MAIB

MARINE ACCIDENT INVESTIGATION BRANCH

# FISHING ACCIDENT FLYER

## HOME FROM HOME?

### Narrative

An experienced fisherman moved to a new area, seeking work as crew and found a berth on a 16m potter. The skipper agreed that the new man could live on board for a short time while he was "finding his feet" and looking for a flat. The boat was a day runner, with a combined galley/mess and sleeping cabin forward of the fish hold. The cabin had a diesel-fired heater and an LPG cooker, but the skipper had disconnected the heater as it was faulty.

Early one cold winter's morning the skipper boarded his vessel to go to sea. He called the crewman and received no response. He could hear a muffled humming noise, but thought this was a water pump running so continued making ready. Once the engines were started, he went down into the cabin to call the new crewman. On entering the cabin he noticed a smell of fumes, though neither the cooker nor heater was lit, and found the crewman unconscious in his bunk. The skipper could not rouse him so called for help.

In the cabin, the skipper realised the "buzzing" he could still hear was coming from the fish hold. The hold was battened down, but an electrical cable was coming out from under the hatch cover. On opening the hold, the skipper found it full of exhaust fumes from a portable petrol-driven generator running inside. The generator belonged to the new crewman, who had brought it onboard and rigged it inside the fish hold to power an electric heater, a TV and radio to make his temporary home a little more comfortable. The skipper had not given permission for him to do this.

The bulkhead between the fish hold and the sleeping cabin was not watertight, nor was it gastight. Sadly, the crewman died as he slept due to Carbon Monoxide poisoning from the generator's exhaust fumes.

### Safety Issues:

The crewman had much to look forward to: he had a fresh start in a new job and had booked a holiday abroad with friends. On the day of the accident, he had set his alarm clock for an early start to go fishing.

We will probably never know why the crewman decided to put the generator inside the fish hold, but in doing so he introduced a number of hazards to the boat:

Carbon Monoxide. The petrol-driven generator's exhaust contained Carbon Monoxide. Given the correct conditions, both the LPG cooker and the diesel heater could also have produced this lethal gas, which has no smell, no taste, is colourless and extremely difficult to detect. Its insidious nature means that a person may be oblivious to the fact

that they are being poisoned; someone sleeping is particularly vulnerable to its noxious properties which, at best can produce 'flu-like symptoms, and at worst will kill. This skipper was fortunate to avoid falling victim as well.

Fire/explosion. Petrol gives off highly flammable fumes that are heavier than air. Having a petrol engine below decks runs the risk of explosive fumes building up in the bilges, particularly if ventilation is poor. This boat was moored second out from the quay in a tier of several boats. Any major accident could easily have destroyed other boats too.

Electrical Hazards. The generator was supplying 240V to household appliances, via an ordinary extension lead which was not designed for use on board a fishing vessel. To do so without the correct wiring can be lethal.

## Lessons

**The main lesson from this accident is that living on board, alone, in unsuitable conditions, is dangerous and can even be fatal. With a full crew complement, and with the vessel's main systems working, the hazards are reduced. However, owners and skippers should consider carefully whether, when the vessel is shut-down, alongside, it provides a safe alternative to living ashore.**

**Hazards change, new ones are introduced and risks often increase, so a proper risk assessment is essential. Simple questions that should be asked include:**

- **Is there sufficient power to provide accommodation lighting and heating?**
- **Is there adequate ventilation? More is needed if there are burners or stoves onboard.**
- **Are the alarms adequate to warn a sleeping crewman of a problem? Both fire and Carbon Monoxide alarms are cheap to buy and quick to fit.**
- **How can the crew escape from the accommodation in the event of an emergency?**
- **Is it safe for a lone crewman to board or leave the vessel at night?**

**Don't let your guard down because you are "safely" tied up alongside.**

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