



ST. VINCENT AND THE GRENADINES

MARITIME ADMINISTRATION

CIRCULAR N° SOL 0049

VDR / S-VDR AND CASUALTY INVESTIGATIONS SOLAS REGULATION V/20 AND MSC/CIRC.1024

TO: **SHIPOWNERS, SHIPS' OPERATORS AND MANAGERS, MASTERS, FLAG STATE SURVEYORS, RECOGNIZED ORGANIZATIONS AND FLAG STATE INVESTIGATORS¹**

APPLICABLE TO: All ships

EFFECTIVE AS FROM: Date of this Circular

In the event of a marine casualty or accident, collection and analysis of the vessel's VDR or S-VDR data may provide important evidence to identify a root cause for a casualty investigation.

It has recently been revealed that on many occasions the Master and Navigation Officers have failed to demonstrate their awareness of VDR / S-VDR operational procedures. This means that if there is a casualty, the collection and preservation of VDR / S-VDR data will be compromised.

According to MSC/Circ.1024, the ship owner should ensure that all necessary actions are taken to collect and preserve VDR / S-VDR data as soon as possible after a casualty.

The corresponding procedures for collection and preservation of the data including a procedure for retrieval of the data module prior abandoning the vessel of the VDR / S-VDR should be included in the Safety Management System. Shipowners should refer to the manufacturer's instructions to establish the procedures.

After a casualty when a vessel must be abandoned and when time and other responsibilities allow, the Master should retrieve the VDR / S-VDR module containing the data before abandoning the vessel.

In accordance with MSC/Circ.1024, during the course of an investigation, the Flag State Investigator should have custody of the original VDR / S-VDR data.

The Flag State Investigator is responsible for arranging the down loading and read-out of the information and should keep the ship owner fully informed. It is the Owner's responsibility to provide all necessary support in connection with down loading and read-out of the information when required by the Flag State Investigator

¹ The Flag State Investigator includes also the investigator of the State authorized by the Flag State to have custody of the VDR / S-VDR data.

A copy of the VDR / S-VDR data, including the audio recording should be saved to digital media, such as a DVD or flash drive, with any relevant instructions or required software to access the data.

Sufficient copies of the data should be made for provision to the owner and all investigating authorities.

Any disclosure of VDR / S-VDR information should be in accordance with section 10 of the Code for the Investigation of Marine Casualties and Incidents

Annexes: MSC/Circ.1024 and SN/Circ/246



Ref. T1/2.02

MSC/Circ.1024
29 May 2002

GUIDELINES ON VOYAGE DATA RECORDER (VDR) OWNERSHIP AND RECOVERY

1 The Maritime Safety Committee, at its seventy-fifth session (15 to 24 May 2002), approved the annexed Guidelines on voyage data recorder (VDR) ownership and recovery which have been developed to support provisions of the revised SOLAS regulation V/15, as amended by resolution MSC.99(73), and, in particular, to support the carriage requirements for voyage data recorders contained in the revised SOLAS regulation V/20, which are expected to enter into force on 1 July 2002.

2 These Guidelines reflect the five basic issues relevant to VDR ownership and recovery, which are ownership, custody, recovery, read-out and access to the VDR information, as envisaged by the revised SOLAS chapter V.

3 In view of the complexity of the matter, close co-ordination and co-operation among interested parties, as appropriate, in any recovery operation of a VDR is encouraged.

4 Member Governments are invited to bring the annexed Guidelines to the attention of all parties concerned.

ANNEX

**GUIDELINES ON VOYAGE DATA RECORDER (VDR)
OWNERSHIP AND RECOVERY****Ownership of VDR information**

1 The ship owner will, in all circumstances and at all times, own the VDR and its information. However, in the event of an accident the following guidelines would apply. The owner of the ship should make available and maintain all decoding instructions necessary to recover the recorded information.

Recovery of VDR and relevant information

2 Recovery of the VDR is conditional on the accessibility of the VDR or the information contained therein.

- .1 Recovery of the VDR information should be undertaken as soon as possible after an accident to best preserve the relevant evidence for use by both the investigator¹ and the ship owner. As the investigator is very unlikely to be in a position to instigate this action soon enough after the accident, the owner must be responsible, through its on-board standing orders, for ensuring the timely preservation of this evidence.
- .2 In the case of abandonment of a vessel during an emergency, masters should, where time and other responsibilities permit, take the necessary steps to preserve the VDR information until it can be passed to the investigator.
- .3 Where the VDR is inaccessible and the information has not been retrieved prior to abandonment, a decision will need to be taken by the flag State in co-operation with any other substantially interested States² on the viability and cost of recovering the VDR balanced against the potential use of the information. If it is decided to recover the VDR the investigator should be responsible for co-ordinating its recovery. The possibility of the capsule having sustained damage must be considered and specialist expertise will be required to ensure the best chance of recovering and preserving the evidence. In addition, the assistance and co-operation of the owners, insurers and the manufacturers of the VDR and those of the protective capsule may be required.

Custody of VDR information:

3 In all circumstances, during the course of an investigation, the investigator should have custody of the original VDR information in the same way that the investigator would have custody of other records or evidence under the Code for the Investigation of Marine Casualties and Incidents.

¹ The term *investigator* refers to the Marine Casualty Investigator as per the terms of the Code for Investigation of Marine Casualties and Incidents.

² Refer to paragraph 4.11 of the Code for the Investigation of Marine Casualties and Incidents, as adopted by resolution A.849(20).

Read-out of VDR information:

4 In all circumstances the investigator is responsible to arrange down loading and read-out of the information and should keep the ship owner fully informed. In some cases, the assistance of specialist expertise may be required.

Access to the VDR information:

5 A copy of the VDR information must be provided to the ship owner at an early stage in all circumstances.

6 Further access to the information will be governed by the applicable domestic legislation of the flag State, coastal State and other substantially interested States as appropriate and the guidelines given in the Code for the Investigation of Marine Casualties and Incidents.

7 Any disclosure of VDR information should be in accordance with section 10 of the Code for the Investigation of Marine Casualties and Incidents.



Ref. T2-0SS/2.7.1

SN/Circ/246
17 June 2005

**RECOMMENDED MEANS FOR EXTRACTING STORED DATA FROM
VOYAGE DATA RECORDERS (VDRs) AND SIMPLIFIED VOYAGE DATA
RECORDERS (S-VDRs) FOR INVESTIGATION AUTHORITIES**

1 The Sub-Committee on Safety of Navigation (NAV), at its fifty-first session (6 to 10 June 2005), recognizing that, after an accident, there is a need for the investigators to be able to download the stored data and playback the information from VDRs/S-VDRs without delay, agreed on the Recommended means for extracting stored data from voyage data recorders (VDRs) and simplified voyage data recorders (S-VDRs) for investigation Authorities.

2 Member Governments are invited to bring the annexed recommendation to the attention of all concerned.

ANNEX**RECOMMENDED MEANS FOR EXTRACTING STORED DATA FROM VOYAGE DATA RECORDERS (VDRs) AND SIMPLIFIED VOYAGE DATA RECORDERS (S-VDRs) FOR INVESTIGATION AUTHORITIES**

1 To enable accident investigators to make effective use of VDR or S-VDR data after an accident, it is essential for the investigators to be able to download the stored data and playback the information without delay. There is at present no required interface in a VDR or S-VDR for the use by investigators.

2 To assist in achieving this aim, it is recommended that all VDR and S-VDR systems installed on or after 1 July 2006 be supplied with an accessible means for extracting the stored data from the VDR or S-VDR to a laptop computer. Where an installed VDR or S-VDR already supports a data output port as per paragraph 3.1 below, means should be provided for existing installations after 1 July 2007.

3 Manufacturers should therefore provide:

- .1 an output port providing data in an internationally recognized format, such as Ethernet, USB, FireWire, or equivalent;
- .2 software, compatible with an operating system available with commercial off-the-shelf laptop computers stored on a portable storage device such as a CD-ROM, DVD, USB-memory stick, etc.; and
- .3 instructions for executing the software and for connecting the laptop to the VDR/S-VDR.

4 The software should provide the capability to download the stored data and playback the information.

5 The portable storage device, the instructions and any special (not commercial off-the-shelf) parts necessary for the physical connection, should be stored within the main unit of the VDR/S-VDR and available for the exclusive use of the accident investigation Authorities.

6 If so requested, VDR/S-VDR manufacturers should make available download and playback software including updates and ship specific software to investigation Authorities.