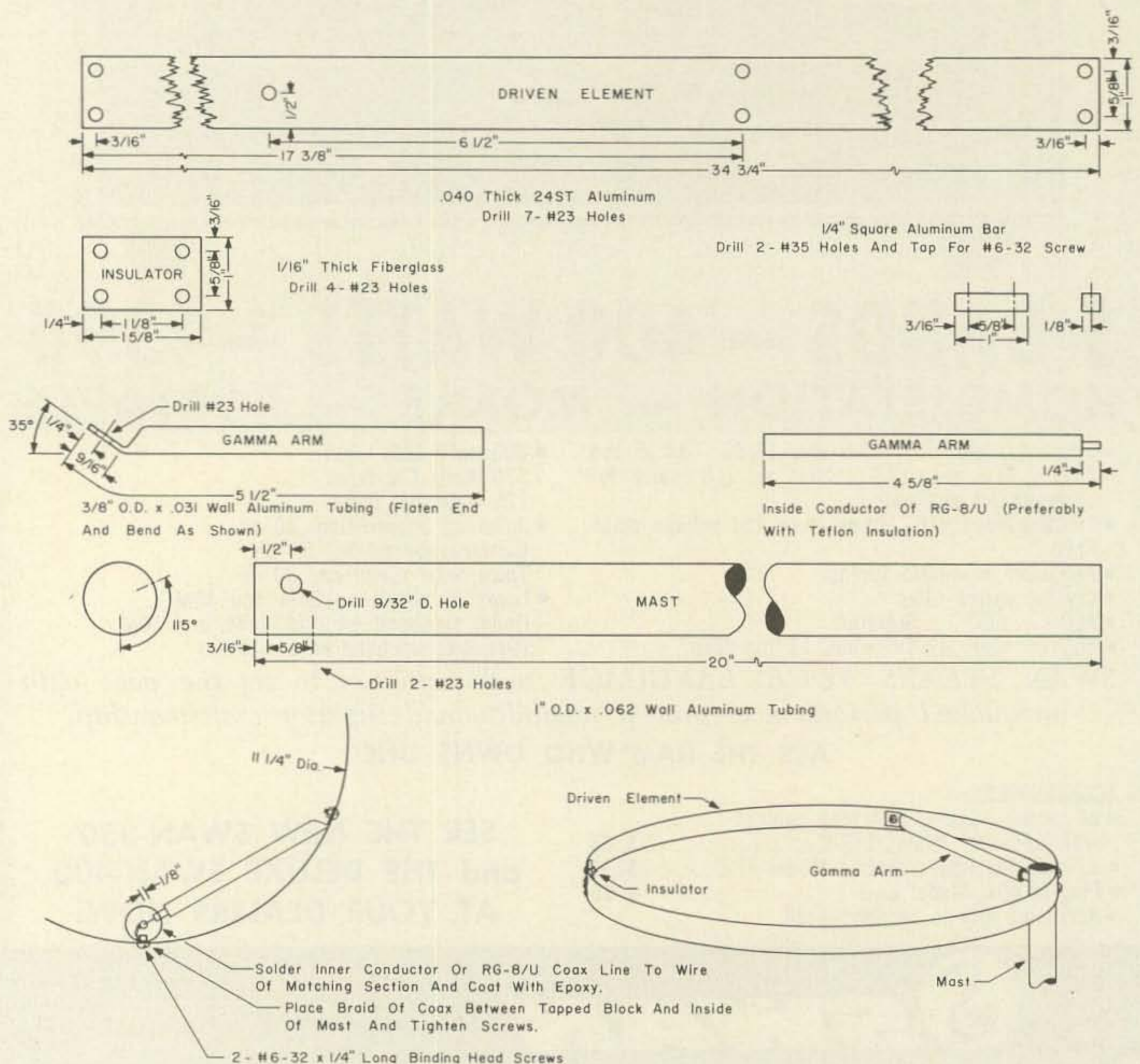


TWO METER MOBILE SPECIAL

A 2 Meter mobile installation that is capable of optimum performance and can be installed or removed in about 2 minutes was my objective, allowing the same transceiver to be used for both home and mobile operation.

The principal features of this installation are a simple platform for the transceiver and a new halo antenna held in place by a magnet.

The 12 volt power plug for the transceiver is wired in permanently, but this could be





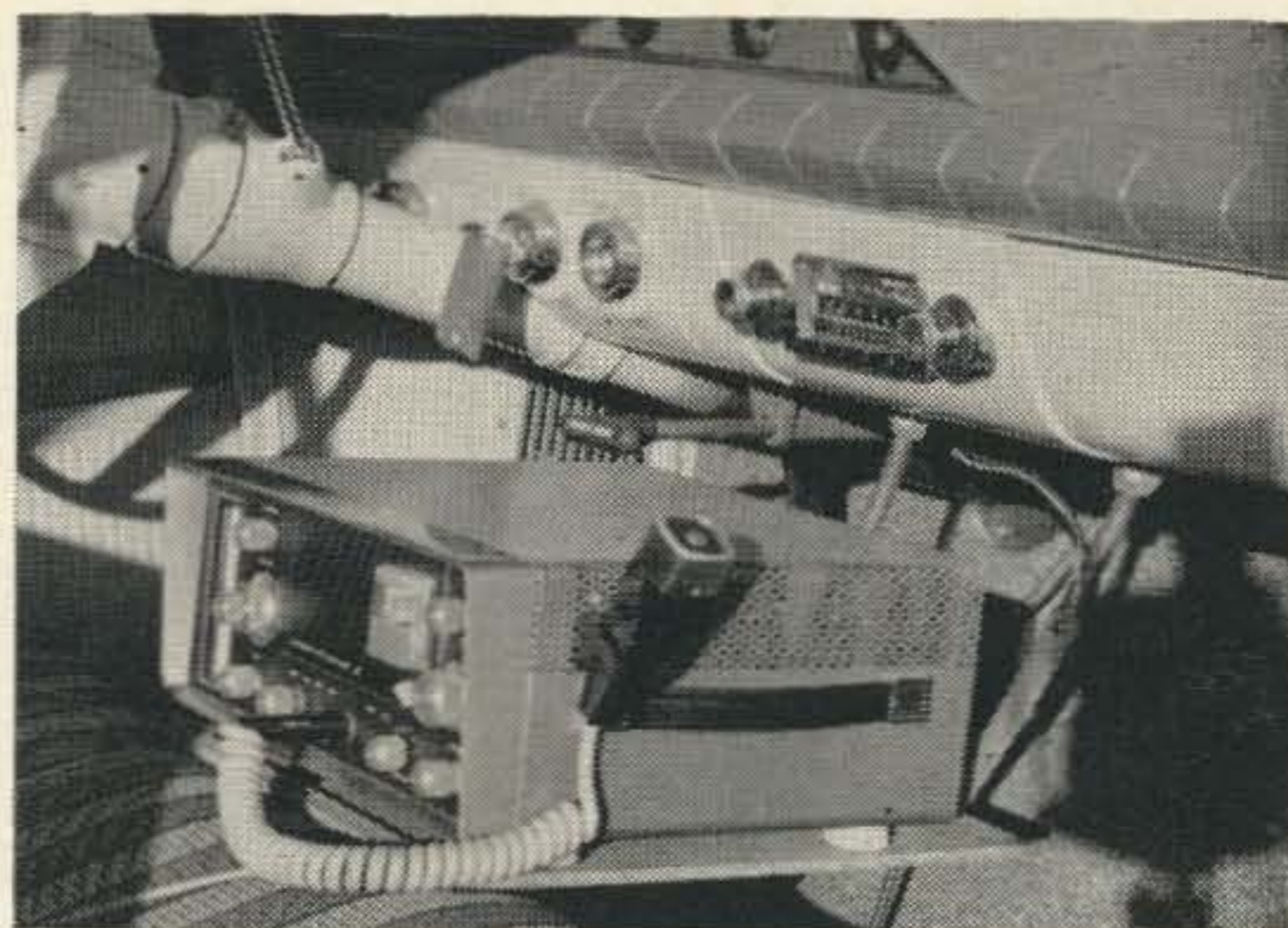
easily replaced by the usual cigar lighter receptacle plug.

The platform for the transceiver was made from masonite with four plastic cups of the type used under table legs fastened on the platform to prevent the transceiver from sliding. Two metal straps are fastened to the front of the platform to which are attached springs with metal clips bent to hook under the lower edge of the car's dash board. The rear edge of the platform has two holes through which a piece of venetian blind cord is threaded. The cord is tied to a piece of wood which holds against the back edge of the driver's seat.

With the platform hooked to the dash board, adjust the cord to hold the platform's edge on the edge of the front seat.

The transceiver will now have a nice shock mounted base and its front panel will be in a most favorable position for operation by either person in the front seat. The antenna cable is routed under the front seat and out the rear window to the antenna.

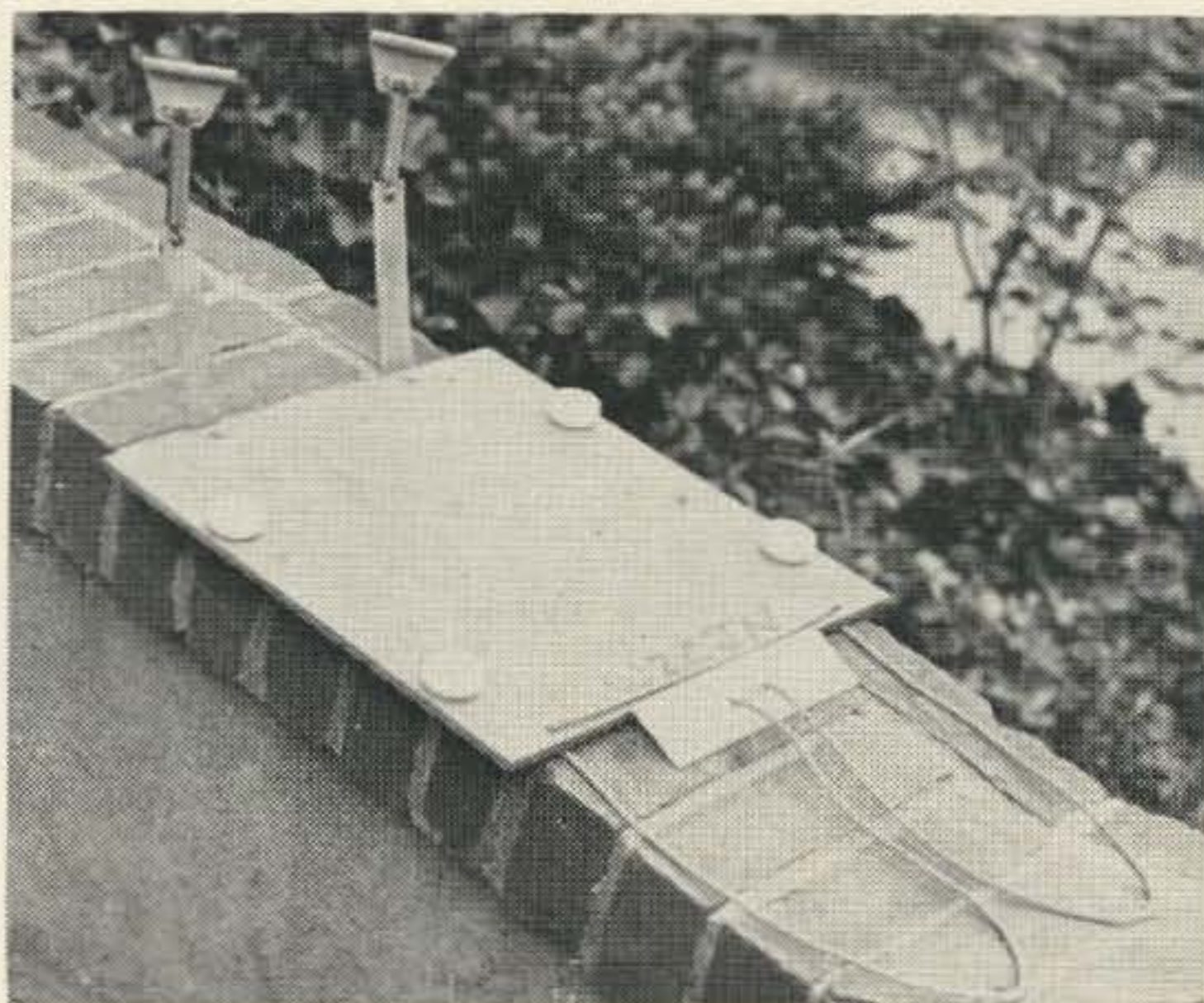
The antenna used is a Halo designed especially for this installation which is light weight and very simple to construct. The aluminum tubing used was 20 inches long (approx. $\frac{1}{4}$



Details of transceiver installation.

wavelength) to allow placing the halo in the center of the car's metal roof. A surplus magnetron magnet holds the antenna to the car roof at all legal speeds and then some. Thin mylar type was used on the pole faces of the magnet and a plastic plug cap was placed on the tubing's lower end to protect the car.

The halo antenna's element is made from flat stock of 24 ST aluminum which is the springy variety. This allows bowing a flat piece into the circular shape. A simple gamma match made from a piece of $\frac{3}{8}$ aluminum tubing having a short piece of wire (inner part of a piece of RG-8/U) inside of it for capacitive



Platform for transceiver.

coupling to the tubing. No adjustments are included for the VSWR should be under 2:1 over the 2 meter band if it is constructed as shown. The nominal impedance of this halo is 50 ohms. The spacing between the ends of the main element will increase or decrease the frequency band at which the optimum VSWR is obtained.

The performance exceeds that of the other 2 meter mobiles in our CD net and has been completely satisfactory in all respects.

... W2CJN