Master.

...... Address.

NINTH SCHEDULE

SCHEDULE

FORM OF RADIOTELEPHONE LOG BOOK

| | RADIOTEL | | |
|--------------|--------------------|------------------|---------------|
| Name of Ship | Official Number | Port of Registry | Gross Tonnage |
| | | | , |
| | | | |
| | | | |

Name of company operating the radio service

Delivered to the Superintendent of the Mercantile Marine Office at the Port of ______ on the _____ day of _____ 19 ____ Countersigned:

| , Superintendent. | |
|-------------------|--|

SECTION A-PARTICULARS OF RADIOTELEPHONE OPERATORS

| Name | Home Address | Certificate Number and Class |
|------|--------------|---------------------------------|
| | | |
| | 22 | |

M.V.

SECTION B-DIARY OF THE RADIOTELEPHONE SERVICE

| Date and Time () | Station From | Station To | Frequency Used | Record of Working |
|-------------------------|-----------------|---------------|-------------------|-------------------|
| | | | | |
| | | | | |

TENTH SCHEDULE

Range of Radiotelegraph Transmitters

1. For the purposes of this Schedule, the normal range of a radio telegraph transmitter, when determined by calculation on a frequency of 500 kHz, shall be calculated in the manner specified in clause 2 or clause 3, of this Schedule.

2. (1) In the case of all types of transmitting aerials except "L" and "T" types, by ascertaining the product of (I_e) the effective radiation current in amperes and (H_e) the effective height in metres of the aerial. The effective radiation current (I_e) is obtained by multiplying the root mean square (RMS) current in amperes fed into the aerial system by a factor C_r/C_t which is determined by the ratio of the radiation capacitance (C_r) to the total measured capacitance (C_t) .

(2) The radiation capacitance (C_r) is obtained from the radiation length (L_r) in conjunction with the table given in subclause (4) of this clause.

(3) The radiation length is as follows:

(a) Single vertical aerial without capacitive loading—Radiation length (L_r) = measured length of aerial in metres.

(b) Single vertical aerial with top capacitive loading—Radiation length (L_r) = measured length of aerial + two times the diameter of loading structure, in metres.

(c) Other types of aerial—Radiation length $(L_r) = total$ length of conductor (vertical and horizontal), in metres.

(4) The radiation capacitance (C_r) is now obtained by the product of the radiation length (L_r) and the capacitance per unit length as given in the following table:

| $15 \cdot 4$ $14 \cdot 0$ |
|---------------------------|
| 14.0 |
| 10.0 |
| 12.9 |
| 11.9 |
| 11-1 |
| 9.8 |
| 8.7 |
| 8.2 |
| 7.8 |
| 7.2 |
| 6.6 |
| 6.0 |
| 5.7 |
| |

(5) The radiation capacitance of N similar vertical aerials joined in parallel shall be taken to be N times the radiation capacitance of one, provided the spacing between them is greater than $L_r/4$

(6) The total capacitance (C_i) of the aerial shall be obtained by measurement using a capacitance bridge of approved design.

(7) The ratio C_r/C_t may now be obtained, and this, when multiplied by the measured RMS current in amperes fed into the aerial system, gives the effective radiation current (I_e).

(8) The effective height of the aerial (H_e) shall be obtained by measurement of the vertical distance from the load line mark indicating the greatest depth to which the ship may at any time or any place be submerged in accordance with the Load Line Rules 1970, or, if there is no such mark on the ship, from the mean level of the surface of the water in which the ship is afloat, to the base of the aerial, plus half the radiation length (Lr) of the aerial or its physical height, whichever is the smaller.

(9) The product (I_eH_e) so ascertained in metre-amperes shall be converted to miles in accordance with the following table:

| Product in Metre-amperes | Equivalent in Miles |
|--------------------------|---------------------|
| 56 | 175 |
| 54 | 150 |
| 21 | 100 |
| 15 | 75 |
| 5 | 25 |

3. In the case of transmitting aerials of the "L" and "T" types, by ascertaining the product of the root mean-square current in amperes, at the base of the main aerial and the maximum height in metres of the aerial measured from the load line mark indicating the greatest depth to which the ship may at any time or place be submerged in accordance with the Load Line Rules 1970, or, if there is no such mark on the ship, from the mean level of the surface of the water in which the ship is afloat. The product so ascertained in metre amperes shall be converted to miles in accordance with the following table:

| Product in Metre-amperes | Equivalent in Mile |
|--------------------------|--------------------|
| 100 | 105 |
| 102 | 175 |
| 76 | 150 |
| 45 | 100 |
| 34 | 75 |
| 10 | 25 |

ELEVENTH SCHEDULE

Basic Principle's and Operational Guidelines Relating to Safety Radio Watchkeeping and Maintenance for Radio Officers on STCW Convention Ships

General

1. Basic guidelines—(1) The master of every STCW Convention ship should ensure that—

(a) The radio watch is maintained in accordance with these performance standards; and