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IMO/MSC GUIDELINES FOR SHORE-BASED MAINTENANCE OF SATELLITE EPIRBs

The Maritime Training Council hereby invites attention to the provisions of MSC/Circ. 1039 dated 28 May 2002 of the International Maritime Organization concerning guidelines for shore-based maintenance of Satellite EPIRBs which is hereto attached.

For information and guidance.

Adopted: 03 July 2002

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Guidelines for Shore-based Maintenance of Satellite EPIRBs

1. Introduction

- 1.1 The purpose of these guidelines is to establish standardised procedures and minimum levels of service for the testing and maintenance of satellite EPIRBs to ensure maximum reliability whilst minimizing the risk of false distress alerting.
- 1.2 The guidelines are intended to be applicable both to 406 MHz EPIRBs and to L-band EPIRBs, as either type may be carried to comply with the requirements of SOLAS regulation IV/7.1.6 EPIRBs may include 121.5 MHz transmitters, or Global Navigation Satellite System (GNSS) receivers.
- 1.3 The guidelines also apply to service exchange EPIRBs which should be properly encoded to match the appropriate registration database.
- 2. Shore-based maintenance (SBM) provider

2.1 The SBM provider should:

1. have a quality control system audited by a competent authority in respect of its servicing operations;

2. have access to adequate calibrated test equipment and facilities to carry out the SBM in accordance with these guidelines;

3. have access to batteries and other spare parts to the original equipment specification;

4. have access to up-to-date technical manuals, service bulletins and the latest software versions as provided by the original equipment manufacturer;

5. keep records of maintenance, available for inspection by the Administration as may be required;

6. ensure that all personnel responsible for supervising and for carrying out the maintenance procedures are adequately trained and fully competent to perform their duties; and

7. issue a shore-based maintenance report with a list of the test results and maintenance performed.

- 3. Prevention of false distress alerts
 - 3.1 Throughout the testing and maintenance process, great care must be taken to avoid the transmission of false distress alerts. The transmissions may be picked up by aircraft as well as satellites.
 - 3.2 A radio-frequency-screened room or enclosure should be used for all maintenance procedures involving, or likely to involve, any transmission from an EPIRB.
 - 3.3 Provision of a 121.5 MHz monitor receiver is required; this will pick up the homing transmitter and give a warning if the EPIRB is accidentally activated outside the screened enclosure.
 - 3.4 If a distress signal is transmitted accidentally, the local RCC should be contacted immediately and informed of the co-ordinates of the test site.
- 4. Maintenance service interval

4.1 406 MHz satellite EPIRBs should be inspected and tested in accordance with MSC/Circ. 1040.

- 4.2 Shore-based maintenance of all satellite EPIRBs, as defined in paragraph 1.2, should be carried out in accordance with these guidelines at intervals specified by the Flag Administration and not exceeding 5 years. It is recommended that the maintenance be performed at the time when the battery is to be changed.
- 5. Self-test
 - 5.1 Prior to carrying out any maintenance and, upon completion, a self-test should be performed, following the instructions on the equipment, and the results noted.
 - 5.2 Attention is drawn to paragraph 3 on the prevention of false distress alerts. Avoidance of live transmissions is required to prevent unnecessary loading of the satellite channels.
 - 5.3 It should be verified that the self-test mode operates properly. This check could be performed by holding the switch in self-test mode position for 1 min after the first self-test mode burst transmission. All transmissions should cease after releasing the