

I. THE MAXIRAN RADIOPOSITIONING SYSTEM

The Maxiran Radiopositioning System is a precision electronic ranging system, capable of both manual and automatic tracking of range. It is especially useful for measuring distances across bodies of water.

The use of the Maxiran requires three or more electronic installations. For the purposes of this discussion, one of these installations is assumed to be aboard a ship (see Figure 1). This installation consists of the Maxiran Monitor and Interrogator. The other installations are located onshore. Each of these installations consist of a Maxiran Beacon and a Control Box. There are two or more of the Beacon Control Box installations situated at appropriate locations onshore.

In operation, the Monitor/Interrogator installation transmits a radio signal (containing a Beacon-Select code which addresses a selected Beacon) which is picked up by all of the Beacon/Control Box installations. Each Beacon decodes the received signal and decides whether the Beacon-Select code transmitted corresponds to that Beacon. If the Beacon-Select code is correct for a