

Merchant Marine Circular

Panama Maritime Authority
General Directorate of Merchant Marine
Control and Compliance Department

MERCHANT MARINE CIRCULAR MMC-161

To: Ship-owners/Operators, ship managers, ship masters, designers and shipbuilders. Legal Representatives of Panamanian Flagged Vessels, Panamanian Merchant Marine Consulates and Recognized Organizations (RO's)

Subject: Voyage Data Recorder (VDR) and Simplified Voyage Data Recorder (S- VDR) annual test, and its Performance Standards

Reference:

- a) Law No. 7 of October 27, 1977 - SOLAS 1974,
- b) Law No. 12 of November 9, 1981 – SOLAS Protocol 1978,
- c) Law No. 31 of July 11, 2007 – SOLAS Protocol 1988,
- d) SOLAS regulations V/ 18.8 and 20,
- e) Resolution No. 106-OMI-125-DGMM of January 27, 2014 adopted Resolution MSC.333(90) of May 22, 2012 A.861(20) of November 27, 1997 and Resolution MSC.214(81) of May 12, 2006,
- f) Resolution No. 106-OMI-52-DGMM of March 19, 2008 adopted MSC.1/Circ.1222 of December 11, 2006,
- g) Resolution MSC.163(78) adopted by IMO on 17 May 2004 (**only as recommendation**),
- h) Resolution MSC.493(104) adopted by IMO on 7 October 2021 - Amendments to the Performance standards for shipborne Simplified voyage data recorders (S-VDRs) (**only as recommendation**),
- i) Resolution MSC.494(104) adopted by IMO on 7 October 2021 - Amendments to the Performance standards for shipborne voyage data recorders (VDRs) (**only as recommendation**),
- j) Resolution MSC.471(101) adopted by IMO on 14 June 2019 Performance standards for float-free emergency position-indicating radio beacons (EPIRBs) operating on 406 MHz. (**only as recommendation**)

1. Purpose

- 1.1. The purpose of this Merchant Marine Circular is to communicate all parties concerned with Panamanian flag ships, of the approved guidelines adopted



Merchant Marine Circular

with the purpose of having a standard method for the annual testing of the VDR and S-VDR including the last amendments adopted by IMO through MSC.493 (104) dated 7 October 2021 and Resolution MSC.494 (104) dated 7 October 2021, concerning to Performance Standards for Shipborne Voyage Data Recorders (VDRs) and shipborne Simplified voyage data recorders (S-VDRs).

2. Background of VDR & S-VDR:

2.1. The requirements that VDR and S-VDR systems are subjected of an annual testing has been approved by the revision of SOLAS Regulation V/20 and established by Regulation V/18.8 as amended.

2.2. The purpose of an annual performance test is to determine that a VDR / S-VDR is operational as defined in the manufacturer's specification.

2.3. The annual test for the VDR and S-VDR will be carried out by the manufacturer or a person authorized by the manufacturer.

3. Recommended items that the annual testing of the VDR and S-VDR should include:

3.1. Confirmation that no alarms are present prior to the initiation of the test;

3.2. Confirmation that when the external power is removed, the power supply alarm is activated, the equipment continues to operate for at least 1 hours and 55 minutes and automatically stops recording no later than 2 hours 5 minutes after the external power is removed;

3.3. Confirmation that the acoustic beacon is functional using the appropriate manufacturer's test equipment or by the substitution of a certified fully operational unit;

3.4. Confirmation that the overall condition of the equipment is satisfactory and that any battery within the equipment (acoustic beacon and power supply) is not expired;

3.5. Confirmation that accurate maintenance records of the VDR are available;

3.6. Confirmation that the items to be recorded, specifically those data items available and required to be recorded at the time of original commissioning as defined in Resolution A.861(20) adopted by IMO on 27 November 1997 and Resolution MSC.163(78) adopted by IMO on 17 May 2004 for VDR and S-VDR respectively, are satisfactorily stored for the duration of the 12-hour recording period;

3.7. Confirmation that the capsule float-free arrangements, where required or



Merchant Marine Circular

fitted, are satisfactory as originally accepted at commissioning; and that any battery, release mechanism or other items are within their expiry date; and,

3.8. Confirmation that the equipment is restored to normal operation mode following completion of the tests.

4. Recommended periods to conduct Annual Test to VDR & S-VDR and record keeping:

4.1. The annual test may be carried out as follows:

4.1.1. For passenger ships: Up to 3 months before the due date of the survey of Passenger Ship Safety Certificate. The maximum period between subsequent checks is therefore 15 months, unless either certificate has been extended as permitted by SOLAS regulation I/14, in which case a similar extension may be granted.

4.1.2. For cargo ships: 3 months before or after the due date of the annual survey of the Cargo Ship Safety Construction Certificate. The maximum period between subsequent checks is therefore 18 months, unless the certificate has been extended as permitted by SOLAS regulation I/14, in which case a similar extension may be granted.

4.1.3. The manufacturer must complete a review, record any changes, and issue the completed test report within 45 days. To accommodate performance checks to align with the appropriate survey under the Harmonized System of Survey and Certification (HSSC).

4.1.4. The annual test should be registered on the form from the model report about the test that figures on the appendix of the MSC.1/Circ.1222 adopted by IMO on 11 December 2006. A copy of the report from the test will remain on board of the vessel. Also these forms will be available for all Port State Control Inspectors and Panamanian Flag Inspectors.

5. Performance Standards S-VDRs

5.1. Owners, Operators of Panamanian Ships, Recognized Organizations, Masters, designers and shipbuilders are recommended to ensure that S-VDRs conform the following performance standards:

5.1.1. Shipborne Simplified voyage data recorders (S-VDRs) installed **on or after 1 July 2022**, conform to performance standards not inferior to those specified in the annex to Resolution MSC.163(78) adopted by IMO on 17 May 2004, as amended



Merchant Marine Circular

by Resolution MSC.214(81) adopted by IMO on 12 May 2006 and the Resolution MSC.493(104) adopted by IMO on 7 October 2021;

5.1.2. Shipborne Simplified voyage data recorders (S-VDRs) installed **on or after 1 June 2008, but before 1 July 2022**, conform to performance standards not inferior to those specified in the annex to Resolution MSC.163(78) adopted by IMO on 17 May 2004, as amended by Resolution MSC.214(81) adopted by IMO on 12 May 2006; and

5.1.3. Shipborne Simplified voyage data recorders (S-VDRs) installed **before 1 June 2008**, conform to performance standards not inferior to those specified in the annex to Resolution MSC.163(78) adopted by IMO on 17 May 2004.

6. Performance Standards VDRs

6.1. Owners, Operators of Panamanian Ships, Recognized Organizations, Masters, designers and shipbuilders are recommended to ensure that VDRs conform the following performance standards:

6.1.1. Shipborne voyage data recorders VDRs installed **on or after 1 July 2022**, conform to performance standards not inferior to those specified in the annex to Resolution MSC.333(90) adopted by IMO on 22 May 2012, as amended by the Resolution MSC.494(104) adopted by IMO on 7 October 2021,

6.1.2. Shipborne voyage data recorders VDRs installed **on or after 1 July 2014 and before 1 July 2022**, conform to performance standards not inferior to those specified in the annex to Resolution MSC.333(90) adopted by IMO 22 May 2012;

6.1.3. Shipborne voyage data recorders VDRs installed **on or after 1 June 2008, but before 1 July 2014**, conform to performance standards not inferior to those specified in the annex to Resolution A.861(20) adopted by IMO on 27 November 1997, as amended by Resolution MSC.214(81) adopted by IMO on 12 May 2006; and

6.1.4. Shipborne voyage data recorders VDRs installed **before 1 June 2008**, conform to performance standards not inferior to those specified in the annex to Resolution A.861(20) adopted by IMO on 27 November 1997.

7. In both cases VDR and S-VDR installed **on or after 1 July 2022** should comply with the construction aspect of the float-free recording medium requirements specified in the Resolution MSC.471(101) adopted by IMO on 14 June 2019 "Performance standards for float-free EPIRB's operating on 406 MHz" to: facilitate grappling and recovery, minimize risk of damage during recovery operations; and continue transmitting an initial satellite distress



Merchant Marine Circular

alerting signal and further locating and homing signals over a period of not less than seven days/168 hours.

July, 2022 – *New reference added, paragraphs renumbered and topics added: including the last amendments MSC.493(104) and MSC.494(104) concerning Performance Standards for Shipborne Voyage Data Recorders (VDRs) and shipborne Simplified voyage data recorders (S-VDRs).*

April 2014 – *Renumbering of paragraphs, include new paragraph 3, regarding the performance standards.*

March 2008

Inquiries concerning the subject of this Merchant Marine Circular or any other request should be forward to:

SEGUMAR-Panama
General Directorate of Merchant Marine
Panama Maritime Authority
Phone: (507) 501- 5353/50/48
E-mail: segumar.headoffice@segumar.com
Website: <https://panamashipregistry.com/circulars/>