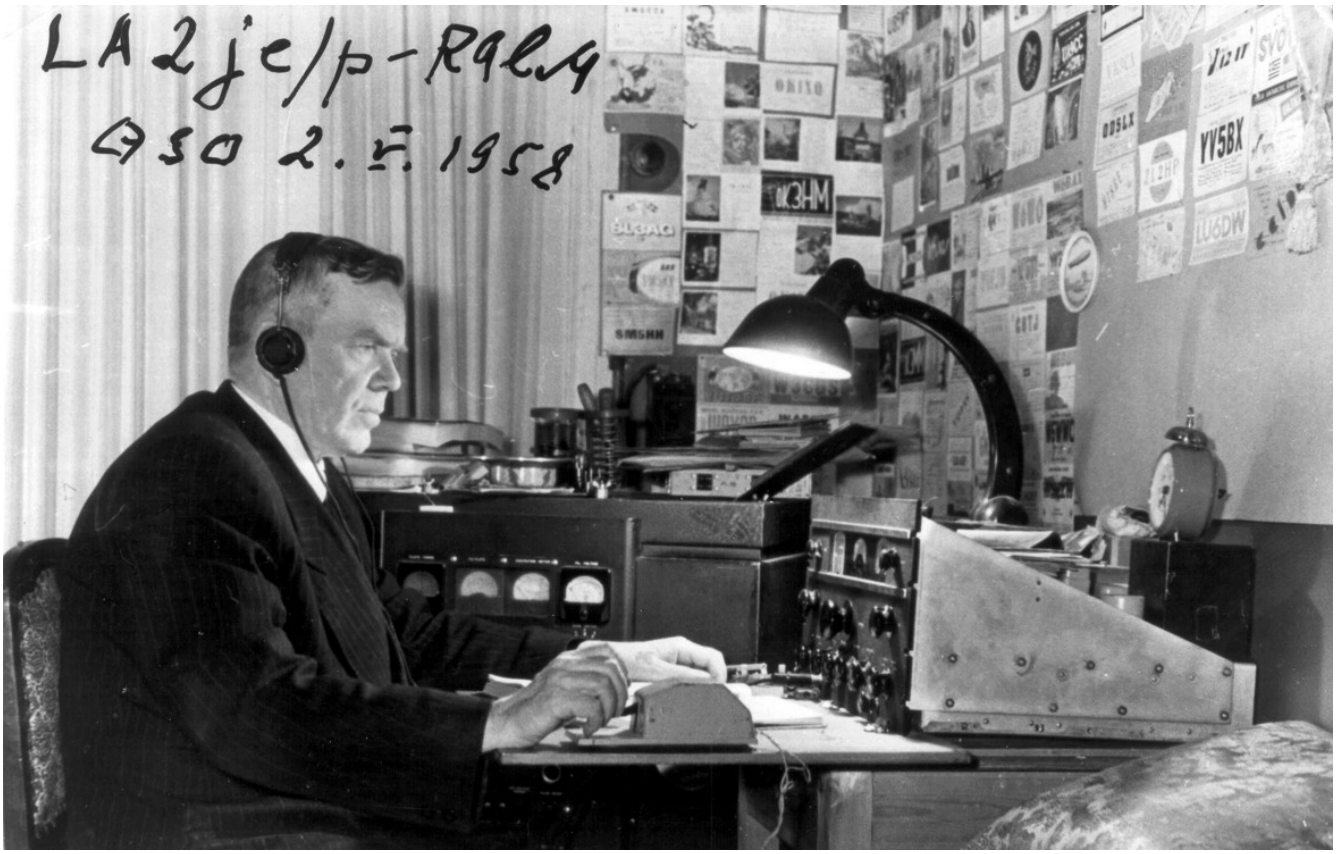


Photo of Ernst Krenkel, RAEM, at his Collins station with a Junker key with cover, QSL for LA2JE/p from 2.V.1958. [Mike Hewitt G4AYO]. Krenkel was given special authorization to use the ship radio call RAEM on the amateur bands.

A special feature of the Junker key was the screw that set the contact gap with markings and a locking device. It was initially produced with a special thread, the finest thread with the smallest pitch. Later keys were given a metric fine thread M7 x 0.3 for cost reasons. 1936 the first series also received a chrome-plated lever. An additional innovation was the spring tensioning screw, which was attached to the side of the lever and allowed each radio operator to individually adjust his keystroke spring tension during operation. Depending on requirements, the key was furnished with a suitable spark extinguishing and suppression circuit. The weight of the standard "M.T." key was 1 kg.

The lighter weight model with a knee clip, "M.T.1" the weight was only 400 grams, the Junker key was furnished with a plastic base plate and a special clip spring designed to hold the key securely to the operator’s knee while he was sending. Variants were given a narrower injection-molded base, special terminals, a second, independent normally closed circuit and a custom colored enamel coating.

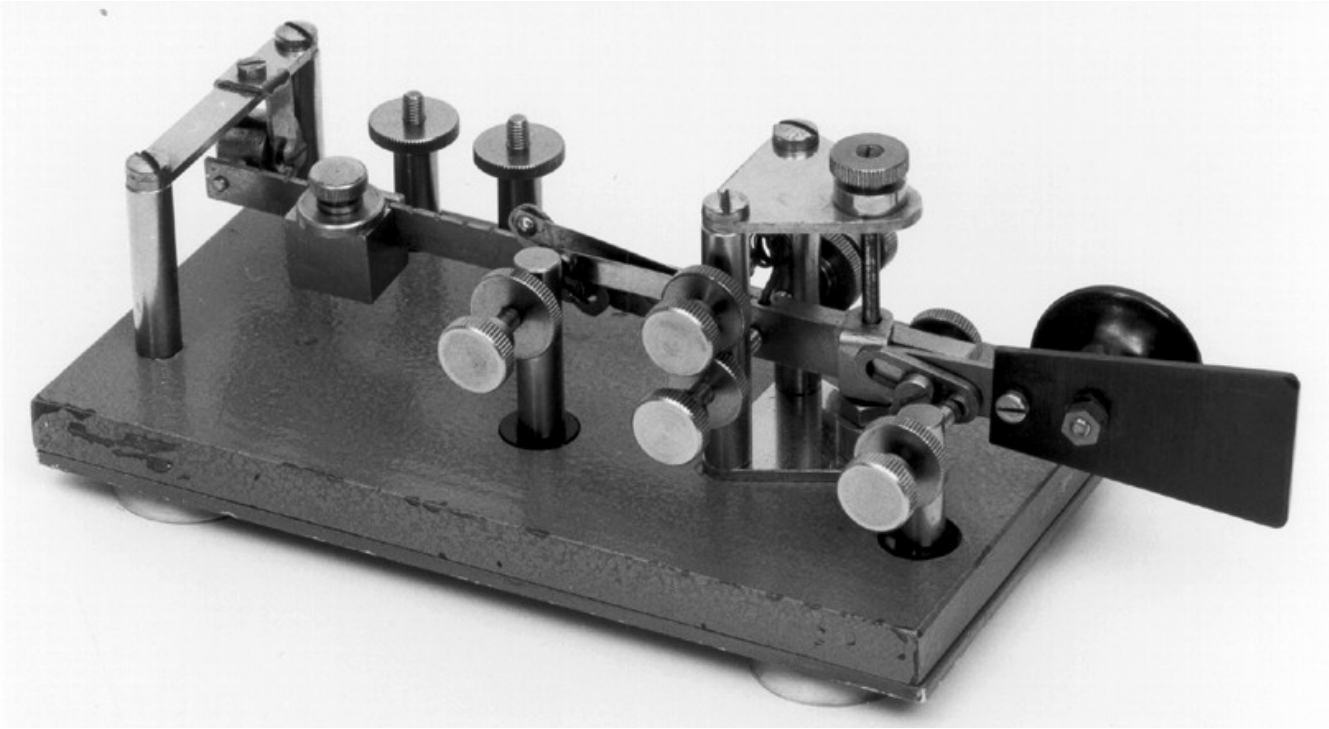
Up to the present day, the company has been producing several hundred pieces per year by hand, modified according to the customer's wishes, before the war they were marked "D.R.P.". = “German Reich Patent,” after the war without that inscription or with the indication: "D.B.G.M.". = “Deutsches Bundes Gebrauchs Muster” or translated into English "German Federal Utility Model".

The "Junker" straight key is one of the most widely used keys on German radio transmitters. It was especially used in shipping and coastal radio stations - generally in light grey color. The German Armed Forces and the Federal Border Guard used it as a standard key according to NATO specifications.

Junker keys are reported to have been manufactured during the war under license by the company Wilhelm Johnson A/S, Amerikavej Street, Copenhagen, Denmark. Johnson manufactured and installed smaller marine radio stations for small craft like fishing boats and Auxiliary naval vessels.

The end of the Second World War led to a relocation of the Junker company from Berlin to Bad Honnef, where a branch factory had already been founded in 1934. Joseph Junker
died in 1946, the company had to build up a new product range; the Morse key was the only one of the old products left.

The semi-automatic Junker morse key, system "BUG", is little known. Although its use was not permitted, it was used by the Federal Border Guard in the 1950s by the radio operators. There it was known as "Bäg" (Rug beater?) or "Frequenzputzer" (English= vacuum cleaner?), because a string of dots could be used to generate attention and readiness to listen.



Junker Semiautomatic key.

With a thick hammered grey base plate, the "BUG" had a weight of 1.5 kg. In its catalog no. 30 of 1974 the company Hannes Bauer offered the semi-automatic Morse key from Junker for 115 DM.