

USCG: fatalities in engine room fire caused by fuel spray ignition

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The United States Coast Guard (USCG) has published Safety Alert 4-15 entitled 'Engine Room Operations: Maintaining Machinery, Knowing Escape Routes, & Conducting Thorough Engineering Watches'.

The safety alert deals with an engine room fire that occurred onboard an older cruise ship while it was at berth. A fuel oil spray under pressure developed from an operating engine's fuel supply line when a bolted flange parted. The fuel spray ignited when it contacted the engine's exhaust piping or turbocharger components. The vessel's fine mist extinguishing system automatically activated and performed as designed extinguishing the primary fire. Fuel pumps and shutoff valves were also secured.

However, the short-duration fire also ignited cable bundles, quickly filling the machinery space with smoke. As a result, one crew member and two technicians were unable to egress and perished in the engine room.

The US Coast Guard has issued this safety alert in order to:

- Reiterate the importance of vessel engineers recognizing and taking action on engine manufacturer technical bulletins and service letters.
- Remind personnel working in machinery spaces to have a personal exit plan no matter where they were working.
- Stress the value of having engineers frequently perform detailed engineering space inspection rounds on engines, systems, and other equipment.

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