

# Technical Bulletin

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## Steering gear compartment fire doors

*It is important to keep **any** fire door shut at all times but it is of particular importance to keep the steering gear compartment fire doors shut*

The Club's ship inspectors frequently find that the fire door(s) and the watertight door leading to the steering gear compartment from the engine room are either hooked, wedged or secured with wire in the open position for ease of access. This is despite many being clearly marked "KEEP CLOSED".

The primary purpose and legal requirement of any fire door is to limit the spread of fire and smoke from one space into another. The engine room / steering gear compartment door will also prevent the escape of carbon dioxide (CO<sub>2</sub>) gas from the engine room into the steering gear compartment.

The calculated volume of CO<sub>2</sub> required for filling the engine room is based on the volume of the engine room *alone*; it does not include the volume of the steering gear compartment. Therefore, if the CO<sub>2</sub> is released and the steering gear compartment door is open, some CO<sub>2</sub> will escape into this space rather than fill the engine room. It is therefore possible that any fire in the upper areas of the engine room may not be extinguished.

Additional problems may be caused if CO<sub>2</sub> is allowed to escape into the steering gear compartment during an engine room fire.

- If the emergency fire pump is located in the steering gear compartment and is a diesel driven type it will not be possible to start this locally. On recently built ships, most fire pumps are electrically driven and can be started remotely (from the bridge, fire station etc.) . Should any problems develop with the pump (e.g.



electrical faults, lack of priming / suction) it would also be impossible without breathing apparatus to access the fire pump to carry out repairs.

- The steering gear compartment is usually the safest location for fire fighting teams to tackle an engine room fire as it is at a lower level than the accommodation access points and is less likely to be affected by heat and smoke. Fire fighting equipment (fire hoses and fireman's suits etc.) are often located in this area. A fire fighting attempt from the steering gear compartment would be severely hampered if this space was even partially filled with CO<sub>2</sub>.
- On many ships the emergency escape route from the engine room leads into or through the steering gear compartment. Escape from the engine room with no CABA or EEBD through this route would be nearly impossible if the steering gear compartment and escape trunking were filled with CO<sub>2</sub>.

It is strongly suggested that all steering compartment doors should always be marked "KEEP CLOSED" and that safety officers should check that they are, in fact, kept closed except when access is required.

