# History of Early Television in Germany, by Wolfgang Lill

On March 8, 1929, the first television images were broadcast via the Berlin-Witzleben radio station (1.7 kW transmission power, frequency 641 kHz). The Berlin press reported on the first "television program" broadcast on the night of March 8th to 9th (11:10 p.m. to 12:30 a.m.) in a special newspaper dated March 9, 1929.

# Extrablatt

Sensationeller Bericht, erschienen im 12 UHR Blatt am 9. März 1929

# Fernsehen in Berlin geglückt!

Gestern die ersten erfolgreichen Bersuche. — Wie das Programm aussehen wird.

Manchem Rundsunkteilnehmer wird es aufgefallen sein, daß gestern im Lautsprecher außerhalb der offi, ziellen Gendezeiten ein larmendes Knattern, das in der Tonlage hin und her schwankte und einem Wechselstromgerausch glich, zu hören war.

Dieje geheimnisvollen Beiden bes beuten die erften praktifden Berfuche des Sernsehens nach dem Guftem Mihaly, die die Reichspoft in aller Stille por

genommen bat.

Die langwierigen Caboratoriumsversuche find febt zu einem gewiffen Abschluß gekommen und fur die Durchführung im Rundfunkbetrieb reif geworden; die lebte Etappe in der Entwicklung ift erreicht.

Die beweglichen Bilder find an ben verschiedensten Stellen ber Stadt empfangen worben, und durchweg find fie ein wand frei, klar und un verzerrt zum Borfchein gehommen

Man hat sogar in England senes charakteristische Geräusch ausgenommen und dasselbe sosort als Sern sehsendungen sestgestellt. Jeder, der also im Besit eines Sernsehapparates ist, kann ohne weiteres die Bersuchs sendungen des Wicklebe en er Senders die seinem eigenen Heim sichtbar machen; verschiedene Amateure haben bereits ihre Beobachtungen an provisorischen Geräten mitgeteilt.

Damit fteht Deutschland an erfter Stelle auf dem Gebiete des Sernsehens. In anderen europaischen Landern find die Bersuche gescheitert, sogar in England, das lich infolgedessen mit fest ft eben den Bil.

bern begnugt.

Man ist sich bei ben augenblichlichen Bersuchen auch ichon über die Durchführung des Gendeprogramms im klaren. Da die Rundfunkteilnehmer tagsüber im allgemeinen kaum die Zeit dazu aufbringen können, sich Tagestereignisse anzusehen, werden Rundfnnktereiten filmen und an ihre Gendestation weitertelegraphieren, die dann in einer Abendstunde den Ablauf der Tagesereignisse in gedrängter Reihenfolge dem Hörer übermitteln wird.

Die direkten Alebertragungen haben, wie man vom Horfunk her weiß, den Nachteil, daß es neben spannenden Momenten stets "tote Punkte" gibt, die der Sprecher nur muhsam auszufüllen vermag. Der Silm gibt die Möglichkeit, langweilige und uninteressante Stellen auszuschneiden und nur Aktuelles und tatsachlich Sehenswertes zur Borführung zu bringen.

Bleichzeitig ist auch das Problem der Beim. kinos geloft. Feder Unterhaltungsfilm kann ber reits zur Premiere im Studio des Senderaumes abtollen, um dann von Millionen zu hause im Klub-

feffel angefehen gu merben.

Aluch das Sernsehen auf der gewöhnlichen Telephonseitung ist nunmehr möglich
geworden, und so kann man 3. 33. in München die
Opern, die bekanntlich den Sernsprechteilnehmern
übermittelt werden, auch durch Telephon sichtbar
machen. Welche kulturellen Umwälzungen, Umstellungen im gesamten Gesellschafts und Wirtschaftsleben
die Einsührung des Sernsehens zur Solge haben wird,
läßt sich heute noch gar nicht übersehen. Fritz Winckel

## Here is a transcript:

Television in Berlin was a success!Yesterday the first successful attempts.

What the program will look like.

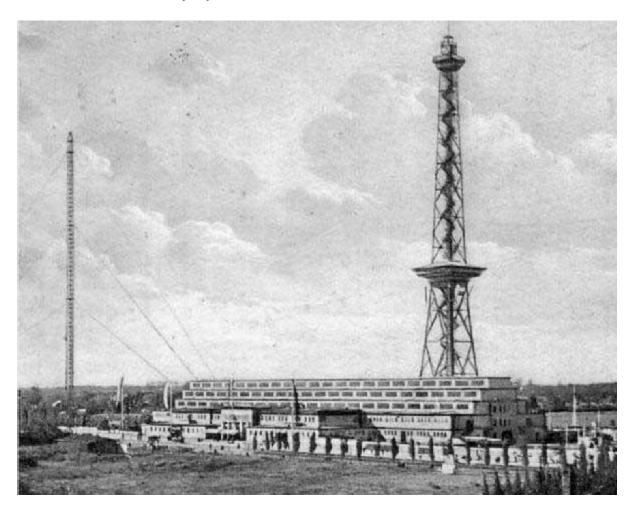
Some radio participants will have noticed that yesterday, outside of official broadcast times, a noisy rattling could be heard in the loudspeaker, which fluctuated back and forth in pitch and resembled an alternating current noise.

These mysterious symbols signify the first practical attempts at television according to the <u>Mihaly system</u>, which the Reichspost undertook in complete silence.

The lengthy laboratory experiments have now come to a certain conclusion and are ready for implementation in broadcasting operations; the final stage in development has been reac The lengthy laboratory experiments have now come to a certain conclusion and are ready for implementation in broadcasting operations; the final stage in development has been reached.

The moving images were received in various places throughout the city, and in all cases they appeared flawless, clear and undistorted.

Even in England, people recorded that characteristic noise and immediately identified it as a television broadcast. Anyone who owns a television can easily view the Witzleben station's experimental broadcasts in their own home; Various amateurs have already reported their observations on makeshift devices.



Witzleben radio tower with exhibition hall 1930

This puts Germany in first place in the field of television.

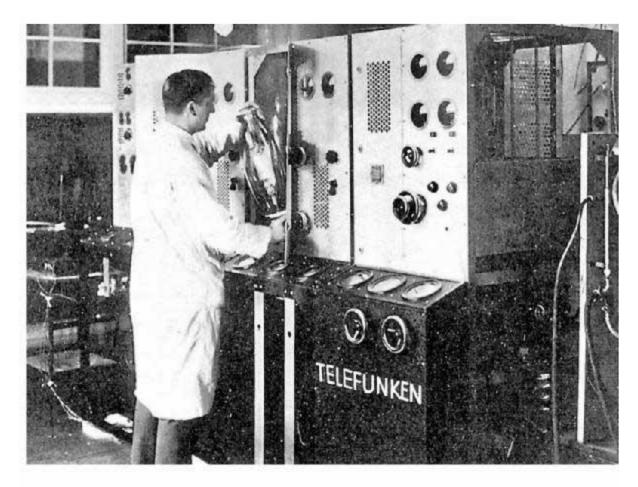
Attempts have failed in other European countries, even in England, which has consequently been content with fixed images- In the current experiments, it is already clear how the broadcast program will be carried out.

Since radio subscribers generally have a lot of time during the day to watch current events, radio reporters all over the world will film important events and telegraph them to their

broadcasting stations, which will then transmit the course of the day's events in a condensed order to the listener in the evening.

As we know from radio, direct transmissions have the disadvantage that, in addition to exciting moments, there are always "dead spots" that the speaker can only fill with difficulty. The film gives you the opportunity to cut out boring and uninteresting parts and only show current events that are actually worth seeing. At the same time, the problem of home theaters has also been solved. Every entertainment film can be shown at the premiere in the studio of the broadcasting room and then be watched by millions at home in their lounge chairs.

Television on the ordinary telephone line has now also become possible, and so in Munich, for example, the operas, which are known to be transmitted to telephone subscribers, can also be made visible via telephone. The cultural upheavals and changes in the entire social and economic life that the introduction of television will result in cannot be overlooked today. Fritz Winkel.



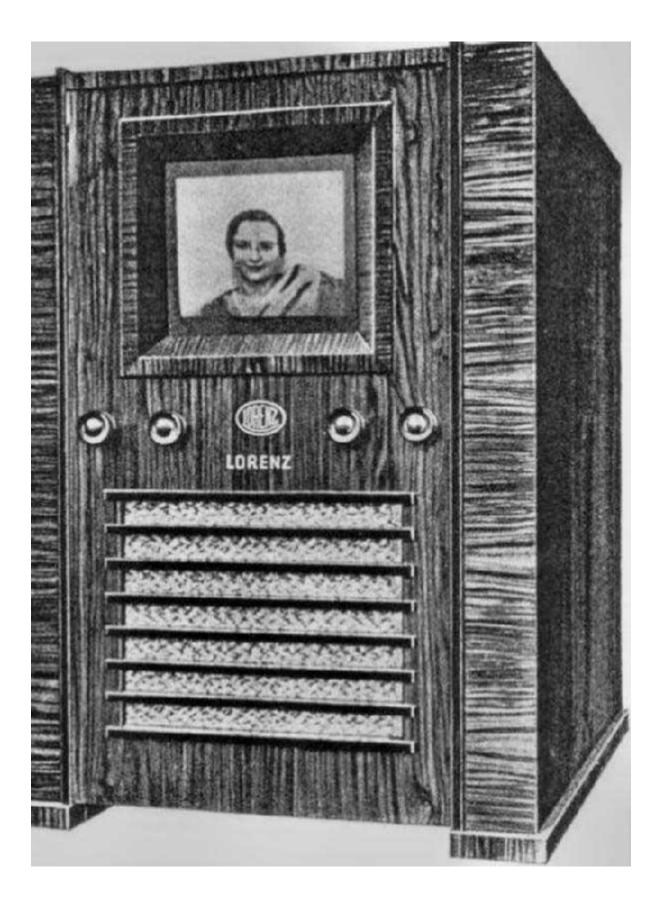
16 kW Sender der DRP in Berlin 1932 (1)



The development of television by the Reichspost continued in a targeted manner

In 1932 the Reichspost puts a 16 kW Telefunken television transmitter into operation

But what use is the best transmitter if the receivers are missing? Unfortunately, things didn't work as quickly as Fritz Winkel predicted. However, various manufacturers developed receivers.



### Here is a Lorenz receiver built in 1936

At least since 1934 there have also been charming announcers: Ursula Patschke (left) and Annemarie Beck (right) Photo: Source reference "Museumsstiftung Post and Telecommunications" Berlin



Television in Germany was officially opened on March 22, 1935. Our television historian Wolfgang Scheida from Vienna wrote a wonderful article about this, which you can read with just one click. (link)

The Berlin-Witzleben station now broadcast on frequencies 40.300 MHz (image) and 42.493 MHz (sound).

In 1935, the DRP considered it time to introduce this new medium to a larger audience and the first public television station was set up on March 22, 1935 in the rooms of the Reichspostmuseum in Berlin.

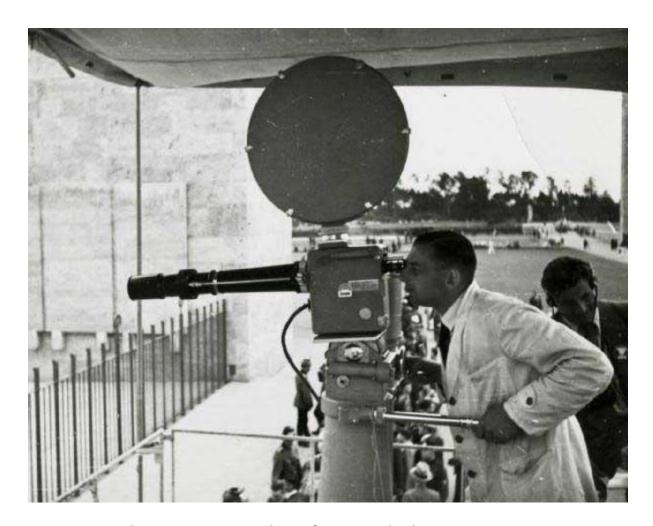
The first big highlight came in 1936, when the Summer Olympics took place in Berlin. It starts on August 1st. The Reichspost has planned a total of three reception points;

A swiveling ionoscope camera was located under the VIP stand in the Olympic station. Another camera was stationed in the swimming stadium (Sommerbadolympiastadion) and the third, a Farnsworth camera, was stationed at the marathon course. However, this only took reasonable pictures when there was enough brightness (sunshine).

From these locations it went via broadband cable to the Deutsche Reichspost television studio at Rognitzstrasse 9, which has been built and used since March 1934. Here you can see a cameraman from the German Reichspost taking direct television images with an intermediate film camera during the 1936 Olympic Games in Berlin.



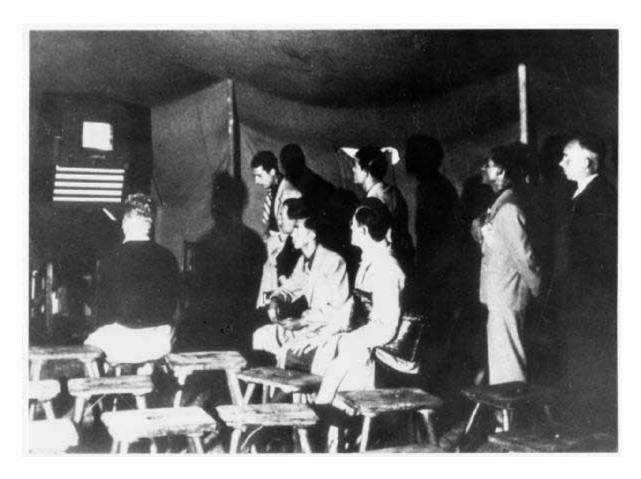
Photo: Source reference "Museum Foundation Post and Telecommunications" Berlin: Memorial plaque on the building at Rognitzstrasse 9 (before renovation).



Photo, Museum Foundation for Post and Telecommunications

The program was mixed in the studio at Rognitzstrasse 9 and broadcast on the "Paul Nipkow" station in a radius of around 60 km.

A total of over 50 television stations in Berlin and Potsdam have already received these Olympic broadcasts from the Berlin station. The "stiff neck" was probably a common effect.



Photo, Museum Foundation for Post and Telecommunications Berlin

There were also some private television owners and amateurs.

Professor Färber from Czechoslovakia was also able to receive the Berlin Olympic program, only sound, as he did not yet have a mobile television. Here is <u>this report</u>.

The first broadband coaxial cable (FK501) was put into operation on March 1, 1936 for the opening of the Leipzig Spring Fair. It was a television voice connection. You can find more information here.

The FK502 was moved from Leipzig to Nuremberg. The route was to be built via Munich with a branch at Obersalzberg, all the way to Vienna. Jürgen Bauch in particular has carried out extensive research on this.

Also about the FK503, Berlin-Hamburg. I am planning a separate article about this, about a repeater station. This long-distance cable was also used for communication with Kalbe, the Goliath long-wave transmitter, the most powerful submarine transmitter in the world, northeast of Kalbe/Milde.

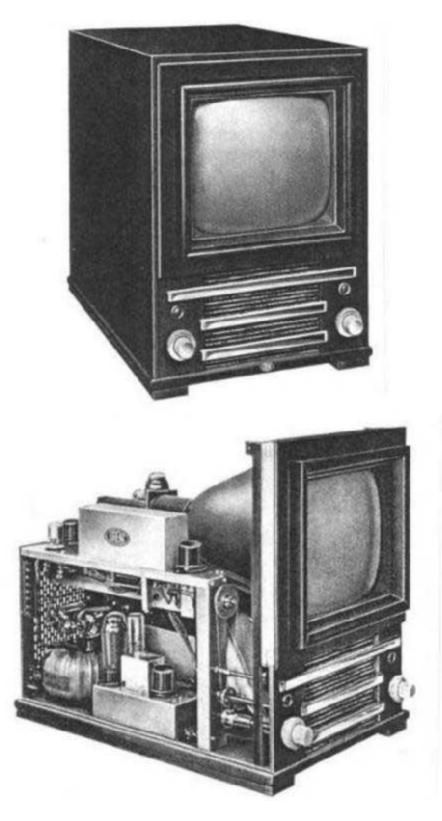
Another long-distance cable, FK 504, was laid from Berlin to Feldberg with a branch to Brocken. A television transmitter was built on the Brocken itself and put into operation. The beginning of the Second World War brought this to an abrupt end. The thinking at the time was that the higher the transmitter, the greater the range that could be achieved...<u>but read on with one click!</u>

#### **Television for the Citizen:**

As a result of these radiation tests, construction of a television transmission tower on the Brocken began in 1936. From April to June 1939, a makeshift program was broadcast from the Brocken. The station was not yet able to take over the Berlin program because the television cable to the Braunlage branch of the broadband cable (504) Berlin – Frankfurt / Main had not yet been completed.

At the 15th Great German Radio Exhibition in Berlin in 1938, C. Lorenz AG exhibited not only radio and broadcasting technology but also television sets and television tubes.

In the technical internal communications of Lorenz AG from December 1938, the head of the television laboratory, M. Messner, wrote: In view of the imminent general public introduction of television in Germany, Lorenz brought out a particularly carefully developed new television home receiver for the 1938 radio exhibition. (In 1936 Lorenz had already exhibited such a home receiver, albeit with a smaller picture tube.) This device represents the latest result of the development of very small, light, inexpensive television receivers that Lorenz has been favoring for years, and was adapted in every detail from the outset to the television system with 441 lines and interlaced scanning specified by the German Reichspost. ---- The housing had the dimensions 35x54 cm and was 49 cm high, the picture is 20x23 cm.



In addition, a combined television and radio receiver in a chest shape with a picture size of 32x37.5 cm, a large television projection system for television rooms and a car television receiver with housing dimensions of 48x35x22 cm, picture size 9x11cm, were demonstrated

in operation. All of these devices were intended for commercial use and were to be put into production. The DRP planned the general introduction of television for private users for 1939. The corresponding recording, transmission and playback devices were developed by Telefunken GmbH, C. Lorenz AG, Fernseh GmbH (until 1939 Fernseh AG), D S. Loewe and TEKADE. In 1939, Fernseh AG developed the German television standard receiver E 1. It was to be the "people's receiver" for television. This device was to cost 650 RM. Of the planned 10,000 units, only 50 could be produced because of the war.



**Photo: Heribert Jung** 

According to conservative estimates, there were around 500 public reception points for the first German television broadcast in the first years of the war. In addition to the public television stations, television receivers were installed primarily in the military hospitals in and around Berlin. There is no information about private television receivers.

On November 26, 1943, the Berlin television station was hit in an air raid and was no longer functional. Television rooms that had not yet been destroyed could still be used. From the studio in the Deutschlandhaus wire television was broadcast and until the end of September 1944, hospitals in the greater Berlin area were also supplied with television.

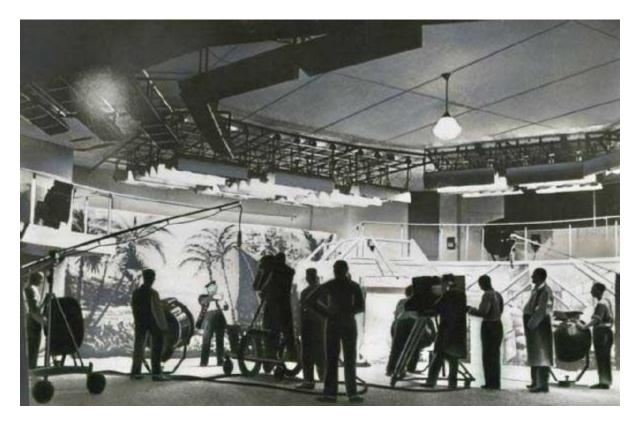


Photo: Source reference "Museum Foundation Post and Telecommunications" Berlin TV recording room of the German Reichspost in the Deutschlandhaus in Berlin at the corner of Heerstrasse.

After the occupation of France in 1941, the DRP began to set up a French-German television in collaboration with the Radiodiffusion Francaise in Paris. There was also a relative of our family who was in the Wehrmacht in Paris at the time.



### **Photo: Private**

The program began broadcasting in April 1943. Unconcerned by the Allied invasion, the Paris television station broadcast until August 18, 1944. There were around 200 public and

800 to 1,000 private television receivers in Paris and the surrounding area. During the war, most development work in the field of television was largely stopped, except at

Fernsehen AG (outsourced to Tanvald/Sudetengau). All technical and scientific capacities were tied up for war production, especially systems for the V1/V2 rockets.

The technology in the territory of the Soviet occupation zone was quickly dismantled from May 1945, even the long-distance cables were dug up and brought to the USSR for reuse.

There are already some articles about this on Radiomuseum.org. In the Soviet occupation zone and the newly founded GDR in East Berlin, German television began its experimental broadcasts with 625 lines and OIR sound standard from

the town hall on December 21, 1952. Television started in Germany almost at the same time.

There are extensive information on television in the Federal Republic of Germany and Berlin West on the Internet. In our Radiomuseum.org you will also find a lot of information

under Forum, keyword television...have fun browsing and reading. This post was edited by Wolfgang Lill on Dec 5, 24, 5:04 p.m.