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MARINE SAFETY ALERT

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Safety Alert 06-97

DRY ENGINE EXHAUST HAZARDS

Owners and operators of vessels using dry type engine exhaust systems are strongly cautioned to check the condition of all exhaust pipes, insulation, and adjacent stack areas to ensure that no combustible materials come in contact with, or in close proximity to, hot exhaust pipes.



Recently, a fire erupted aboard a small wooden passenger vessel (approximately 70 ft in length) carrying over 60 people. Although the official investigation is not complete, information available at this time indicates that sparks or radiant heat from the exhaust pipes apparently ignited a fire in the vicinity of the smokestack. Crew members initially responded to the fire by discharging two carbon dioxide extinguishers at the flames. Once this action proved to be futile, the crew members deployed the vessel's fire hose. In the few short minutes it took to retrieve and lead out the hose, the flames fully engulfed the vessel; elapsed time was approximately five minutes.

The smokestack in this case consisted of several exhaust pipes passing vertically through a stack facade. The facade was fabricated of wood and sheathed in non fire retardant fiberglass. Constructed as it was, the flames quickly spread throughout the stack area and progressed unimpeded through the wooden vessel.

Operators of similarly constructed vessels should be aware of the potential fire hazards that dry exhaust systems present and should take all the necessary precautions to ensure these systems are properly constructed, insulated, and that the insulation is itself in good condition and properly secured. The stack and any void spaces located in and around it should also be free and clear of all combustibles. Luckily, the vessel was operating in protected waters and in close proximity to shore at the time of the casualty. Had this incident occurred under different circumstances it could have easily led to more serious injury or even death.

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