

Lyngby Radio Calling

Radiotelex Radiotelephony Radiotelegraphy



TELECOM



Lyngby Radio *in the early days.*

Lyngby Radio Historical Survey.

Lyngby Radio is historically connected with the development of radio technology, as the inventor of the Poulsen arc-transmitter, Valdemar Poulsen, together with P. O. Pedersen, established and directed an experimental radio station on this site in 1904. Although the initial purpose of the station was to develop stable, long-distance radiotelegraphy systems based on the use of the Poulsen arc-transmitter, it was here that some of the first experiments with radiotelephony took place as early as in 1907.

In 1909 the radio-telephone was evolved, becoming a huge attraction at the Army and Navy Exposition in Copenhagen that year. On this occasion a phonograph transmission by radio was made - our first broadcasting. Announcer was one of Valdemar Poulsen's and P. O. Pedersen's energetic assistants during the research period, Peter L. Jensen, who some years later settled down in The States and became the inventor of the dynamic loudspeaker (Magna Vox).

The outbreak of the first world war totally changed the circumstances for the experimental station, and in the spring of 1917 the Danish State Telegraph Authority took over Lyngby Radio.

In the late twenties the transmitters at Lyngby caused heavy disturbances to radio broadcast reception in the densely populated urban area nearby, and this led to the transfer of the transmitters to Skamlebaek about 100 kilometres northwest of Lyngby by the Great Belt. The radio reception was now concentrated at Lyngby, and for more than 30 years it maintained its functions without essential changes. During this period the station was Denmark's receiving station for fixed radiotelegraph and telephone circuits to many countries, and was the coast station where the PTT had concentrated all reception and dispatch of telegrams via short wave radio to Danish ships all over the world.

Furthermore Lyngby Radio covered the demand for maritime radio in the nearby geographical area by means of MF-radiotelegraphy and MF- and VHF-radiotelephony, the most important role being to maintain a continuous 24-hours watch on the international distress frequencies and to take part in the radio work concerning the safety of ships and of life at sea.

In the mid fifties, all the fixed services, point to point, gradually converted from radio to cable via the telephone and telex-network, but shipping traffic continued to grow.

In 1964 a new receiving station was put into operation at Reersoe, and this improved the operating conditions for the Lyngby Radio HF services through the introduction of remote-controlled receivers with access to directional aerials at Reersoe. In 1967 the present building in Lyngby was taken into use.

Up till the eighties the manually handled traffic was increasing and a staff of approx. 100 was employed at the station.

Gradually more and more VHF-traffic was converted to the NMT (Nordic Mobile Telephone) and on long distance more and more radiotelegrams and HF-radiotelephone-calls were converted to our radiotelex-system, which was fully automated in 1986. The INMARSAT Satellites took over part of the long distance traffic. This transition from manually handled traffic to automatic traffic has been increasing, especially since the IMO introduced The Global Maritime Distress and Safety System to automate and improve emergency communications for world shipping. TELECOM Denmark A/S complied with the GMDSS from the very beginning in february 1992 by implementing Digital Selective Calling on VHF, MF and HF at the danish coast stations.

Lyngby Radio was therefore one of the first coast stations in the world taking part in the HF-DSC-system, meaning that we might participate in distress and safety situations all over the world. The GMDSS means that the radio operators are becoming dispensable on ships and that navigators, who now must deal with the GMDSS, have to obtain a certificate for operation of radio stations under GMDSS.

TELECOM Denmark A/S took the opportunity to start a Radio School at Lyngby Radio, running courses intended for persons who will be operating GMDSS. From 1992 till now Lyngby Radio has produced 330 GMDSS certificates, mainly for navigators, and 64 certificates to VHF and HF radiotelephony, mainly for pleasure boat sailors.

Today (1994) 66 persons (converted into full-time basis 60) are employed at Lyngby Radio. The automation will continue and in the future a still diminishing amount of traffic will be handled manually. But this, the distress and safety work and the Radio School will still require operators for important and meaningful work.

Today

Lyngby Radio OXZ

is a modern coast station operating on radiotelegraphy, radiotelephony and radiotelex in the maritime bands.





The Institute of Electrical and Electronics Engineers (IEEE) has designated THE POULSEN-ARC RADIO TRANSMITTER to be an Electrical Engineering Milestone and dedicated a Milestone Plaque to be unveiled May 28th, 1994 at Lyngby Radio.