STATUTORY INSTRUMENTS

1976 No. 302

MERCHANT SHIPPING

The Merchant Shipping (Radar) Rules 1976

Made - - - -	*26th February* 1976
Laid before Parliament	*8th March* 1976
Coming into Operation	*1st April* 1976

The Secretary of State, after consulting with the organisations referred to in section 85(3) of the Merchant Shipping Act 1970**(a)**, in exercise of powers conferred by sections 1 and 6 of the Merchant Shipping (Safety Convention) Act 1949**(b)** as having effect by virtue of section 85(1) of, and Schedule 1 to, the said Act of 1970, and by section 2 of the Merchant Shipping Act 1964**(c)**, and now vested in him **(d)** and of all other powers enabling him in that behalf, hereby makes the following Rules:

Citation, commencement and interpretation

1.—(1) These Rules may be cited as the Merchant Shipping (Radar) Rules 1976 and shall come into operation on 1st April 1976.

(2) The Interpretation Act 1889**(e)** shall apply for the interpretation of these Rules as it applies for the interpretation of an Act of Parliament.

(3) In these Rules, unless the context otherwise requires, the following expressions shall have the meanings respectively assigned to them, that is to say:

"radar installation" means a radio navigational aid (other than a direction-finder) required to be provided under Rule 3 below;

"maintenance" means any activity intended to keep a radar installation in satisfactory working condition and includes tests, measurements, replacements, adjustments and repair.

Application

2. These Rules apply to ships of 1600 gross registered tons and more which are registered in the United Kingdom.

Provision of radar

3.—(1) Every ship to which these Rules apply shall be provided with a radar installation which shall comply with:

(*a*) the Marine Radar Performance Specification 1957 or

(*b*) the Marine Radar Performance Specification 1968

issued by the Department of Trade:

Provided that a radar installation which is already provided in such a ship shall not be required to comply with such specifications before the expiry of one year from the date on which these Rules come into operation.

(a) 1970 c. 36. **(b)** 1949 c. 43. **(c)** 1964 c. 47.
(d) *See* S.I. 1965/145 and S.I. 1970/1537 (1965 I, p. 438; 1970 III, p. 5293).
(e) 1889 c. 63.

(2) Every such ship shall be provided with adequate means for readily determining any significant diminution in performance of the radar installation:

Provided that such equipment shall not be required to be provided before the expiry of four years from the date on which these Rules come into operation.

(3) Where a radar installation includes facilities for inter-switching different units of equipment, at least one arrangement of units when used together shall comply with all the requirements of these Rules.

Interference with other installations

4.—(1) At no time while the ship is at sea shall any interference or mechanical noise produced by the radar installation be such as to prevent the effective reception of radio signals.

(2) Units of the radar installation shall not, where practicable, be installed closer to the ship's standard and steering compasses than the appropriate "safe distance" marked on the unit. The "safe distance" means the minimum distance from the compasses specified on the unit, at which it should be installed.

Provision of electrical energy

5.—(1) There shall be provided in every ship to which these Rules apply, at all times while the ship is at sea and at all reasonable times when it is in port, a supply of electrical energy suitable and sufficient for the operation of the radar installation or for the purpose of testing and charging any batteries which are a source of electrical energy for the radar installation.

(2) The supply of electrical energy shall not exceed the limits set out below and adequate means shall be provided for disconnecting the supply of electrical energy:

AC Variation from nominal voltage of $\pm$ 10%
Variation from nominal frequency of $\pm$ 6%

DC Variation from nominal voltage:
110/220 Volt + 10% − 20%
24/32 Volt + 25% − 10%

Charging of batteries

6.—(1) If batteries are provided as a source of electrical energy for any part of the radar installation, adequate means shall be provided on board every ship to which these Rules apply for the charging of such batteries from the ship's main source of electrical energy.

(2) When any battery provided for a radar installation is not in use, it shall be capable of being fully charged within a period of not more than 16 hours by the means of charging required by paragraph (1) of this Rule.

(3) When any battery is float charged whilst in use, the voltage used for charging the battery shall be within the limits set out in Rule 5(2) above.

Siting of radar installation

7.—(1) The provisions of this Rule apply only to a radar installation installed one year or later after the coming into operation of these Rules.

(2) The radar installation shall, where practicable, be mounted sufficiently rigidly to prevent the performance and reliability of the installation being adversely affected by vibration.

(3) The aerial unit of the radar installation shall be sited so that the best overall performance is achieved in relation to:

(*a*) the avoidance of shadow sectors;

(*b*) the avoidance of false echoes caused by reflections from the ship's structure; and

(*c*) the effect of aerial height on the amplitude and extent of sea-clutter.

(4) The radar display shall be sited on the bridge from which the ship is normally navigated. The site shall be such that:

(*a*) an observer, when viewing the display, faces forward and is readily able to maintain visual lookout;

(*b*) there is sufficient space for two observers to view the display simultaneously, with any fitted display visor removed if necessary.

(5) For the purposes of this Rule, "sufficiently rigidly" means that the radar installation will not, whilst in service, normally be subject to greater vibration than that specified in the Marine Radar Performance Specification 1968 issued by the Department of Trade.

Serviceability of radar installation

8.—(1) The radar installation shall be in a satisfactory working condition whenever the ship goes to sea:

Provided that this paragraph shall not apply when a ship is going to sea from a place at which prompt maintenance is not available or practicable without unduly delaying the ship.

(2) The radar installation shall be in a satisfactory working condition at all times when the ship is at sea, unless there is a defect in the installation and maintenance is not practicable.

Alignment of heading marker

9. The radar heading marker (or stern marker if fitted) shall be accurately aligned with the ship's fore-and-aft line as soon as practicable after the radar installation has been installed in the ship. The marker shall be re-aligned as soon as practicable whenever a relative bearing taken by radar is not substantially the same as that obtained visually.

Measurement of shadow sectors

10. The angular width and bearing of any shadow sector displayed by the radar installation shall be determined and kept up to date following any changes likely to affect shadow sectors.

Servicing and operating information

11. Adequate information and instructions as to the use and maintenance of the radar installation shall be provided and shall be available at all times for use by any person operating, testing or servicing the radar installation.

Spares and tools

12. For each radar installation there shall be supplied such special tools and equipment as are necessary for shipboard maintenance and such spares as are likely to be required for the duration of the intended voyage.

Stanley Clinton Davis,
Parliamentary Under-Secretary of State,
Department of Trade.

26th February 1976.

EXPLANATORY NOTE

(This Note is not part of the Rules.)

These Rules introduce requirements for the provision of a radar installation in ships of 1600 gross registered tons and above registered in the United Kingdom. Provision is also made in respect of the siting and serviceability of the radar installation.

SI 1976/302
ISBN 0-11-060302-8

