

Australian/New Zealand Standard™

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



AS/NZS 4330:2006

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee RC-004, Radiocommunications Equipment—Maritime and Safety of Life. It was approved on behalf of the Council of Standards Australia on 23 June 2006 and on behalf of the Council of Standards New Zealand on 7 July 2006.

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The following are represented on Committee RC-004:

Australian Communications and Media Authority
Australian Electrical and Electronic Manufacturers Association
Australian Federal police
Australian Marine Industries Federation
Australian Maritime Safety Authority
Civil Aviation Authority
Department of Defence
Electromagnetic Technical Evaluation Committee
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee RC-004, Radiocommunications Equipment—Maritime and Safety of Life to supersede AS/NZS 4330:2000. It has been developed from a combined Department of Transport and Communications, and Australian Maritime Safety Authority document ECR 241.

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.

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.

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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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SECTION 1 SCOPE AND GENERAL

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.

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

1.2 OBJECTIVE

The objective of this Standard is to provide equipment designers, manufacturers and suppliers with provisions 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 APPLICATION

The scope of this Standard encompasses the physical characteristics of EPIRBs devices, as they pertain to maritime use, and the performance characteristics for reception through a space satellite system or by overflying aircraft.

From 1 February 2009 the frequency 121.5 MHz will cease to be monitored by Cospas-Sarsat as a primary distress beacon frequency and this Standard, AS/NZS 4330, will then be withdrawn, as equipment covered by this Standard will no longer function as a distress beacon.

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

1.4 REFERENCED AND RELATED DOCUMENTS

The following documents are referred to in this Standard:

AS/NZS

CISPR 22 Information technology equipment—Radio disturbance characteristics—Limits and methods of measurement

IEC

60945 Maritime navigation and radiocommunication equipment and systems—General requirements—Methods of testing and required test results