

Australian Standard<sup>®</sup>

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**Radiocommunications equipment  
used in the inshore boating radio  
services band**

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This Australian Standard was prepared by Committee RC/4, Radiocommunications Equipment—Maritime and Safety of Life. It was approved on behalf of the Council of Standards Australia on 20 December 1995 and published on 5 March 1996.

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The following interests are represented on Committee RC/4:

Airservices Australia  
Australian Electrical and Electronic Manufacturers' Association  
Australian Federal Police  
Australian Maritime Safety Authority  
Department of Communications and the Arts, Australia  
Ministry of Commerce, New Zealand  
Spectrum Management Agency, Australia  
State Maritime Service Departments, Australia  
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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee RC/4 Radiocommunications Equipment—Maritime and Safety of Life. It was developed from a Department of Transport and Communications (Australia) document ECR 244 *Radiocommunications Equipment used in the 27 MHz Inshore Boating Service*. It is one of a series of Standards dealing with radiocommunications equipment under the terms of a Memorandum of Understanding between Standards Australia and the Australian Spectrum Management Agency.

This Standard is a result of consensus among Australian and New Zealand representatives on the Joint Committee to produce it as an Australian Standard, as the Inshore Boating Service does not exist in New Zealand.

The objective of this Standard is to specify the essential radiofrequency requirements and minimum standards for radiocommunications equipment to operate in the Inshore Boating Radio Service (IBRS) at frequencies not exceeding 30 MHz, and to provide methods of testing to confirm compliance to those requirements.

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## STANDARDS AUSTRALIA

### Australian Standard

## Radiocommunications equipment used in the inshore boating radio services band

**1 SCOPE** This Standard specifies the essential requirements and minimum standards for operation of the radiocommunications aspects of all radiocommunication equipment used in the Inshore Boating Radio Service (IBRS) operating at frequencies specified in Table 1.

IBRS equipment includes equipment used in—

- (a) limited coast stations;
- (b) ship stations; and
- (c) handheld stations.

**2 DEFINITIONS** For the purposes of this Standard, the definitions below apply.

**2.1 A3E**—an emission whose basic characteristic is that of a double sideband, amplitude modulated single channel carrier containing primarily analogue telephony information.

**2.2 ALC threshold**—the operating point on a transmitter output power characteristic at which an increase in the modulating signal level does not cause a proportional increase in output power. The ALC threshold is established when 1 dB compression is reached.

**2.3 Battery-end-of-life voltage**—the manufacturer's declared voltage below which the battery is incapable of operating the equipment in accordance with the manufacturer's stated specifications.

**2.4 Channel**—a 10 kHz band centred on the nominal carrier frequency.

**2.5 Emission**—radiation produced, or the production of radiation, by a radiocommunications transmitter.

**2.6 Handheld station**—a station designed to be carried on the person and deriving primary power from a replaceable or rechargeable internal battery.

**2.7 J3E**—an emission whose basic characteristic is that of a single sideband, amplitude modulated suppressed carrier on a single channel containing primarily analogue telephony information.

**2.8 Limited coast station**—a station established on land for the purpose of communicating with ship stations at sea and which is not used for the transmission and reception of messages on behalf of the public.

**2.9 Necessary bandwidth**—the bandwidth which is just sufficient to ensure the transmission of information at the rate and with the quality required.

**2.10 Out-of-band emission**—an emission on a frequency or frequencies immediately outside the necessary bandwidth which results from the modulation process but is not a spurious emission.

**2.11 Peak envelope power (PEP)**—the power supplied to the antenna transmission line by a transmitter during one radiofrequency cycle at the crest of the modulation envelope taken under normal operating conditions.

**2.12 Radiation**—the outward flow of energy from any source in the form of radio waves.