

Radio Museums in Sweden

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Summary

An overview is given of radio museums in Sweden.

1. Introduction

Wireless technology permeates essentially all aspects of our modern society, and is now to the ordinary person an invisible infrastructure that provides global communications and navigation. While radio broadcasting has been around for a century, in the last four decades we have witnessed an explosion in wireless technology, applications, and usage. Even though a conference like SMWD is forward-looking and futuristic, it is often fruitful to have knowledge of the past as well. The history of radio science can be found in the URSI centennial book [1], and history related to Sweden in *e.g.* [2] and [3].

Museums are important functions in a changing world, providing an archive of our accumulated knowledge. Professionally curated exhibits can often provide a pedagogical insight into technology and its impact on society.

The museums specialized in radio technology have in common that they depend heavily on volunteers. Many of these volunteers belong to a generation with firsthand knowledge of the presented technology, often having a life-long career within the field. Herein lies a danger in that these often retired persons will not be around forever, and recruiting younger volunteers is universally difficult. Also, limited government and local funding can often lead to continuity problems when *e.g.* the buildings that house the museums are subject to increased rent. One example of loss of continuity was the demise of *Telemuseum* in Stockholm in 2004, a consequence of lack of support from major stakeholders. In addition to the abovementioned difficulties, the recent COVID-19 pandemic meant a significant loss in visitor numbers, and thus a concomitant loss of income for the museums.

2. Museum Categories

The radio related museums in Sweden can be coarsely divided into the following categories:

- Museums with a strong connection to a historical radio facility
- Traditional museums with collections of artefacts and exhibitions
- Virtual museums
- “By appointment only”

The division lines are not set in stone, and some of the museums are hybrids of the abovementioned categories. Museums are increasingly documenting and digitizing their collections, and thus the virtual component is often added to the museums.

The following sections provides a non-exhaustive list of the radio related museums in Sweden.

2.1 Museums with a Strong Connection to a Historical Radio Facility

Grimeton Radio Station SAQ [4]

The “grand old lady” of radio technology in Sweden is the Grimeton Radio Station SAQ with its VLF (17.2 kHz) pre-electronic Alexanderson alternator and colossal six-element array antenna [3]. The facility was declared a UNESCO World Heritage in 2004. Commissioned in 1924, the radio station is unique in being fully operational throughout a century. The transmitter is started several times a year, yielding listener reports from many parts of the world.

Hörby Radioförening [5]

Located in Östra Sallerup outside Hörby, the museum of Hörby Radioförening (*Hörby Radio Society*) is focused on the history of the Hörby MF/HF/VHF/UHF broadcasting station and typical radio apparatus heritage.

Sveriges Rundradiomuseum [6]

Sveriges Rundradiomuseum (*The Swedish Radio Broadcasting Museum*) in Bondebacka outside Motala is located in the transmitter building of the decommissioned Motala long-wave station. The old transmitter hall with its original equipment from 1935 has been preserved in its entirety, whereas the antenna system has been demolished.

2.2 Traditional Museums with Collections of Artefacts and Exhibitions

Radiomuseet i Göteborg [7]

Located in an old shipyard area in Gothenburg, Radiomuseet i Göteborg (*Gothenburg Radio Museum*) is presently the most comprehensive radio museum in Sweden. The large collection is divided into a dozen of application areas, such as audio, broadcasting, radio & TV, military radio, marine radio, amateur radio, *etc.* The museum also has a well-equipped workshop and library.

Jönköpings Radio- och Teknikmuseum [8]

Originally the private collection of Erik Karlsson, Jönköpings Radio- och Teknikmuseum (*Jönköping Museum of Radio and Technology*) is located in Norrahammar outside Jönköping.

2.3 Virtual Museums

AEF [9]

The goal of Arboga Elektronikhistoriska Förening, AEF (*Arboga Electronics History Society*), is to document the development in the field of electronics for the Swedish Air Force and convey this knowledge in words and images in a virtual museum with a focus on the Cold War era 1945 – 1990.

2.4 “By Appointment Only”

FRA [10]

Försvarets Radioanstalt, FRA (*The Swedish National Defence Radio Establishment*), have a small museum on their Lovö site, just outside Stockholm. In addition to signal intelligence radio equipment, the museum contains quite unique objects, *e.g.* the *Geheimschreiber* encryption machine cracked by Arne Beurling in WW2, and salvaged equipment from the Swedish Air Force DC-3 aircraft shot down over the Baltic Sea in 1952.

Teleseum [11]

Teleseum in Enköping is a museum with a mission to preserve and make available the telecommunications technology heritage from the Swedish defense sector and the civilian part of total defense.

References

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