



Königs Wusterhausen

“Birthplace of German Radio”

Report by Alan Pennington

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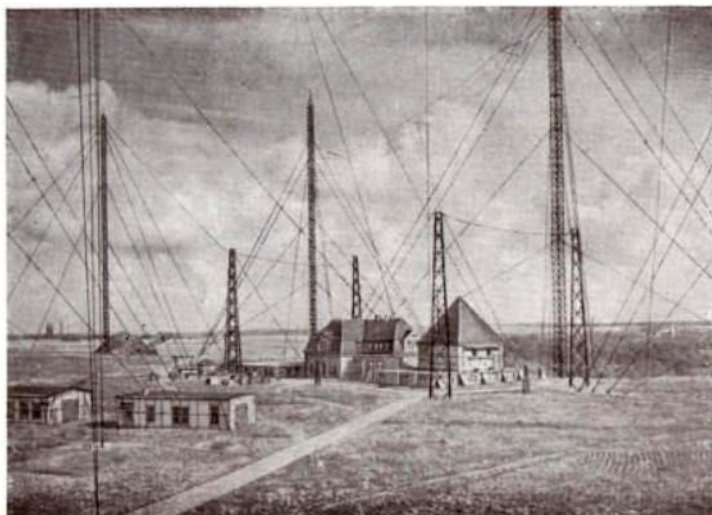
After saying farewell to some of our fellow EDXC conference participants at the hotel in Ochsenkopf (see report last month), we were driven north in a convoy of vehicles flying EDXC flags (like some EU delegation!) to Königs Wusterhausen, just south east of Berlin, to visit the “Sender und Funktechnikmuseum” (Transmitter and Radio Technology Museum).

Königs Wusterhausen, in particular the Funkerberg hill just outside the town centre, is regarded as the “Birthplace of German Radio”. Today it’s no longer an active transmitter site, the transmitters are silent and only one aerial mast and three towers remain standing (though there is a local FM station, Hit Radio SKW, based there). However the old transmitter buildings on this historic site contain an impressive museum – well worth a visit if you are in the Berlin area!



Above: Museum showing three remaining aerial towers (two on right still supporting a MW T-aerial). At the foot of the right hand tower is a trailer used to house a mobile 20 kW mediumwave reserve transmitter.

We were fortunate to be able to visit the museum on a Monday, when it’s usually closed, and had an enthusiastic guide to the museum in Herr Dunker whose words were kindly translated into English by Michael Schmitz (ADDX) and Tibor Szilagy (EDXC Secretary-General).



Experimental broadcasts had begun from the Funkerberg, the site of an old windmill, in 1908, using mobile spark transmitters and aerials raised aloft using balloons or kites. Their success resulted in the construction of a military radio station, begun in 1913 and commissioned in June 1915, during WW1. It became the central radio station for the German Army, sending and receiving Morse messages only at first, though experiments to transmit voice & music took place in 1917.

left: Funkerberg in 1918 (www.funkerberg.de)

After WW1, the radio station was taken over by the German Imperial Post in 1919, for the transmission of commercial messages. On 22 December 1920 however, a Christmas concert of music was broadcast for the first time, the brainchild of Hans Bredow (who is considered the "Father of German Radio"). The broadcasts, on 2700 metres longwave, resulted in letters from listeners in England, Holland, Luxembourg and the Nordic countries, but none from Germany, where radio listening was forbidden. Following this, popular Sunday concerts were broadcast regularly from Königs Wusterhausen until 1926. In January 1926 Deutschlandsender launched on 182 kHz long wave, giving national coverage.

The rapid expansion of the "KW" radio station had resulted in two additional transmitter halls being built: 'Haus 2' in 1923 and 'Haus 3' in 1925.

'Haus 2' would after WWII become home to the 100 kW Telefunken medium wave transmitter (Sender 21) of GDR's Berliner Rundfunk from 1949-1992. This transmitter, of 1932/33 vintage, had broadcast Berliner Rundfunk from a site at Berlin-Tegel which was in Soviet hands after WWII. However Berlin-Tegel was actually in the French sector following the Allied division of Berlin and the French gave the Soviets just three days notice in December 1948 to move the transmitter to Königs Wusterhausen, after which the aerial mast at Tegel was blown up to ensure the safety of flights into Berlin-Tegel airport. The transmitter was incorporated into the museum's collection and can be seen today, along with an authentic control desk and dummy operators.



With the construction of 'Haus 3' and further aerial masts around a central 243 metre high tower, the "KW" site had reached its capacity, so construction of another transmitter site at nearby Zeesen was started. By 1929 a new large longwave transmitter (for Deutschlandsender II) was in use from Zeesen and in August 1929, the first official German shortwave broadcast was made from Zeesen, using a newly-constructed 8 kW transmitter – the output stage of this Telefunken transmitter can also be seen in the museum (*see photo left*). It was the nearby Zeesen site that was expanded when the Nazis came to power in 1933 in recognition of the propaganda potential of radio and with the upcoming 1936 Berlin Olympics. Four 40 kW shortwave transmitters were built at Zeesen which remained in operation until 1945. After WWII, the Soviets took useable transmitters away from Zeesen and then blew up the transmitter buildings. The buildings at Königs Wusterhausen however largely survived intact - one of the exhibits at the museum today is an impressive scale model of the transmitter site and its many aerials in 1938/9.

After 1945, 'Haus 3' housed a 10 kW longwave transmitter for Berliner Rundfunk and from August 1946 a 100 kW Telefunken/Lorenz longwave transmitter used on 177 and 263 kHz

until 1997 by Deutschlandsender, Radio Volga, Deutschlandsender-Kultur & Deutschlandradio, which is also now preserved and protected in the museum.

We were surprised to also find a huge 100 kW transmitter from Hörby, Sweden in Sender Haus 3 at the museum. This Telefunken transmitter was installed in 1937 and served until after the war in 1947 when it had become difficult to get spares from Germany. It was kept as a reserve at Hörby before coming to the museum in Königs Wusterhausen. The information panel for this

exhibit did not indicate if it was a MW or SW transmitter, but in retrospect I assume it's the 100 kW one listed in the 1947 World Radio Handbook at Hörby on 1131 k/cs mediumwave (as shortwave from Sweden used only 12 kW transmitters from Motala in 1947).

Below: Herr Dunker points out some features of the 100 kW transmitter from Hörby, Sweden.



Also in Sender Haus 3 was another exhibit the museum is very proud of – a 1937 vintage 1000 HP Deutz diesel engine, the last working example in the world. It was used to drive a 6 kV generator which provided power for the transmitters at Königs Wusterhausen and is regularly started up for visitors, according to a timetable on the museum website.

Another transmitter at the museum since 1998 is a mediumwave transmitter (SM8/H1) from the Berlin-Köpenick facility (now demolished), used between 1959-1990 by Berliner Rundfunk (693 kHz) and Radio Berlin International (1359 kHz). Between 1990-1993 it was then used by Antenne Brandenburg (693 kHz) and Deutschlandfunk (1359 kHz). It was shut in April 1993 and dismantled in 1994.



The transmitters (SW, MW and LW) on the site were gradually closed down between 1992 and 1999. The one remaining aerial mast at the site is a 210 metre high steel-lattice mast dating from 1924 (mast No 17 on the 1938/39 model we had seen inside the museum) – quite costly to preserve but considered an important relic of German radio history as it was used to broadcast the first national station, Deutschlandsender, on longwave. It was originally one of a group of six surrounding a central 243 metre high tower. This central tower collapsed in a storm on 15 November 1972, after which the other five 210 metre high masts were dismantled, leaving just the one in place today. At the date of German reunification this remaining mast was still being used as a self-radiating longwave aerial.

left: the remaining 88 year old 210 metre high mast today

The only other aerial still standing is a mediumwave T aerial strung between two towers at the side of the original station building. A third tower stands immediately in front of the building. I'm unsure how old these were, but they look very similar to those in the 1918 picture of the site above!

Our tour of the museum had also included a brief film of the early days of the radio station plus a demonstration by our guide, in a darkened room, of Heinrich Hertz's early experiment using a spark gap transmitter to prove the existence of radio waves ('Hertzian waves"). As well as the preserved transmitter exhibits, there are displays giving a chronological history of the Königs Wusterhausen station and the nearby Zeesen site, with models of the many aerials. A couple of wartime receivers – a Volksempfänger VE301W and Deutscher Kleinempfänger attracted our attention in the main museum exhibition and in the Sender Haus 3, shelves full of GDR radios (see right) from 1945-1989 deserved more attention than our limited time allowed!



Above: Outside the entrance to the museum (left to right): Michael Schmitz (ADDX), Tibor Szilagyi (EDXC), our guide Herr Dunker, Dr Harald Gabler (RMRC) & Alexander Beryozki (DX St Petersburg).

After a fascinating couple of hours at the museum, we had to drag ourselves away to catch a train into Berlin for our evening flight home. A pity that all of the conference delegates were not able to visit to this excellent museum. Our thanks to Dr Harald Gabler for arranging the visit and to our guide, Herr Dunker.



The Sender und Funktechnikmuseum at Königs Wusterhausen is open Tuesdays, Thursdays, Saturdays and Sundays 1300-1700 (admission 3 Euros). Tours for groups of five or more can be arranged outside the normal opening times. More details on the museum website at: <http://www.funkerberg.de/>. (AP)