United States Coast Guard
U.S. Department of Homeland Security

CG-5431
Office of Vessel Activities
Domestic Compliance Division

MI Notice 02-10
July 2, 2010

Marine Inspection Notice

APPLICATION OF IMO RESOLUTION MSC.256(84) TO U.S. FLAG SOLAS SHIPS

Retroactive requirements for carbon dioxide system releasing control arrangements

In 1990, IMO amended SOLAS regulation II-2/5.2.5 to require two separate and independent releasing controls on fixed carbon dioxide systems installed on or after 1 October 1994, following a series of casualties attributable to the inadvertent discharge of systems fitted with only a single releasing control. These requirements were not made retroactive to existing ships, as it was anticipated that older ships would be gradually phased out of service.

In 2008, the IMO Fire Protection Sub-Committee revisited the issue and determined that there were still a significant number of ships in service with carbon dioxide systems installed prior to 1994 fitted with only a single releasing control. It was agreed that since these older ships were being kept in service much longer than anticipated, it was necessary to establish a cut-off date for the use of single release systems. The Sub-Committee consequently amended regulation II-2/10 by adding a new paragraph 4.1.5:

"4.1.5 By the first scheduled dry-docking after 1 January 2010, fixed carbon dioxide fire-extinguishing systems for the protection of machinery spaces and cargo pump-rooms on ships constructed before 1 July 2002 shall comply with the provisions of paragraph 2.2.2 of chapter 5 of the Fire Safety Systems Code."

Paragraph 2.2.2 of chapter 5 of the FSS Code requires:

"2.2.2 Controls

Carbon dioxide systems shall comply with the following requirements:

.1 two separate controls shall be provided for releasing carbon dioxide into a protected space and to ensure the activation of the alarm. One control shall be used for opening the valve of the piping which conveys the gas into the protected space and a second control shall be used to discharge the gas from its storage containers; and

.2 the two controls shall be located inside a release box clearly identified for the particular space. If the box containing the controls is to be locked, a key to the box shall be in a break-glass-type enclosure conspicuously located adjacent to the box."

These amendments were promulgated as IMO resolution MSC.256(84), and apply to all carbon dioxide systems required by chapter II-2 of SOLAS. However, they do not apply to automatically released systems installed in certain spaces where SOLAS allows the Administration to determine the required protection in accordance with SOLAS regulations II-2/10.5.4 and II-2/10.6.3.1.4.

All Coast Guard type approvals for carbon dioxide systems include provisions for automatic release, subject to the design and arrangements shown in the manufacturer's approved manuals. Automatic release is permitted for systems protecting normally unoccupied spaces such as flammable liquid lockers or emergency generator spaces with a volume of 6,000 ft^3 or less, having a suitable means of horizontal escape, provided the cylinders are located inside the protected space and arranged to discharge upon activation of pneumatic heat actuated devices (HADs). New and existing automatically released systems designed in accordance with the manufacturer's approved design manual are acceptable in such spaces onboard both SOLAS and non-SOLAS ships. Existing systems are not required to be modified to comply with resolution MSC.256(84).

The vessel regulations in 46 CFR (e.g. 95.15-10(b)) also permit the installation of systems with a single releasing control, provided the system has no more than 300 lbs of carbon dioxide. Such systems are also exempt from resolution MSC.256(84), unless they protect a machinery space of category A or a cargo pump room.

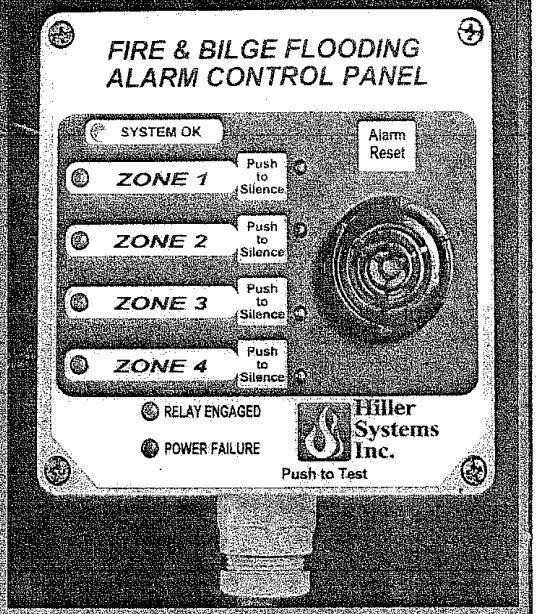
Questions concerning this notice may be directed to LT Jarrod DeWitz in the Office of Vessel Activities, Domestic Compliance Division (CG-5431) at Jarrod.M.DeWitz@uscg.mil 202-372-1219 or Mr. Randall Eberly at Coast Guard Headquarters Lifesaving and Fire Safety Division (CG-5214) at (202) 372-1393.

HillerSAFE

Fire & Bilge Flooding Alarm Control Panel

Features-

- 12 or 24 Volt D.C. Operation
- Compact Size: 5" x 5" x 2.5"
- Fully Supervised
- Sealed Membrane Switches
- Liquid-Tight Enclosures
- Surface or Flush Mount
- Integral Alarm and Silence Function
- Primary Power Loss Warning
- Output for Remote Audio Visual Alarm



Function-

The **HillerSAFE Fire and Bilge Flooding Alarm Panel** utilizes advanced technology for the detection of fire and overheat conditions as well as bilge flooding conditions. Each HillerSAFE Control Panel has the ability to monitor up to four separate zones simultaneously. Four zones means better hazard location and identification. Visit www.hillersystemsinc.com to learn more!

Each alarm zone is monitored for alarm or fault conditions, and all circuits are fully and automatically supervised. If any field wiring or detection devices are damaged, a 'Trouble' condition will be audibly and visually annunciated. An internal battery is continuously and automatically charged by the panel circuitry, and illuminates a 'Power Failure' L.E.D. when primary system power is lost, or degrades below 5 volts.

The HillerSAFE Control Panel and associated devices were successfully tested to Lloyds Register (LR) Type Approval System, Test Specification 1. The tests were performed by Retlif Testing Laboratories, Ronkonkoma,New York. Test report reference is Report Number R-8695, dated October 31st , 2000.

Monitors-

- Heat Detectors
- Manual Fire Alarm Pull Stations
- Bilge Flooding Sensors
- General Alarm Pull Stations
- Security Devices
- Any Contact Closure Device

ABS Cert. 01-N0228998-PDA

Hiller Systems Inc.