

# DESCRIPTION AND USE OF WAVE-INDICATING TALLIES

NOTE :- This subject is included under the general heading of "Control Circuits" because it is mainly the control circuit equipment that is concerned. The actual operation of setting or shifting wave in individual transmitters and receivers is given in the Sub-Sections of this book dealing with the transmitters and receivers concerned.

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In C.W.S., allowance is made for twelve different transmitters, all capable of simultaneous and independent operation (subject to aerial limitations). Provision is also made for ordering changes in wave from C.C.O. and R.C.O. operator's positions by means of the dialling system.

It is therefore necessary to provide a complete organisation to fulfil the following requirements :-

## In the Transmitter Rooms.

- (a) To enable the T.R. watchkeeper (T.R.W.) to see at a glance what wave is supposed to be set on any transmitter.
- (b) To provide a means whereby the wave change order indicator can indicate to the T.R.W. the actual wave-frequency to which any transmitter is to be set or shifted.

## In the C.C.O.

- (a) To enable the officer or rating-in-charge to see at a glance which transmitter, C.R.R. bay and R.C. positions are in use for any particular line of communication (or "service") and the actual wave-frequency in use for that service.
- (b) To enable each operator to see at a glance what wave-frequency is in use on his particular line of communication.
- (c) To provide a means whereby each operator can indicate to the T.R.W. through the dialling system and W.C.O.I. the actual wave-frequency to which the transmitter on that line of communication is to be set or shifted.

## In the R.C.O.

- (a) To enable each operator to see at a glance what wave-frequency is in use on his particular line of communication.
- (b) To provide a means whereby each operator can indicate to the T.R.W. through the dialling system and W.C.O.I. the actual wave-frequency to which the transmitter on that line of communication is to be set or shifted.

## WAVE-INDICATING TALLIES.

The above indications are effected by means of "Wave-indicating tallies". Two typical tallies are shown in figure DBI. Figure DBI(a) shows an "Individual Service" tally, so called because each tally is labelled with the name of the service for which it will be used, e.g., "Station H/F Wave".

Figure DBI(b) shows the "General Service" tally, so named because each tally covers the most likely wave-frequencies required for M/F, H/F and low-power working respectively, irrespective of the service in use.

WAVE - INDICATING TALLIES.

"INDIVIDUAL SERVICE"								
4740 kc/s 1	5700 kc/s 2	8290 kc/s 3	11200 kc/s 4	12500 kc/s 5	kc/s 6	kc/s 7	kc/s 8	kc/s 9
"STATION H/F WAVE"								

(a)

"GENERAL SERVICE"								
2333 kc/s 1	2650 kc/s 2	1364 kc/s 3	500 kc/s 4	475 kc/s 5	270 kc/s 6	138 kc/s 7	107 kc/s 8	kc/s 9

(b)

kc/s 1	kc/s 2	kc/s 3	kc/s 4	kc/s 5	kc/s 6	kc/s 7	kc/s 8	kc/s 9
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(c)

# WAVE-CHANGING & WAVE-SETTING ORGANISATION

Tally plates will be supplied as plain metal plates without labels, sufficient tally plates being provided to cover the probable requirements of various types of ship. Skeleton paper labels for tallies as shown in Figure DB1(c) will be supplied in quantity to ships and should be demanded in the same manner as stationary.

It will be necessary for ships to affix the paper labels to the tally plates. Care must be taken to stick the labels squarely and centrally on the tally plates, leaving an equal margin at either end of the tally. If this is not done, the tallies will not fit properly into the tally holders.

Ships will normally be supplied and fitted with five stowage racks for tallies, one for each T.R., two for the C.C.O. and one for the R.C.O. Each of these stowage racks will hold 32 tally plates.

The tallies required for use are inserted in tally-holders as follows :-

For each transmitter - In the tally-holder on the front of the wave-change order indicator.

For the rating i/c C.C.O. - In tally-holders, fitted with cursors on the control circuit exchange, one tally-holder being fitted on the left of each horizontal row of sockets on the vertical exchange panel.

For C.C.O. and R.C.O. operators - In tally-holders, fitted with cursors, on the frame of the operator's information board (i.e., one to each operator).

## WAVE-FREQUENCY INDICATION.

Each tally has numbered spaces on it. In these spaces are written the wave-frequencies most likely to be used for the service denoted on that tally.

The actual wave-frequency which is in use at any moment, or to which it is desired to shift will then be indicated as follows :-

On the W.C.O.I. of each transmitter.

By the number of the W.C.O.I. switch which is in the 'down' position or by the number of the W.C.O.I. lamp which may burn to indicate an order to shift wave.

On the "Control Circuit Exchange" and on each "Operator's Information Board".

By the position on the cursor on the tally-holder.