

Electrical fire in engine room

Safety Flash Published on 1 November 2001 Generated on 18 February 2026 IMCA SF 13/01

A Member has reported the following incident which occurred onboard one of its vessels.

What happened?

Due to a sudden power fluctuation, evidenced by flickering lights, the chief engineer went to the engine room to investigate and detected smoke, with a foul smell emanating from the step-down transformer.

He panicked and shut off the main power breaker, causing the vessel to go adrift. He used two DCP-type fire extinguishers to douse the smoke. He tried to establish the cause of the incident and, after about five minutes, he bypassed the transformer and resumed the power supply.

The cause of the overheating of the transformer is under investigation. It is suspected that the transfer insulation and cooling fan may be at fault.

Our Member took the following action:

The member, in order to prevent reoccurrence of such an incident, has advised its personnel:

- That it is absolutely necessary to stay calm and assess the situation before deciding on the course of action.
- To conduct a periodic check of all overload relays, MCBs and fire/smoke detection systems for correct function.
- To report defects and ensure corrective action is taken.

IMCA Safety Flashes summarise key safety matters and incidents, allowing lessons to be more easily learnt for the benefit of the entire offshore industry.

The effectiveness of the IMCA Safety Flash system depends on the industry sharing information and so avoiding repeat incidents. Incidents are classified according to IOGP's Life Saving Rules.

All information is anonymised or sanitised, as appropriate, and warnings for graphic content included where possible.

IMCA makes every effort to ensure both the accuracy and reliability of the information shared, but is not be liable for any guidance and/or recommendation and/or statement herein contained.

The information contained in this document does not fulfil or replace any individual's or Member's legal, regulatory or other duties or obligations in respect of their operations. Individuals and Members remain solely responsible for the safe, lawful and proper conduct of their operations.

Share your safety incidents with [IMCA online](#). Sign-up to receive Safety Flashes [straight to your email](#).

