

E. Base stations operate from 12 volts automotive batteries. The base beacon weighs only 20 pounds. Continuous operation for 2 days before battery change.

MOBILE STATION

This consists of the monitor, the interrogator beacon and associated antenna system. Additionally, linear amplifiers are available which increase the transmitter output from the 200 watts minimum up to a maximum of 20 kilowatts, with power positions of 1 kilowatt, 5 kilowatts and 10 kilowatts provided. Linears are normally used when extended ranges are anticipated during the survey. A 117 volts AC to be available if these amplifiers are used.

Various types of antenna are available, including a high gain 48 degree beam width log-periodic array, a 135-degree beam width Yagi antenna, or an omni-directional rod antenna. A dual antenna system is normally used on the mobile station to provide better reception when the shore stations are separated by a wide angle or when baseline crossings are run.

BASE STATION

The base station comprises a beacon transmitter/receiver, a beacon control unit, 12 volts batteries, the antenna system with tower sections and normally a portable battery charges. The beacon unit is very compact, weighing 20 pounds and is essentially identical to the mobile interrogator except it operates on a different frequency. Similarly, linear amplifiers may be employed but this necessitates the provision