

**DEPARTMENT OF TRANSPORTATION  
UNITED STATES COAST GUARD**

COMMANDANT (MMT-3)  
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NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 6-70

Subject: Fixed Fire Extinguishing Systems for Use in Galley Ventilating Equipment

- I. Purpose. The purpose of this circular is to inform interested parties fixed fire extinguishing systems for galley ventilating protection may be installed in accordance with the following instructions.
2. Background. A ship's galley offers a natural environment for the production of fire since necessary elements of combustion are present; heat, fuel, and oxygen. Casualty files show that fires in galley units are often complicated by the fact that the fires extend into the galley ventilating equipment. This is an area that is difficult to reach in order. to effect extinguishment.
3. Discussion. There are three major types of fixed fire extinguishing systems for use in galley ventilating equipment. They are:
  - a. Dry Chemical
  - b. Carbon Dioxide
  - c. Anti-freeze

Dry chemical extinguishes fires by means of its inhibiting chemical interaction with the combustion process. Carbon dioxide excludes oxygen and the anti-freeze system dispenses a liquid which turns cooking fat into soap by a process of saponification rendering it non-flammable. Each of the devices has inherent advantages and disadvantages, however, all are efficient devices when properly installed. The three types of devices are capable of manual and/ or automatic operation.

4. Action. A fixed fire extinguishing system designed for use in galley ventilating equipment which is listed for such use by Underwriters' Laboratories, Inc., Chicago, Illinois will be permitted for installation on board U. S. vessels. Installation shall be made in accordance with the laboratories listing and labeling requirements and the manufacturer's recommended procedures. The list of acceptable systems and their design parameters may be found in the Underwriters' Laboratories, inc. Fire Protection Equipment List. Engineered CO<sub>2</sub> systems that are currently approved by the Coast Guard may also be installed.

Approval for each installation shall be on a vessel by vessel basis. Plans should be submitted to the appropriate U. S. Coast Guard District, Merchant Marine Technical Branch for review.