



Collection Justismuseet. (NRM.03944).

### DATA SUMMARY

**Organisation:** Milorg/SOE -Section Norway.  
**Design/Manufacturer:** Johan Lagercrantz AB, Stockholm.  
**Year of Introduction:** World War 2.  
**Purpose:** Short range communication during actions of Milorg.  
**Circuit features:** Superregenerative receiver, Hartly type transmitter. (AM R/T only)  
**Frequency coverage:** 110-135MHz.  
**RF output:** About 100-150mW.  
**Aerial:** Vertical ½ wave rod; 6 sections of 20.5 cm each.  
**Valves:** 1G4G, 1Q5G  
**Power supply:** Dry batteries 90V HT and 1.5V LT, plus a 3V grid battery.  
**Size (mm):** Height 25, length 13.5, Width 30.  
**Weight (kg):** 4.3 without batteries.

### References:

- Tore Moe, Litt om VHF-samband i Norge under krigen, NRHF, *Hallo Hallo*, Nr. 1/93, ISSN 0801-9800.
- Louis Meulstee, *Wireless for the Warrior*, Volume 4, ISBN 0952063-36-0, September 2004.
- Colour photographs of a 'VHF-sett' courtesy Justismuseet, Trondheim, Norway. <https://justismuseet.no/en/>
- Peder Skogaas, (1982): *Over alle grenser 1882-1982 Elektrisk Bureau - 100år i teleteknikkens tjeneste*, Oslo, A/S Elektrisk Bureau, ISBN 82-990901-0-5
- Photographs from the collection of the Norwegian Resistance Museum (Norges Hjemmefrontmuseet) in Oslo with kind permission.

## 'VHF-sett'

Country of origin:  
Sweden

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

### REMARKS

The 'VHF-sett'\* was a self-contained lightweight portable short range dry battery powered transceiver. It was used by the Norwegian Milorg/SOE Section Norway for radio communication during sabotage actions, and by the Danish-Swedish Escape Aid, an organisation for secret crossing the Öresund between Denmark and Norway. The set was designed and produced by Johan Lagercrantz AB in Stockholm, Sweden.

The set was enclosed in a strong metal box with a detachable lid, when opened showing a standard LM Ericsson telephone handset and just 3 controls. The on-off switch was positioned in such way when the handset was placed in its holder the batteries were disconnected. The vertical ½ wave aerial was composed of 6 sections which were, if not in use, carried in a holder located on the set front panel. It was inserted in the rear of the box; the lower section was bent to achieve a vertical position of the aerial.

At least 9 'VHF-sett' transceivers survived and are in the collection of various museums in Norway.

\*) The official manufacturer's type number was not known. The set was generally called 'VHF-sett'.

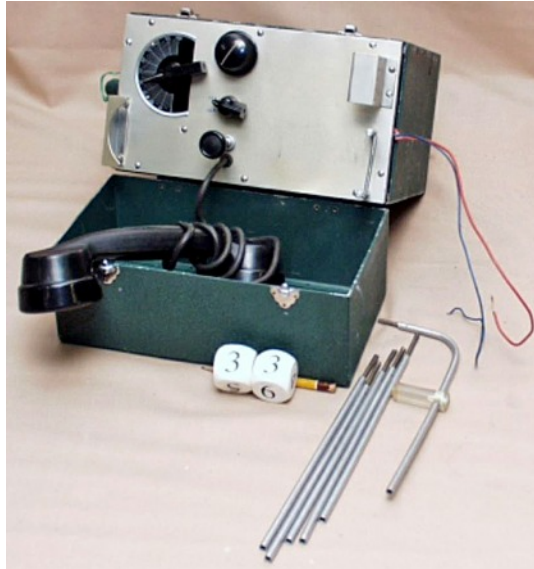


Front panel view of a 'VHF-sett' from the collection Justismuseet. (NRM.03944)

Note that the clip for stowing the aerial sections is damaged.



Collection Norges Hjemmefrontmuseet (NHM.32)



Collection Norges Hjemmefrontmuseet (NHM.33)



Collection Norges Hjemmefrontmuseet (NHM.1721)



Collection Norges Hjemmefrontmuseet (NHM.1722)



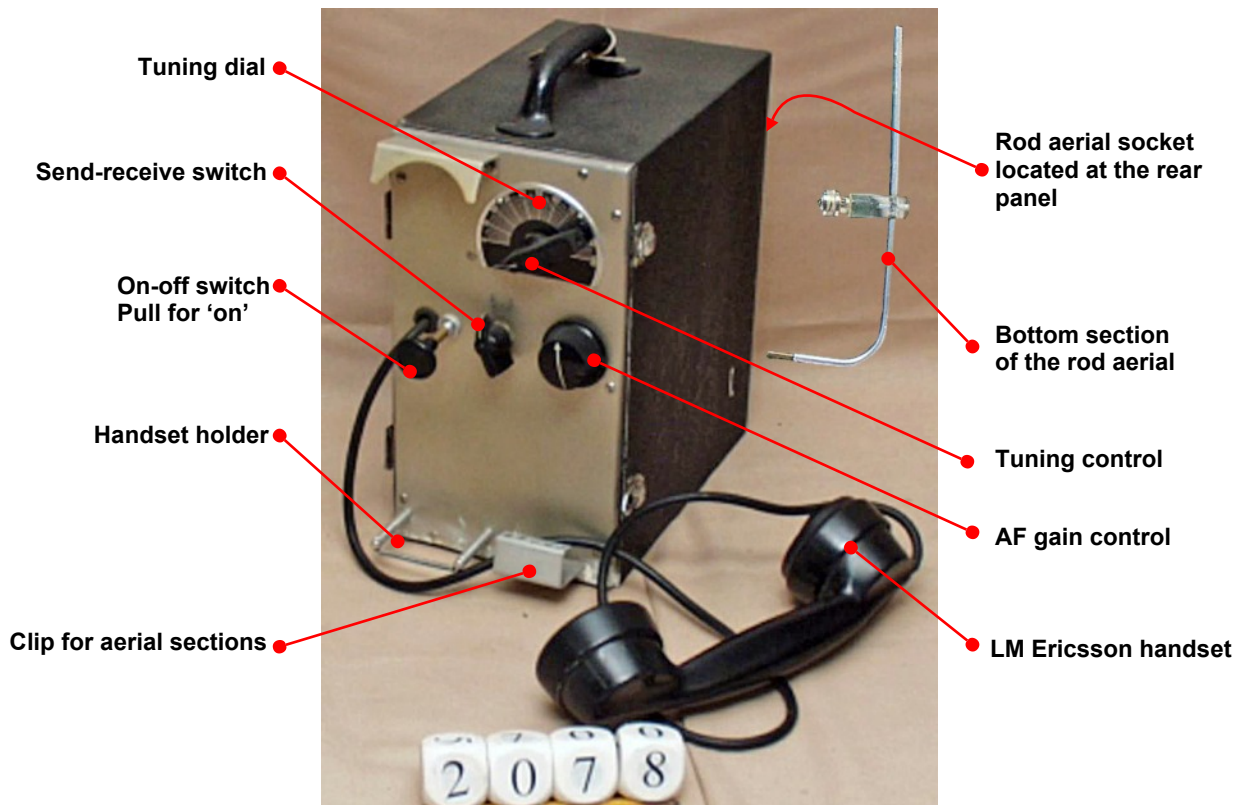
Collection Norges Hjemmefrontmuseet (NHM.2279)



Collection Norges Hjemmefrontmuseet (NHM.2435)



Collection Norges Hjemmefrontmuseet (NHM.2079)

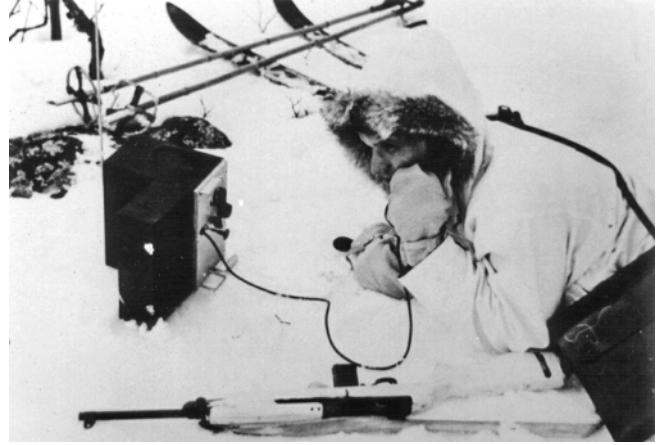


Functions of controls Lagercrantz 'VHF-sett'.

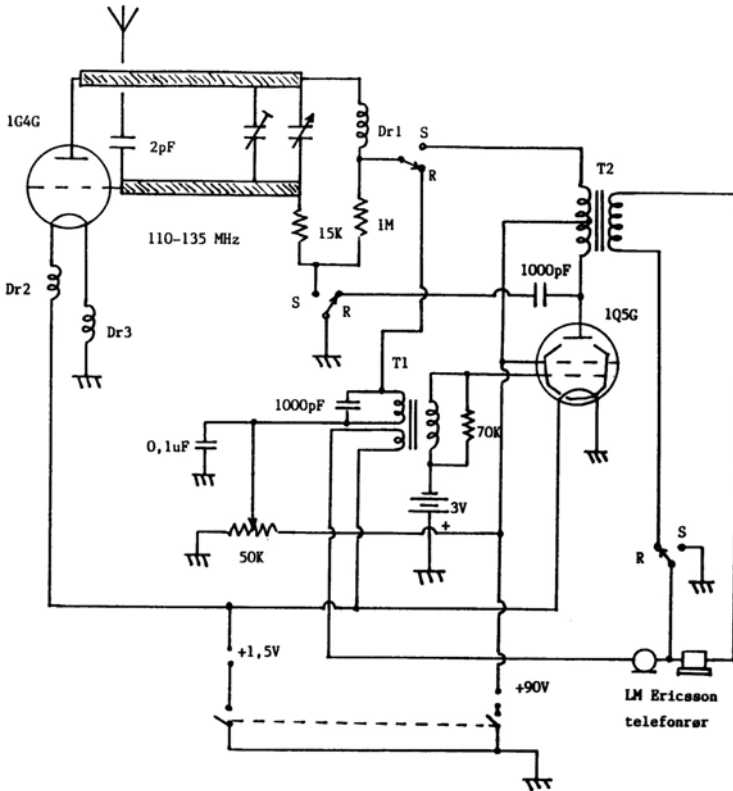
Collection Norges Hjemmefrontmuseet (NHM.2078)



Photograph from A/S Elektrisk Bureau jubilee book 'Over alle grenser' showing two Swedish 'VHF-sets'

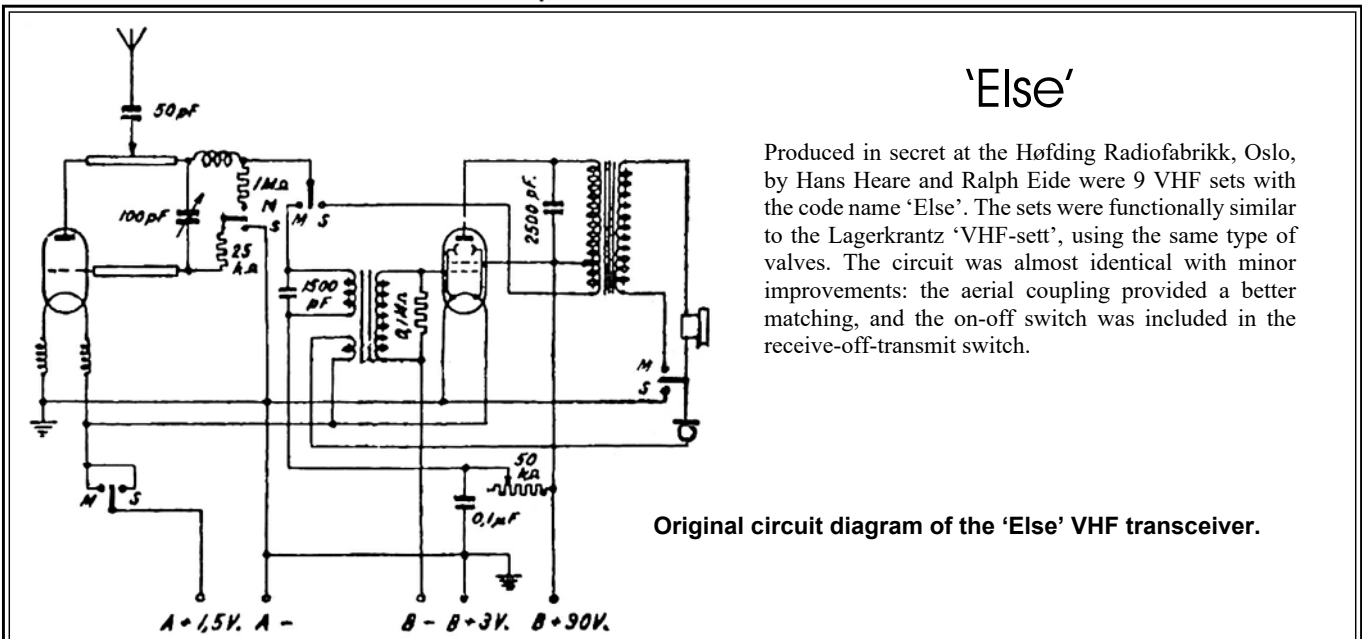


A Lagercrantz 'VHF-set' in use by Milorg.



Circuit diagram of the Lagercrantz 'VHF-set'. The design, including a Lecher-line instead of a coil, was typical for portable VHF transceivers of this era.

Circuit drawn by Tore Moe Namsos in 1993.



### 'Else'

Produced in secret at the Høfding Radiofabrikk, Oslo, by Hans Heare and Ralph Eide were 9 VHF sets with the code name 'Else'. The sets were functionally similar to the Lagercrantz 'VHF-set', using the same type of valves. The circuit was almost identical with minor improvements: the aerial coupling provided a better matching, and the on-off switch was included in the receive-off-transmit switch.

Original circuit diagram of the 'Else' VHF transceiver.

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