

Fuelling the problems

The issue of fuel regulation aboard commercial fishing boats is important for a number of reasons. If skippers or owners can adjust the fuel pumps themselves to suit their needs, it means fishing effort cannot be monitored accurately. When some quotas, for example Irish Sea prawns, are regulated by fishing effort (in kW/days) rather than weight of harvest, this is vital. Some boats have been modified to pull two trawls rather than one, and need more Kilowatt output from the engine, so to achieve this skippers can manually turn up the fuel pump to increase fuel flow and so kilowatt output from the same size engine. This has the result of overheating the whole exhaust system leading to increased danger of fire. One member of our group has witnessed exhaust temperatures in excess of 365 degrees, when fishing aboard a vessel using these practices.

The Marine Accident Investigation Board* has identified the hot exhaust pipe as the source of ignition in wheelhouse fires aboard two fishing vessels, the “Stephanie” and the “Rosses Fisher”. In both cases the original cause of the fire was stated as unclear, but the source of ignition was identified. The Irish Marine Casualty Investigation Board failed to find the cause of the fires, which sank two fishing vessels, the “Spalpin Fanach” and the “Patriarch” in 2004. Attempting to monitor effort by monitoring fuel use by an individual boat is fraught with difficulties, as boats tend to fuel up in different ports from different suppliers.

Over the past few years there has been a large number of second-hand boats bought into Ireland from other countries. Often these have been fishing methods unsuitable for Irish conditions, and so have extensive modifications done soon after arriving in Ireland. Alterations, such as a change from pelagic to otter bottom trawling, the addition of shelterdecks or changing the engine. All modifications affect the stability and/or the freeboard of the vessel, with subsequent effects on the safety of the vessel. These practices are so widespread that this type of boat is widely known as a “Rulebeater”. Any modifications should be subject to a marine surveyor’s report, before the modified vessel is allowed to rejoin the fleet at sea.

As skippers and owners see the catching advantages of multi-rigging they are converting older vessels to twin-rigging, a fishing method requiring large

amounts of power to pull the large nets through the sea bed at a speed previously considered unnecessary to catch prawns. If they can achieve this extra power by adapting their existing engine they will. At present they only require a diesel mechanic to sign off that their engine has a Kilowatt output of so much. This system is open to abuse. One vessel has an engine rated at 84 h.p. but is actually fishing a twin-rig using 340 h.p.

We propose that when a vessels engine output is officially rated, the fuel-pump be sealed with a tamper-proof seal so the output cannot be altered. This seal should be inspected at least on an annual basis and available to inspection to all regulatory authorities (Harbourmaster, Fishery Officers, Naval Inspectors). Furthermore any unofficial tampering or removal of the seal be dealt with severely. We realise that this will not be popular but consider why. It is widely acknowledged that twin-rigged trawlers do extensive damage to the seabed and have a higher proportion of fish by-catch, than single rigged “traditional” trawlers. So much so, that vessels using multi-rigs have been banned within six miles of the shore by at least one Sea Fishery authority in England. Because of the power demands twin-rigged boats can use over sixteen hundred litres of fuel per day. As opposed to a “traditional single trawler” which generally will use approx. 1200 litres for five days fishing We propose that all vessels have their actual engine Kilowatt output rated, and the fuel pump sealed during their annual safety check. This safety check, as it is an annual requirement provides the ideal opportunity to bring in the tamperproof seals and check the actual fishing effort being used by the vessel. As the owners benefit from any tax rebates on fuel not the actual fishermen, it is in their interests (or has been under the present system) to use plenty of fuel.

The purpose of this paper is to ensure that fishery managers can have the actual data and correct figures regarding fishing effort. Also to help protect the environment and ensure the safety of vessels and crew.

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(Sea Fisheries Advisory Group) Irish Seal Sanctuary

*Marine Accident Investigation Branch (MIAB)-Safety Digest-Fishing-2001. pg.34-35

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