

## Fire in engine room

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The Marine Safety Forum (MSF) has published the following safety alert regarding an incident in which there was a fire in an engine room.

### What happened?

The incident occurred whilst returning to port from offshore. The crew were alerted when three sensors on the fire detection system activated, setting off the fire alarm and the vessel's "flexifog" fixed firefighting system. The chief engineer, who had been close to the engine room, confirmed that smoke was present. The quick closing fuel valves were activated and ventilation to the space shut down whilst the crew mustered and readied the Breathing Apparatus (BA) team. Due to the vessel's proximity to the coast and to other marine traffic, an anchoring party was sent forward and appropriate lights were displayed. A BA team then entered the engine room with a charged hose, but it was subsequently confirmed that the fire had been extinguished by the "flexifog" system. Whilst the vessel was without propulsion for a short time, no crew members were injured and damage was minimal.



The following points were noted:

- The actions of the crew minimised the risk to their own safety and damage to the vessel.
- All equipment was operated as required and the fire was dealt with promptly and professionally.
- The result of effective fire and safety drills and proper maintenance regimes are clear.
- The fire started as a result of the failure of a low pressure fuel hose on one of the Main Engine generators. This allowed fuel to leak onto the exhaust manifold heat shield – the fuel pooled and ran off the heat shield causing contact with the exhaust, which subsequently ignited the fuel.

## Corrective actions/recommendations:

- Thorough inspection and periodic replacement – regardless of condition – of fuel hoses on generators and main engines. In this case, the company replaced fuel hoses on all similar engine types.
- Appropriate update of planned maintenance system to increase the frequency of checks on fuel hoses.
- Review the operation of their fixed firefighting systems and the initial actions that should be taken by the vessel crew in the event of a fire – ensuring that all crew members are fully conversant with both.
- In this case, the proper activation of the fixed firefighting system and prompt action of the crew prevented a potentially life threatening scenario.

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