

Marine Safety and Security Management System

TIER I – Policy

Acceptance of Electronic Visual Distress Signals in lieu of Pyrotechnic Distress Signals (smoke signal or flare) on Pleasure Craft

Effective Date	Date of Revision

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1 Policy Objective

- 1.1 The objective of this policy is to improve pleasure craft safety by accepting new electronic alternatives to conventional pyrotechnic distress signals (smoke signal or flare).

2 Policy Statement

- 2.1 When carried with an approved smoke signal, Transport Canada recognizes that an electronic visual distress signal device (eVDSD) can be carried instead of all approved rocket parachute flares, multi-star flares, hand flares or a watertight flashlight if the electronic signal is determined to have:
 - a. met the requirements of the Radio Technical Commission for Maritime Services (RTCM) Standard 13200.0 by a Product Certification Body or been accepted by the United States Coast Guard.
- 2.2 Any written operating instructions and warnings required, by the RTCM Standard 13200.0, to be on the eVDSD shall be in both English and French. Instructions and manuals required by the Standard must be available in both English and French.

3 Scope

- 3.1 This policy applies to pleasure craft that must carry flares (approved pyrotechnic distress signals) in accordance with to the *Small Vessel Regulations*.

4 Authority

- 4.1 Section 4 for substitute safety equipment of the *Small Vessel Regulations* made under the *Canada Shipping Act, 2001*.
- 4.2 This policy falls under the overall administrative authority of the Director General of Marine Safety and Security.
- 4.3 The Marine Safety and Security Executive Committee has approved this policy for general use.

5 Responsibility

- 5.1 The Executive Director, Domestic Vessel Regulatory Oversight, is accountable for the development, approval and maintenance of this policy.
- 5.2 The Regional Directors, Marine Safety and Security, are responsible for implementation of this policy.
- 5.3 Please email questions or comments to marinesafety-securitemaritime@tc.gc.ca, or mail to:

Manager, Small and Fishing Vessels, Design and Equipment Standards
(AMSDS)

Transport Canada
Place de Ville, Tower C
330 Sparks St
Ottawa, ON, K1A 0N5

6 Related Documents

- 6.1 *Small Vessel Regulations* (SOR/2010-91)
- 6.2 TP 14475, Canadian Life Saving Appliance Standard
- 6.3 RTCM Standard 13200.0, *Electronic Visual Distress Signal Devices (eVDSD)*

7 Background

- 7.1 The *Small Vessel Regulations* currently require, amongst other things, that all pleasure craft longer than 6 metres, carry pyrotechnic distress signals unless;
 - b. they are operating on a river, canal or lake in which they can at no time be more than one nautical mile from shore; or
 - c. they have no sleeping arrangements and are engaged in an official competition or in final preparation for an official competition.
- 7.2 Smoke signals and flares are hard to ship, store, and dispose of in a safe and environmentally-friendly way. It's also hard to find a course to learn how to

use them correctly. As such, Transport Canada began looking into alternative signaling devices.

- 7.3 In June of 2018, following extensive research, the Radio Technical Commission for Maritime Services (RTCM) published the RTCM Standard 13200.0 which list the requirements for Electronic Visual Distress Signal Devices (eVDSD).
- 7.4 After consulting with marine stakeholders and Canadian search and rescue authorities, Transport Canada now recognizes eVDSD as an approved alternative to traditional pyrotechnic distress signal.

8 Date of Application

- 8.1 This policy comes into force on November 9, 2021.

9 Date for Review or Expiry

- 9.1 This policy will be reviewed in 5 years.

10 RDIMS Reference

- 10.1 The English version of this document is saved in RDIMS under reference number (17414209). The applied naming convention is (PUBLICATION - TP 13585 - POLICY - ACCEPTANCE OF ELECTRONIC VISUAL DISTRESS SIGNALS IN LIEU OF PYROTECHNIC DISTRESS SIGNALS (SMOKE SIGNAL OR FLARE) ON PLEASURE CRAFT).
- 10.2 La version française du présent document est dans le SGDDI et porte le numéro de référence (13357523). La règle d'affectation des noms est (PUBLICATION - TP 13585 - POLITIQUE - ACCEPTATION DES SIGNAUX DE DÉTRESSE VISUELLE ÉLECTRONIQUES AU LIEU DES SIGNAUX DE DÉTRESSE PYROTECHNIQUE (SIGNAL FUMIGÈNE OU FUSÉE) SUR LES EMBARCATIONS DE PLAISANCE).
- 10.3 This is the first approved and finalized revision of the English version of this document.

11 Keywords

- Electronic Visual Distress Signal
- eVDSD
- RTCM Standard 13200.0
- Visual Distress Signals
- Pyrotechnics

Annex A – About electronic visual distress signals (eVDSD)

In Canada, pleasure craft can use electronic visual distress signals (eVDSD) that are certified to the Radio Technical Commission for Maritime Services (RTCM) standard 13200.0 **instead** of traditional pyrotechnic distress signals.

Here are some key points for boaters to be aware of to safely and legally make use of this option.

The scope of the policy

- This policy **only** applies to pleasure craft
- It requires that a Transport Canada (TC) approved smoke signal be carried with the eVDSD for daytime alerting.
- It only allows eVDSD with documentation from an accredited product certification body, or the United States Coast Guard (USCG), stating that it has been tested to and meets the requirements of the RTCM standard 13200.0.
- Devices must be labelled with the statement, “Complies with RTCM Standard 13200.0 for an eVDSD”. If a device doesn’t include this statement, it can’t be used as an alternative to pyrotechnic distress signals

The policy adds additional choices for distress alerting available to vessel operators. It does not replace the acceptance of approved pyrotechnic distress signals. These flares continue to be an option that may be used to meet the requirements of the regulations.

Characteristics of eVDSD

An electronic signal that meets the standard will have:

- signal characteristic in the form of a 2-colour cyan (blue) and red-orange S-O-S light sequence
- near-infrared signal so it can be detected with night vision goggles
- an operating temperature range of -1°C to +30°C
- a storage temperature range of -20°C to +55°C
- an average effective intensity of at least 50 candela
- at least 2 hours continuous operating life

Choosing and using electronic signals

- Electronic signals are just one of many ways to signal that you need help. In addition to the minimum requirements of regulations, alert options available to boaters include marine VHF, 406MHz Personal Locator Beacons, Emergency Position Indicating Radio Beacons (EPIRB) and means of two-way communication such as cellular phones in certain areas.
- Vessel operators should select their distress alerting equipment after assessing:
 - your planned route
 - the risks associated with that route
 - who will help you in an emergency, and where they're located, and
 - the equipment you would need to alert and communicate with those helpers
- One of the great things about eVDSD is how easy they are to learn and use. Make sure to practice using your signal, but only in a place where the distress signal can't be seen by others or accidentally cause a search and rescue response.
- Like all safety equipment, the eVDSD must be located where it can be used immediately
- Everyone on board should know where the eVDSD is located, and how to activate it. They should also understand that it's just one of many ways to signal that you need help.

Maintaining an electronic signal

Each eVDSD comes with an instruction manual from the manufacturer. The manual will include instructions for using, maintaining and caring for your device.

Always follow the manufacturer's instructions and recommendations for how eVDSDs should be maintained and cared for. Regular inspections and service checks are an important part of keeping your equipment ready to be used.