

Skandia Super 20A

Sold by importer: Elektroskandia

Stockholm, Sweden - 1941-42

From the collection of Robert Lozier, Monroe, NC: USA



During WW-II, Sweden tried to remain a neutral country. They had decided that they did not have enough military capability to prevent a quick occupation by Germany as happened to Norway in April 1940.

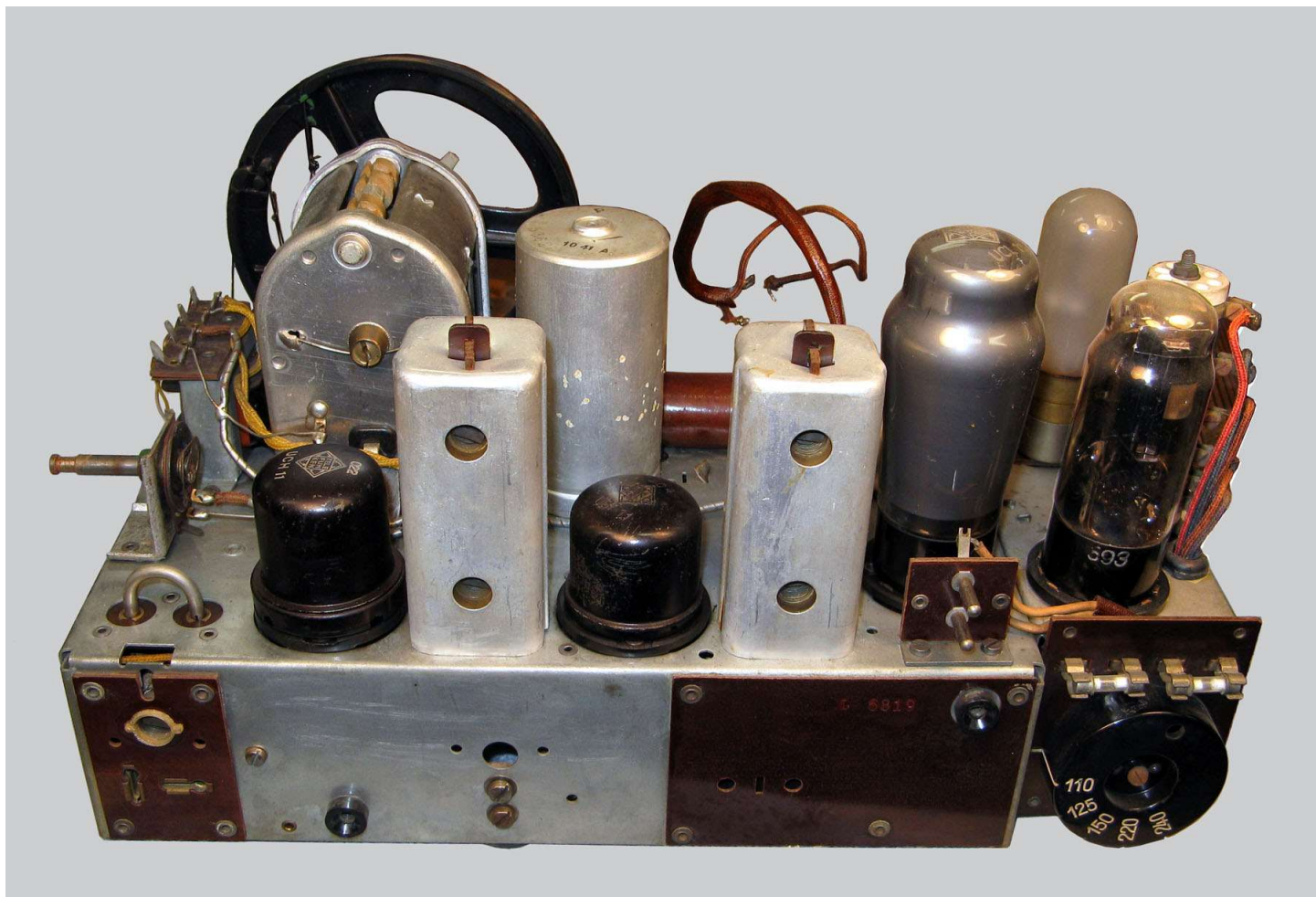
Elektroskandia, founded in 1917 had manufactured some radios in the early 1920s but soon changed to importing various electrical goods from the rest of Europe. By the late 1930s they were importing Skandia branded radios made by Lorenz in Germany. Throughout the 1930s Lorenz had been a subsidiary of International Telephone and Telegraph (ITT) with significant shareholders in the USA. As Germany ramped-up war production, some export goods production was

subcontracted to manufacturers in occupied France. It is likely that this radio was actually, at least assembled, in France.

The most interesting feature I see in this receiver is that it makes use of Telefunken metal shell tubes first introduced in 1938. This is an AC-DC receiver that makes interesting use of a ballast lamp to set operating voltage range.

The chassis has all original components. The electrolytics have dried-out and someone long ago parallel connected British made parts. Fortunately, no circuit changes were made; and I simply removed them.

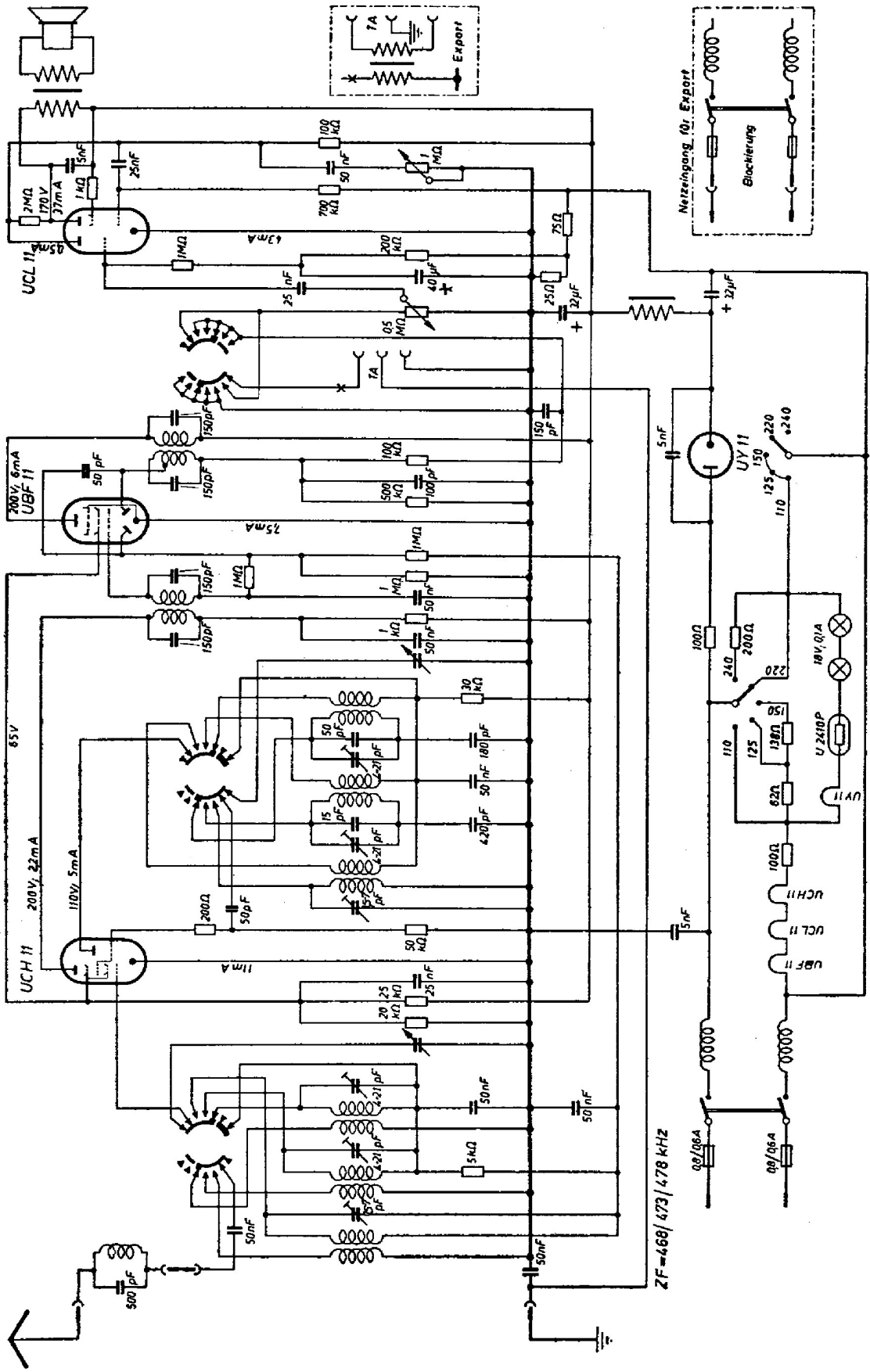
Notice that the rear safety cover has a paper label containing information in Swedish. If this label were removed, it would reveal Lorenz (or possibly Tefag) branding in German.

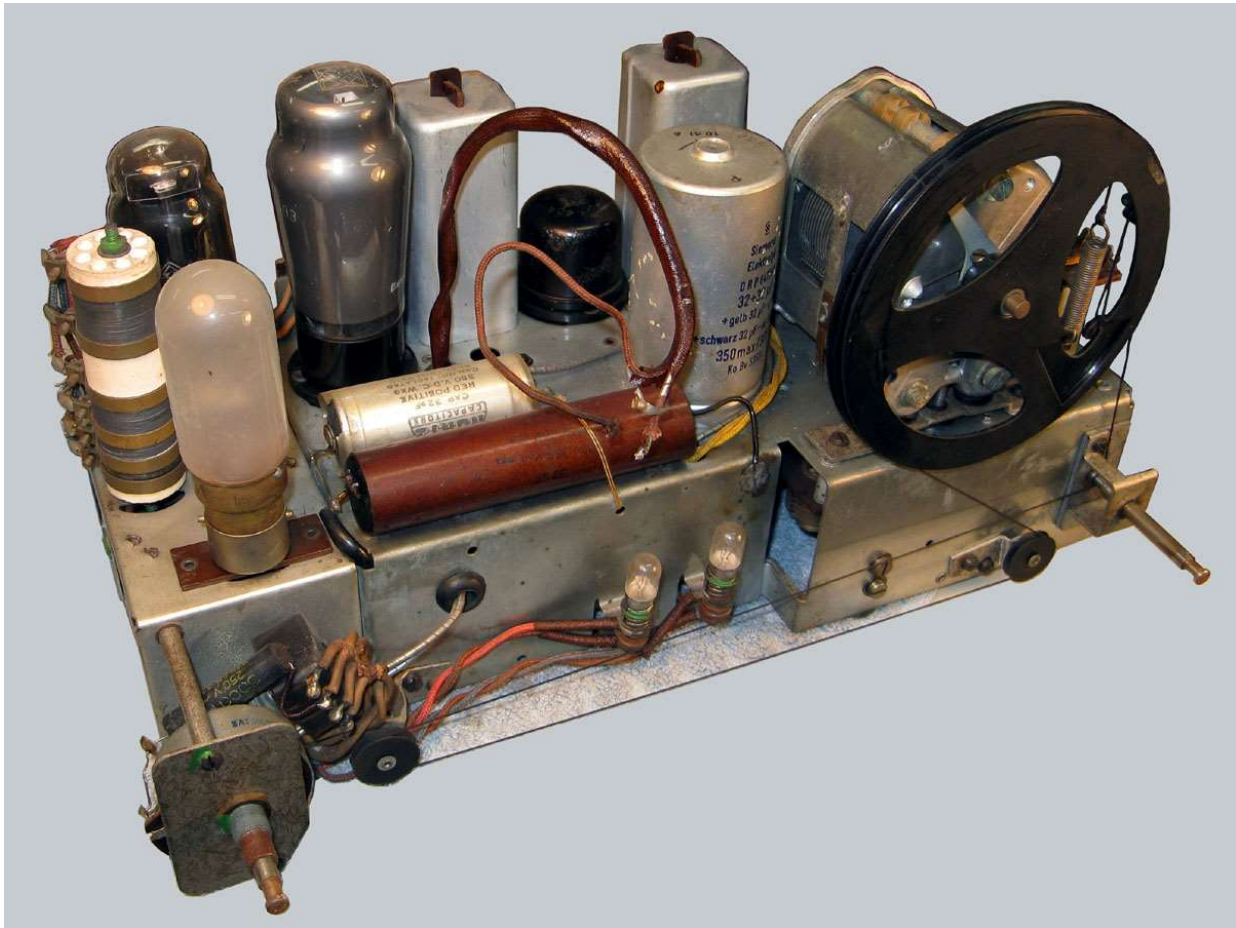
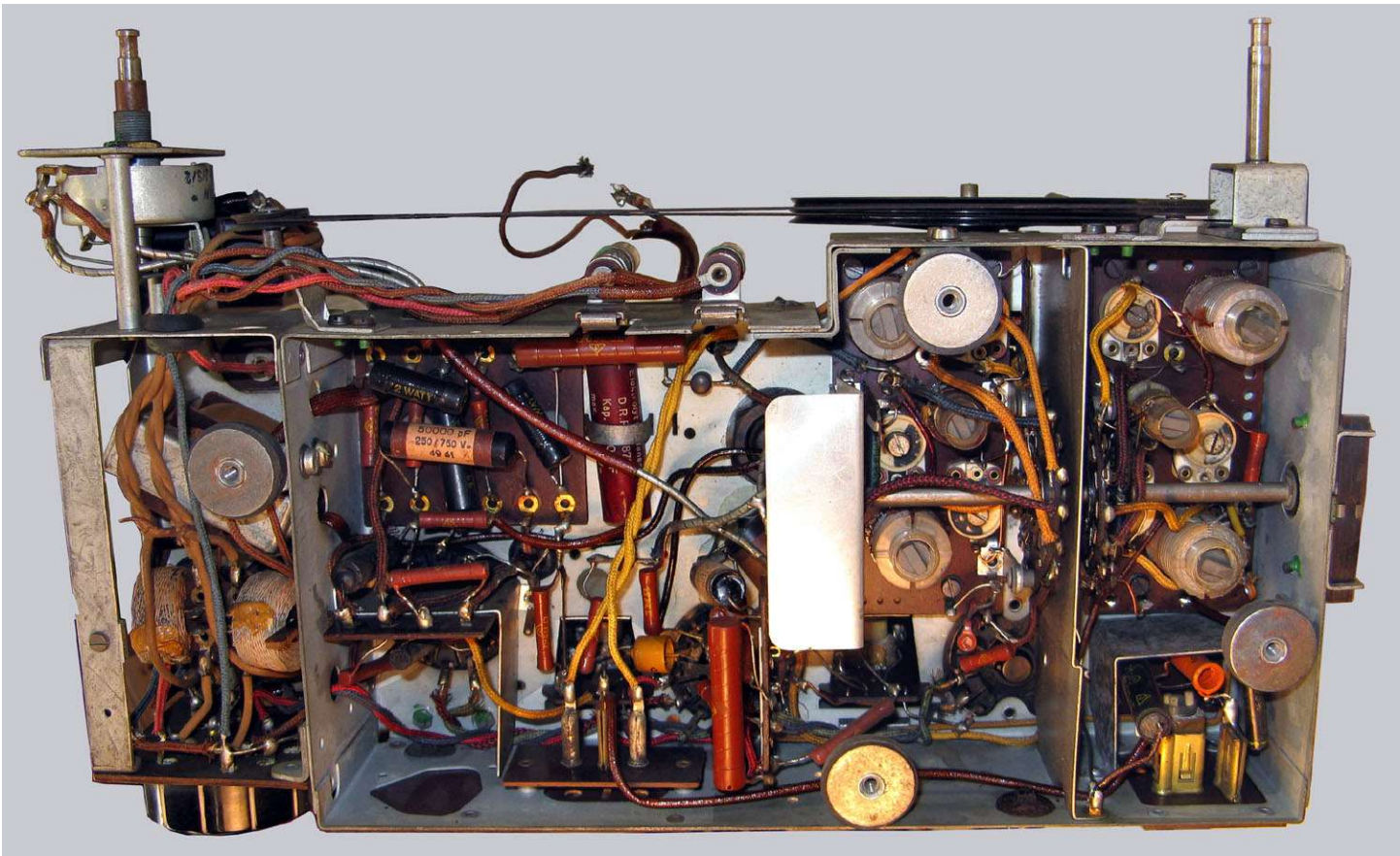


This radio employs metal cased Telefunken tubes introduced in 1938 for the converter and IF amplifier stages. Types UCH11 and UBF11.

Lorenz 20 A

Ned. Ver. v. Historie v/d Radio







This radio was acquired many years ago and in early 2020 I was thinking of selling it because of the poor appearance of the cabinet and having found no information years ago.... But some new on-line information tidbits found elevated it's probable lineage to be an artifact far more interesting and worthy of retention.

From radio catalog volume 1:

Carl Lorenz (1844-1889) has been running a mechanical workshop in Berlin since 1870 and founded the Telegraphenbauanstalt, factory for electric light, electric railways, art and industry in 1880. He expands this to a respected mechanic workshop. 30-50 mechanics manufacture Morse equipment, line chimes and arc lamps.

In 1890, the 27-year-old textile merchant Robert Held (1862-1924) acquired the company from the widow Lorenz and ran it with a firm hand, while at the same time introducing rational division of labor and performance wages with only nine hours a day (then a major social act [489-12]). In 1893 he took over the telegraph construction company CF Lewert, founded in 1839 by David F. Lewert (1779-1863), with around 30 mechanics in Berlin. The latter built the first German Morse telegraphs and is eng

aged in the telephone business for the Reichspost. Held founded a branch plant in St. Petersburg in 1900.

In 1906, Held converted the entire company into C. Lorenz AG and entered into a license agreement with Amalgamated Radio Telegraph Company Ltd. He thus

secured the rights to the Poulsen arc system for the generation of undamped HF vibrations for Germany and Austria-Hungary and founded the department for wireless telegraphy.

By using scientists such as Hahnemann (first head of the department for wireless telegraphy), Rein, Pungs, Harbich, Scheller, Goldschmidt and Nesper for the new tasks, he gives the new branch the greatest importance. A test station for Poulsen transmitters and HF machine transmitters is being built in Eberswalde and soon the first transmissions of speech and music will take place.

The company also maintains the traditional fields of work, for example through its own construction of telephone connection and private branch technology around 1910. In 1915 Lorenz took over the telegraph company founded by Wilhelm Gurlt in 1853. Lorenz introduced the "step alphabet teleprinter" and replaced it with the "spring writer" in the mid-20s.

In 1920 the company broadcasts the first broadcasts in Germany with a Lorenz Poulsen transmitter [489-32].

The first radio devices were built in the Eberswalde test facility and in the Tempelhof plant, with numerous amateurs and employees participating in transmission and reception attempts. On the systematics of the models: The sequence of letters (1920s) in front of the model number is shown differently (large, small, with and without a dot). The meaning for us is: E = receiver, D = detector / R = tubes, followed by e.g. W for resistance amplification (RC coupling) or T for transformer coupling, N = neutrody circuit etc. For three-digit numbers up to 1932, the first digit means the number of receiving tubes, From 1932 to 1935/36, Lorenz used names to later change to numbers with different systematics.

The first device, the Audion "Lover Receiver" from 1923 with inductive tuning, colloquially called "Sprottenkiste", is available for 250 Rentenmark. The coordination takes place with a movable short-circuit cylinder; the inner coil space is provided with finely divided iron powder to increase inductance. The company also offers two types of detector receivers. After the introduction of the receiver, there is a two-tube audio amplifier in the same format for the Audion and shortly afterwards a preliminary circuit. Together, these devices form a "D-train".

At the end of 1924, when Robert Held died, C. Lorenz AG employed around 3,000 people and was successful in all areas of electrical communications engineering. The main factories built in 1916 are located on the Teltow Canal in Berlin-Tempelhof. In 1926, low-frequency communications and signal technology dominated, while radio technology made up just under 20%. The Lorenz-Radio-Vertriebsgesellschaft mbH was founded on 1.4.26 in Berlin. In 1927, Lorenz acquired Dr. Erich F. Huth GmbH. Parts of Huth's buildings in Hanover are also owned by Lorenz. Lorenz later collaborated with Tefag [638969] on the construction of radio equipment.

In 1929, Lorenz also manufactured radio sets for Philips, but had to give up production at the beginning of 1930 due to a lawsuit with Telefunken [638969] and had to break relations with Philips.

In the absence of a congenial successor, the majority of the shares were sold to the Standard Electricity Company (SEG) of ITT (USA - via ST&T) in May 1930. Because: In 1929 ITT took over Telephonfabrik AG, formerly J. Berliner (Tefag), but continued to run the brand until the war. In 1932/33, the radio technology at Lorenz reached the largest pre-war share with approx. 45%, but Lorenz gave up development and production of tubes in 1932. Lorenz remained largely independent of the parent company until 1945. From the mid-1930s, deliveries to the police, Reichspost (including radio broadcasting networks) and the war economy began to predominate; the private telephone business goes to Mix & Genest, which has also been owned by SEG since 1929/30, as does the company Schuchhardt AG.

Lorenz was in fifth place in 1933 with a market share of 6.3%. This share will be reduced to 3.7% in the following year and then to 3.3%. The company achieved the largest market share in 1928 with 10.8% [503].

In 1935, Lorenz (DRP 735'429) patented a rotatable ferrite direction-finding antenna [489-129], which later also found its way into radio equipment. In 1936, the Lorenz crystal quartz laboratory started operating. In the mid-1930s, Lorenz built a wire-tone device (BW1) that was intended for the 1936 Olympic Games and the Reichsbahn [639181]. In 1937, Lorenz set up a laboratory for transmitter and receiver tubes at the main plant in Berlin and began producing Wehrmacht tubes in Mulhouse / Thuringia. The DKE, which was produced in millions by all major broadcasting companies in Germany from 1938, was developed by A. Stapelfeld near Lorenz.

With the experience of the parent company and good engineers like Dr. H. Rochow and K. L. Vraný manage to distinguish themselves in the following three areas: technology of ultra-short waves (aeronautical radio navigation and mobile radio systems), large-scale technology and telegraph technology. The company soon found itself in war technology; it has to take out large loans at the request of the Reich.

War and post-war period

In 1940 Lorenz took over G. Schaub Apparatebau GmbH. In 1944 there were 12 factories with approximately 24,000 employees, practically exclusively for armaments production. Only four of them (Berlin, Eschershausen, Landshut and Pforzheim) are outside the Russian zone after the war.

At the end of the war, essential assets were destroyed, society has high, irrecoverable claims against the Reich and large debts. Mühlhausen's facilities were transported west during the short period of American occupation. They form the basis for the tube plant founded in February 1946 in Esslingen / Neckar.

In 1946 radio production accounted for 35% and in 1948 for 70% of Lorenz's total turnover. In Berlin-Tempelhof, Hanover, Landshut and Stuttgart, completely different types of devices developed until 1948.

The Leipzig plant also has a modest recipient production for a short time. It was not until July 1950 that Lorenz combined radio production in Stuttgart / Pforzheim (Schaub-Werke).

Knut Berger traced the post-war history in [639503] with a lot of research work. In his article, he shows the circumstances under which the various works were created and how they developed. The devices and the place of production were added until 1950.

In 1948 the company headquarters including the sister company Mix & Genest AG changed from Berlin to Stuttgart-Zuffenhausen, however decentralized, self-sufficient, medium-sized units remained at their locations: Berlin-Tempelhof (wireless technology and transmission technology), Esslingen (tube plant), Landshut (electrical machinery), Radio accessories, signal technology), Pforzheim I (development laboratory and model workshop for small radio and directional radio technology), Pforzheim II (teleprinter system) and Schaub Pforzheim (radio and television receiver).

From 1951, Schaub developed, manufactured and sold all home receivers of the Lorenz and Schaub brands, but in 1954 these activities were integrated as a department into C. Lorenz AG.

At the beginning of the 1950s, Lorenz built wire-tone devices - mostly integrated in the housing of a radio - for private use. In 1955, Lorenz employed more than 6,000 people. But: radio and television receivers were given the Schaub-Lorenz brand from 1954. The company sold 10 portable radios until 1957 under Lorenz. They are identical to Schaub-Lorenz, but have different model names.

In spring 1958, the Standard Elektrik AG group of companies was combined with C. Lorenz AG in the ITT group of companies to form Standard Elektrik Lorenz AG (SEL).

In 1961 the majority of Graetz also came to the SEL. You then also own the Austrian radio factory Ingelen Figer & Co KG, for example.

In 1975 SEL suffers DM 16 million losses in the consumer electronics business; Max Becker buys the Rastatt plant. At the turn of the year 1987/88, the French group Alcatel, now a majority shareholder in SEL, sold the UE division to the Finnish Nokia group. This sells high-quality devices under the Schaub Lorenz brand to specialist retailers; cheaper devices get the name Graetz. For Austria and Switzerland, Nokia also operates with the brands Salora (Finland) and Luxor (Sweden).

The historical development of the company, which would have played a much greater role in communications technology without lost, hard patent disputes against Telefunken, can be found in the books "50 Years Lorenz" (1930) and [489] "75 Years Lorenz" (1955) detailed.

Lorenz in East Germany:

EFM Elektro-Feinmechanik Mittweida gives up the production of radio receivers in 1948/49. C. Lorenz AG, Leipzig (in administration) ends the production of radios in 1947.

Additional information welcome. Robert Lozier – kd4hsh@carolina.rr.com