AS/NZS 4432.1:2011
IEC 61097-1 Ed. 2.0 (2007)

AS/NZS 4432.1:2011

Australian/New Zealand Standard™

# Global maritime distress and safety system (GMDSS)

# Part 1: Radar transponder—Marine search and rescue (SART)—Operational and performance requirements, methods of testing and required test results


This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee RC-004, Maritime Radiocommunications. It was approved on behalf of the Council of Standards Australia on 6 June 2011 and on behalf of the Council of Standards New Zealand on 26 July 2011.
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EMC Technologies, New Zealand
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*This Standard was issued in draft form for comment as DR AS/NZS 4432.1.*

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# Global maritime distress and safety system (GMDSS)

# Part 1: Radar transponder—Marine search and rescue (SART)—Operational and performance requirements, methods of testing and required test results

Originated as AS/NZS 4432:1996.
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# PREFACE

This Standard was prepared by the Standards Australia Committee RC-004, Maritime Radiocommunications to supersede AS/NZS 4432:1996, *Radar transponders for marine search and rescue (SART)—Operational and performance requirements and methods of test.*

The objective of this Standard is to align the AS/NZS Standard with the latest edition of the International Standard.

The main changes with respect to the previous edition are set out in the IEC Foreword following the Contents list.

This Standard is identical with, and has been reproduced from IEC 61097-1 Ed. 2.0 (2007), *Global maritime distress and safety system (GMDSS)—Part* 1: *Radar transponder—Marine search and rescue (SART)—Operational and performance requirements, methods of testing and required test results*.

As this Standard is reproduced from an international standard, the following applies:

(a) Its number appears on the cover and title page while the international standard number appears only on the cover.

(b) In the source text ‘this part of IEC 61097’ should read ‘this Standard’.

(c) A full point substitutes for a comma when referring to a decimal marker.

None of the normative references in the source document have been adopted as Australian or Australian/New Zealand Standards.

# CONTENTS

# FOREWORD

The main changes with respect to the previous edition are listed below:

– some amendments to bring the standard up to date with newer IMO resolutions and ITU recommendations. In particular, in 1995, the IMO adopted new performance standards for the SART in resolution A.802(19) which replaced those of resolution A.697(17). This new resolution introduced a new requirement for the SART to be provided with a pole arrangement. In 2006, the ITU-R revised recommendation M.628 to permit the optional use of circular polarisation with the SART;

– the Introduction has been deleted as it was of historical interest only;

– Annex A, which contained details of the parts of the IEC 61097 series of standards, has been deleted as this information is now available from this Foreword;

– Annex B which contained a Bibliography has been deleted and the information moved into the normative references.

AUSTRALIAN/NEW ZEALAND STANDARD

# Global maritime distress and safety system (GMDSS)

## Part 1:
## Radar transponder—Marine search and rescue (SART)—Operational and performance requirements, methods of testing and required test results

### 1 Scope

This part of IEC 61097 specifies the performance standards and type testing of marine radar transponders used in search and rescue operations at sea (SART), as required by Regulation 6.2.2 of Chapter III, and 7.1.3 and 8.3.1 of Chapter IV of the 1988 amendments to the 1974 International Convention for Safety of Life at Sea (SOLAS), and which is associated with IEC 60936 (Shipborne radar) and IEC 60945 (General requirements).

This standard incorporates the performance standards of IMO Resolutions A.530 (13) and A.802 (19) (Survival craft radar transponders for use in search and rescue operations) and the technical characteristics for such transponders contained in ITU-R Recommendation M.628-4, and takes account of the general requirements contained in IMO Resolution A.694 (17).

NOTE 1 The categories of SART operation which are applicable to the stated SOLAS Regulations, IMO Resolutions and ITU-R Recommendation are:

a) integral with a survival craft;
b) portable and capable of floating;
c) as part of an EPIRB.

NOTE 2 This standard does not include non-SOLAS options for instance those envisaged in ITU-R Recommendation 628-4 - Considering (b).

All text whose meaning is identical to that in IMO Resolutions A.530 (13), A.694 (17), A.802 (19) and ITU-R Recommendation M.628-4 is printed in italics.

### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60936-1, *Shipborne radar – Operational and performance requirements – Methods of tests and required test results*

IEC 60945, *Marine navigational equipment – General requirements – Methods of testing and required test results.*

IMO Resolution A.222 (VII): *Performance standards for navigational radar equipment.*

IMO Resolution A.477 (XII): *Performance standards for radar equipment.*

IMO Resolution A.530 (13): *Use of radar transponders for search and rescue purposes.*

IMO Resolution A.694 (17): *General requirements for shipborne radio equipment forming part of the Global maritime distress and safety system and for electronic navigational aids*