

## CHAPTER I.

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### General Description.

#### Portable and Harbour Defence W/T Sets.

The PORTABLE and HARBOUR DEFENCE Sets are each designed to form a self-contained Wireless Set, independent of any outside source of power. This complete independence is obviously necessary in the case of the Portable Sets, and it enables the Harbour Defence Sets to be installed in vessels having no electrical equipment.

The HARBOUR DEFENCE Set is designed for use in connection with the Examination Service and is supplied to all vessels carrying out this work, and to the Central Stations on shore to which such vessels report, these Stations being supplied in addition with a mast and a tent.

The PORTABLE Set is intended for use on shore in connection with landing parties, calibration ranges, &c.

For transport, two handcarts are supplied, the wheels being detachable enable the bodies of the carts to stand on legs and thus form tables.

#### Harbour Defence Set.

The Wave-Length used is 514 feet (L.S. value 6·2), and the range depends on the size of the vessel used, but the average day range is about 40 miles. In fitting up the sets in vessels, care much be taken to place the petrol engine on the upper deck, if possible, and as far from the receiving gear as can conveniently be arranged.

The Torpedo Schools at the various Ports are responsible for keeping the Local Defence Sets in an efficient condition.

#### STOWAGE OF PETROL.

Cans are stowed in open racks with tray bottoms. Since these cans must not be opened on a wood deck, an iron sawall is provided.

#### Portable Set.

The Portable Set uses a 985 feet Wave (L.S. value 22·8). The range obtained is about 60 miles over land and 100 miles over the sea.

As a good earth cannot be relied upon, a balanced capacity is used to take its place.

**Note.** In both sets, Signal Pads S. 1,322, and W/T Signal Log S. 325, should always be taken away when the sets are required for service.

## CHAPTER II.

### **Instruments.**

Instruments that are common to both the Portable and Harbour Defence Sets are marked "P.H.D."

Instruments for Portable Sets only are marked "P."

Instruments for Harbour Defence Sets only are marked "H.D."