Fire in switchboard room

Safety Flash Published on **1 June 2004** Generated on **28 January 2026** IMCA SF 05/04

A Member has provide the following account of a fire which broke out in a carousel 660v switchboard room aboard one of its vessels.

What happened?

The purpose of the 660v switchboard room was to provide power distribution to the vessel's carousels. As well as having a primary function as the switchboard room, the area had been shelved to provide storage space for consumables and spare parts. Below the switchboard room was an open store containing more stores and machinery. In addition, numerous cable runs for the main propulsion and ancillary gear were routed through this area of the vessel.

A welder had been issued with a hot work permit by the duty engineer in connection hot work to be conducted in the carousel holds. The period of validity of the hot work permit was 12 hours and during this period there was a requirement for the automatic fire detection system in the holds to be disabled.

An engineer entered the hold area to speak to the welder. During their discussion it was noticed that the paint work was starting to bubble and blister towards the switchboard room. The engineer located the nearest dry powder extinguisher and entered the switchboard room, in the correct manner, to attack the fire. The welder was meanwhile instructed to raise the alarm and to locate another extinguisher.

Following the exhaustion of the fire extinguisher, the engineer left the switchboard room and closed the door to prevent the fire spreading. The welder had been unable to locate another extinguisher or raise the alarm, so the engineer moved to the azimuth room, where he knew more extinguishers were located. On entering the azimuth room, he called the engine control room and advised the chief engineer of the situation. The chief engineer subsequently called the bridge and the alarm was raised manually by the duty deck officer. The alarm was raised, all onboard mustered and the fire parties appraised of the situation.

Although the engineer returned to the source of the fire, he was unable to continue due to the amount of smoke and was forced to abandon the space.

Five minutes later, men from the main fire party entered the space to access the situation. Both were suitably attired in breathing apparatus. During this period, the back party was instructed to close all ventilation to the space and electrical isolation of the area was confirmed.

The bridge party ensured that the nearby platform was informed of the situation and a helicopter was put on standby as a contingency measure. A further four men entered the switchboard room, wearing breathing apparatus, and assisted the first fire party in successfully extinguishing the fire with water.

Forty-five minutes after the initial incident, the chief officer reported the fire to be

extinguished. The area remained under observation in the hours following and all fire fighting equipment was checked, replenished and returned to its correct locations.

The engineer who had initially tackled the fire was treated by the medic due to suspected intake of both dry powder from the extinguisher and smoke from the fire.

Although this incident highlighted deficiencies in the systems in place, a number of positives were be gained from the response onboard. All fire fighting systems had worked well and the muster was adhered to by all personnel. Communications between the parties were satisfactory and contact with the shore was easily established and available at an early stage in case of escalation of the incident. It was also felt that training provided both onshore and onboard had ensured that the marine crew were able to deal with the situation in a confident and professional manner.

The company involved has noted the following lessons learned:

1. A failure in the onboard permit-to-work system was highlighted with the following recommendations made:
    - The person preparing and issuing the permit (the issuing authority), or a nominated deputy, must satisfy himself/herself that an effective inspection of the worksite has been concluded prior to issue of a permit-to-work.
    - The vessel master must satisfy himself/herself that the system is being effectively utilised, by periodically auditing the system.
2. It has become evident from the fire that, under stress, the crew found it difficult to connect the fire connections. It was therefore recommended that two keys be provided at each fire hose station.
3. More powerful torches are to be stationed around the vessel.
4. A compatible throat walkie-talkie microphone should be obtained for the person in charge of the fire party.

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.