

Australian/New Zealand Standard™

**121.5 and 243.0 MHz emergency
position indicating radio beacons
(EPIRBs) including personal EPIRBs**



S t a n d a r d s Australia



STANDARDS
NEW ZEALAND
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AS/NZS 4330:2000

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The following interests are represented on Committee RC/4:

Australian Communications Authority
Australian Electrical and Electronic Manufacturers Association
Australian Federal Police
Australian Maritime Safety Authority
Ministry of Commerce NZ
New Zealand Marine Safety Interests
State Maritime Service Departments
State Police/Emergency Services
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee RC/4 on Radiocommunications Equipment—Maritime and Safety of Life. It has been developed from a combined Department of Transport and Communications, and Australian Maritime Safety Authority document ECR 241.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

As outlined in the Foreword, this Standard specifies the essential standards and minimum requirements for the design and construction of 121.5 and 243.0 MHz emergency position indicating radio beacons (EPIRBs) including personal EPIRBs.

This edition of the Standard contains changes which broaden the scope to include aviation portable ELTs, modify the physical requirements for the device to reflect the change of scope, refine activation and test mode conditions and tests, and refine modulation requirements. It adopts international climactic and durability tests from IEC 60945, *Maritime navigation and radiocommunication equipment and systems—General requirements—Methods of testing and required test results*, to align with IMO requirements.

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FOREWORD

To provide the essential requirements for 121.5 and 243.0 MHz emergency position indicating radio beacons (EPIRBs) including personal EPIRBs, this Standard includes both environmental and operational requirements and radio-frequency requirements for marine and aviation application beacons. The requirements are made up of specifications, and the methods of test for verification of those specifications, which are based on COSPAS-SARSAT and International Maritime Organization requirements.

These specifications are required by both the appropriate national spectrum management authority and maritime safety authority in each country.

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S E C T I O N 1 G E N E R A L

1.1 SCOPE

This Standard provides the minimum requirements for maritime emergency position indicating radio beacons (EPIRBs) including those designed for use as personal EPIRBs operating with carrier frequencies of 121.5 and 243.0 MHz and aviation portable emergency locator transmitters (ELTs) operating on 121.5 MHz.

These requirements encompass the physical characteristics of the devices, as they pertain to maritime use, and the performance characteristics for reception through a space satellite system or by overflying aircraft.

This Standard does not apply to fitted emergency locating transmitters (ELTs) or 406 MHz beacons employing 121.5 or 243.0 MHz homing devices.

Unless otherwise stated, aviation portable ELTs shall meet the same technical requirements as personal EPIRBs.

1.2 APPLICATION

This Standard is intended for use by equipment designers, manufacturers and suppliers to ensure correct operation of maritime EPIRBs including those designed for use as personal EPIRBs and aviation portable ELTs and their compatibility with space satellite systems.

1.3 REFERENCED AND RELATED DOCUMENTS

Referenced document

The following document is referred to in this Standard:

AS/NZS 3548	Limits and methods of measurement of radio disturbance characteristics of information technology equipment
IEC 60945	Maritime navigation and radiocommunication equipment and systems— General requirements—Methods of testing and required test results

Related documents

Attention is drawn to the following related documents:

AS 1000	The international system of units (SI) and its application International Maritime Organization Assembly Resolution A.763(18) International Telecommunication union—Radio Regulations
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