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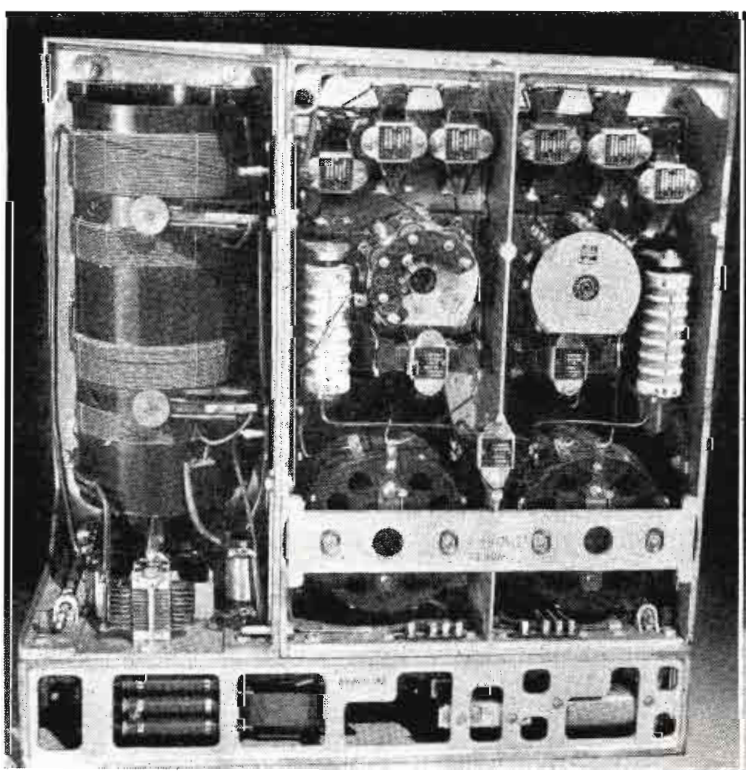
GERMAN 100 W.S. TRANSMITTER

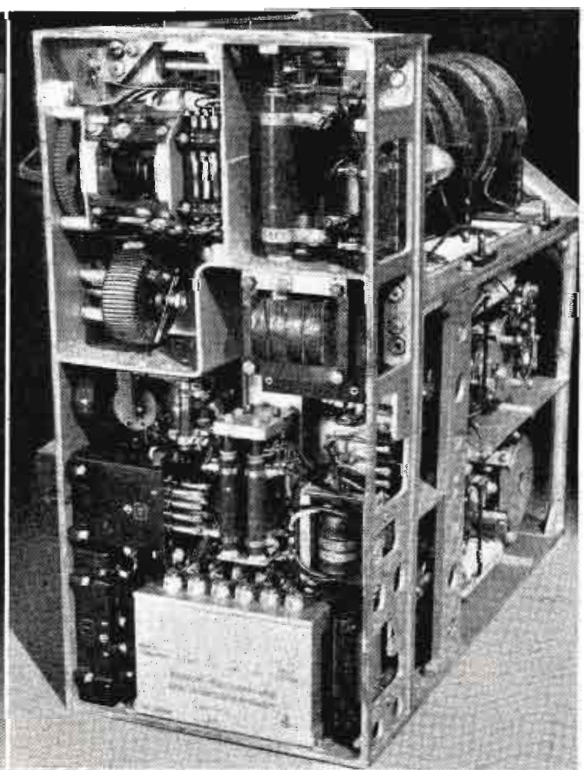
Military version of 100-watt commercial transmitter built by Lorenz. Using three tubes – it operates on both phone and CW

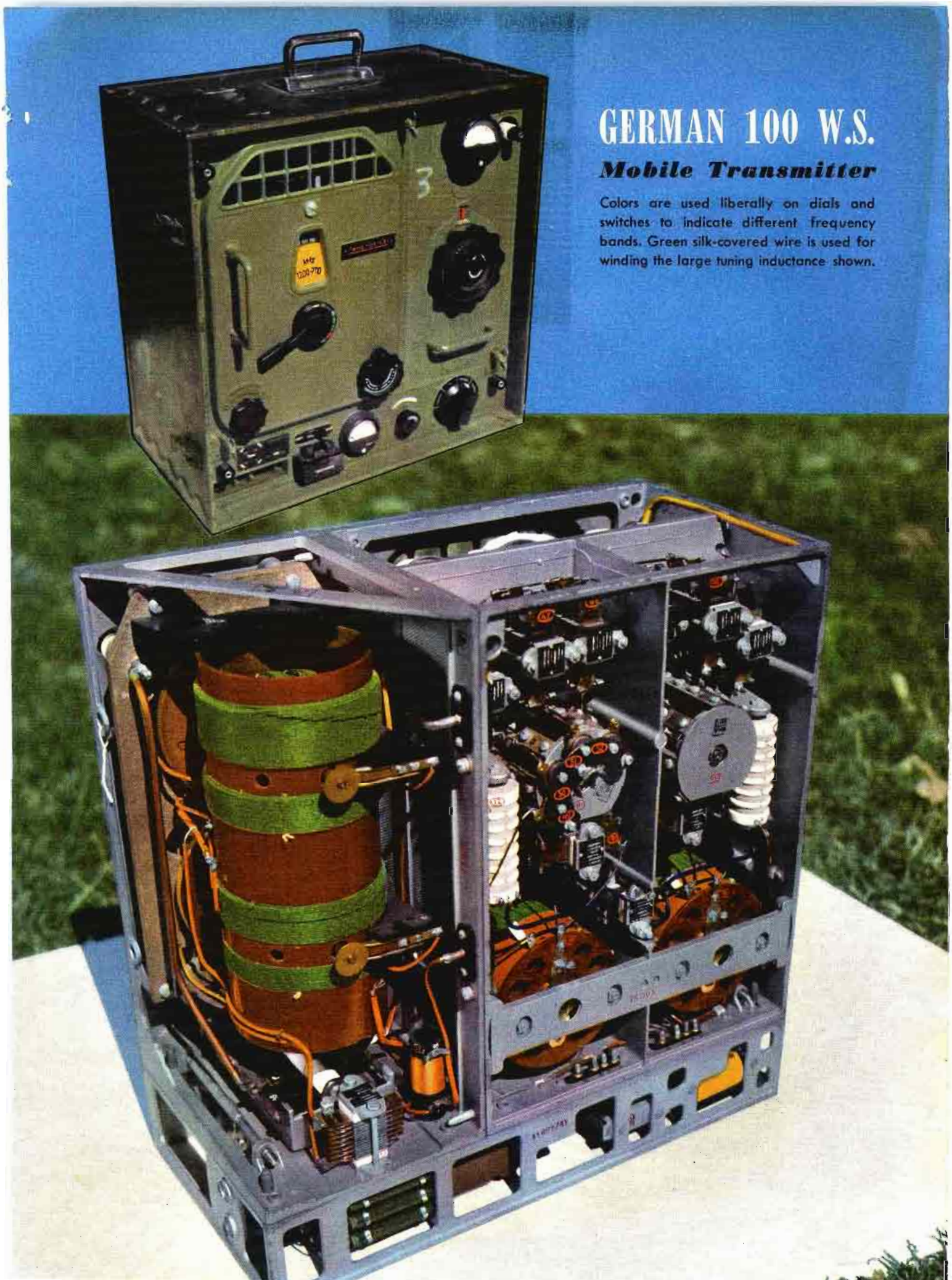
THIS transmitter is exceptionally well built. It is used in vehicles, as a fixed station transmitter and for the transmission of radiophotos. It covers a frequency range of from 200 to 1200 kilocycles on CW or phone. Provision is made for both local or remote keying. Like other German equipment—this set does not use crystal-control. It is designed to be used with a 30 ft. vertical antenna with umbrella top (to increase low angle radiation), an open wire, a roof antenna or an 18 ft. rod. A dynamotor, type U100A is used when operating in mobile units. For fixed station use—a machine type C furnishes power. A source of 12 volts @ 7.3 amperes, and a plate supply of 1000 volts @ 300 ma. is required. Provision is made to reduce the 100 watt output to 10 watts when limited range is desired. A total of three tubes is employed: two RS 237 transmitting triodes (M.O. and P.A.), and one type RS 241 (modulator). The weight of the transmitter is 57 lbs. and the type N-100 dynamotor is 48 lbs. Asbestos-covered shock absorbers may be seen over the three tubes. They hold the tubes firmly in the sockets. Mica condensers are used liberally throughout this set. Some of the assemblies are stacked two and three inches thick. They are made in higher capacities than those of American design. Metal castings are to be found in most German sets. Lightweight metals, such as aluminum, are well made and durable. Soldering and cabling is done neatly. Terminal blocks of bakelite or hard rubber are used. The variable condensers in the 100 W.S. are of good quality. Ball-bearings support the end of the rotor shafts. Heavy tie bars prevent de-tuning of circuits from mechanical distortion.

Rear view of the 100 W.S. transmitter. The large inductance is patterned after the variocoupler used in early receivers.



Bottom view showing neatly-arranged parts and general type of mechanical construction employed in German radio equipment.





GERMAN 100 W.S.

Mobile Transmitter

Colors are used liberally on dials and switches to indicate different frequency bands. Green silk-covered wire is used for winding the large tuning inductance shown.