### Supplement Chap. 245 - 1



# MA 444 `Svenskesuperen' Country of origin: Sweden

This Supplement chapter is a follow up and should be read in conjunction with the 'MR 444' section in the '*Sweden*' chapter of WftW Volume 4.

#### DATA SUMMARY

Organisation: Milorg/SOE -Section Norway. Design/Manufacturer: Unknown Swedish company. Year of Introduction: Late World War 2. Purpose: Shortwave receiver for listening to Allied radio broadcasts and coded messages. Circuit features: Single conversion superheterodyne. Mixer/oscillator, IF with reaction, Detector/AF stage; principally for AM R/T, but probably also CW if the RF gain control brought the IF stage into reaction. Intermediate frequency: 432kHz. AF output: High impedance headphones. Frequency coverage: 5.5-20MHz. Valves: 6J8G, 6K7G, 6Q7G. Power supply: 220V AC/DC mains. 25Z6 rectifier valve. Size (mm): Height 15.5, Length 15.5, Width 11.5. Weight (kg): 1.6.

#### REMARKS

The MA-444, also known as 'Svenskesuperen', was an AC/DC type superheterodyne short wave receiver, manufactured by an unknown Swedish company in late World War 2. In its design a minimal number of components were used. Most Svenkesuperen were brought secretly across the Swedish border into Norway by so-called 'borderpilots'.

The MA 444 was primarily intended for use by the Norwegian resistance (MILORG/SOE-Section Norway) for listening to the coded messages that were hidden in the news broadcasts of the BBC in London.

The receiver was built on a small metal chassis, enclosed by a perforated metal case. The perforations were an absolute necessity because the filaments were series connected and the ballast resistor produced much heat. The AC/DC design saved the costs of a power transformer, and as parts of the electricity mains grid in Norway was direct current, the receiver was suitable for either 220V AC or DC operation. It was essential to observe the polarity of the mains when used on 220V DC.

### References:

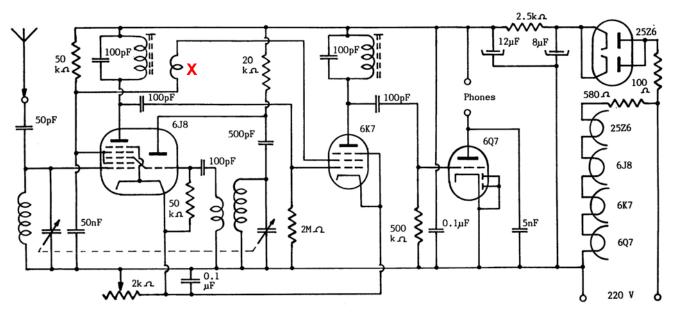
- Erling Langemyr, Svenskprodusert radioutstyr benyttet I Norge 1940-45, NRHF, *Hallo Hallo*, Nr. 67 (3/99), September 1999.
- MA 444 circuit diagram reconstructed by Tor Marthinsen, NRHF, *Hallo Hallo*, Nr. 78 (2/02), May 2002, pp. 20-22.
- Børresen, Finn O, Svenskesuperen, *Teknikk*, Nr. 2/3 1945.
  Louis Meulstee, *Wireless for the Warrior*, Volume 4,
- ISBN 0952063-36-0, September 2004.
- Colour photograph of a MA 444 courtesy Justismuseet, Trondheim, Norway. https://justismuseet.no/en/
- Photographs and information courtesy Cryptomuseum, Eindhoven, Holland. www.cryptomuseum.com



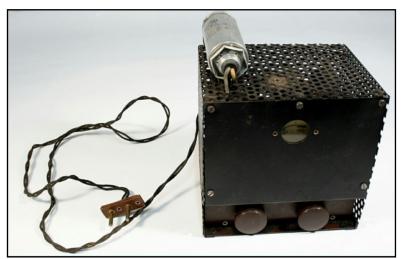
Rear view of the MA 444 Svenkesuperen. Note the headphones sockets at the bottom right. The aerial was connected to a socket at the top.

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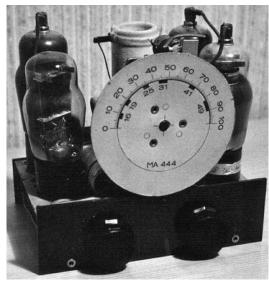
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Circuit diagram of the MA 444 Svenskesuperen. Just the minimum required number of components were used in its design. The receiver had no automatic volume control but only a manual RF gain control. For listening to Morse CW the IF was brought into oscillation via coil X and increasing the setting of the RF gain control.



Svenskesuperen held in the collection of the Justismuseet in Trondheim (NRM.07888). The object on top is a later added electrolytic capacitor as replacement for a faulty unit inside.



View of Svenskesuperen with perforated metal enclosure detached.



The frequency dial, a piece of printed paper glued onto a disc, was visible through a circular window at the front.

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