



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

October 31, 2024

MIR-24-34

Fire aboard Fishing Vessel *Whiskey Business*

On November 5, 2023, about 0900, a fire broke out aboard the fishing vessel *Whiskey Business* while it was moored at the Safe Harbor Marina in Orrs Cove in Harpswell, Maine (see figure 1 and figure 2).¹ No one was on board at the time of the fire, and local fire departments extinguished the fire. There were no injuries, and no pollution was reported. Damage to the vessel was estimated at \$1 million.



Figure 1. *Whiskey Business* on November 5, 2023, after the fire. (Source: *Whiskey Business* captain)

¹ (a) In this report, all times are eastern standard time. (b) Visit [nts.gov](https://www.nts.gov) to find additional information in the [public docket](#) for this NTSB investigation (case no. DCA24FM009). Use the [CAROL Query](#) to search investigations.

Casualty Summary

Casualty type	Fire/Explosion
Location	Safe Harbor Marina, Orrs Cove, Harpswell, Maine 43° 49.85'N, 69° 54.91'W
Date	November 5, 2023
Time	0900 eastern standard time (coordinated universal time -5 hrs)
Persons on board	None
Injuries	None
Property damage	\$1 million est.
Environmental damage	None
Weather	Visibility 10 mi, overcast, winds south-southeast 6 kts, air temperature 49°F, morning twilight 0552, sunrise 0623
Waterway information	Harbor



Figure 2. Area where the fire broke out aboard the *Whiskey Business*, as indicated by a circled X. (Background source: Google Maps)

1 Factual Information

The 45-foot-long fiberglass fishing vessel *Whiskey Business*, built in 2019 in Lamoine, Maine, was privately owned and used for tuna fishing in the waters off the New England coast. While underway, the vessel was typically crewed by one person (a captain employed by the owner), but the vessel was typically left unattended in Orrs Cove at Safe Harbor Marina in Harpswell, Maine, when not in use.

On November 5, 2023, the *Whiskey Business* was docked, unoccupied, at Safe Harbor Marina. The vessel had been docked at the marina for about 3 weeks. While moored, the vessel's electrical system was supplied by external electrical power via a portable cable from a shore power pedestal on the pier.²

On November 5, shore power was energizing one refrigerator, one freezer, and two climate control systems for the cabin and berthing spaces. Each climate control system integrated cooling, dehumidification, and heating in a compact unit. The self-contained units each consisted of a seawater-cooled, marine air conditioning unit with a reverse cycle heat kit. Seawater cooling was provided by a pump located under the forward stateroom, drawing in seawater from a through-hull penetration, and discharging into each unit's heat exchanger via rubber hoses connected with hose clamps. One air conditioning unit was located under the bunk in the forward stateroom, and the other unit was in a compartment under a bench in the port aft corner of the cabin. In the weeks leading up to the fire, the climate control systems were set to maintain the temperature of the vessel's interior spaces at 65°F.

About 0850, the owner of a boat docked diagonally across from the *Whiskey Business* arrived at the marina and heard a beeping noise coming from the *Whiskey Business*. He believed it was "an alarm of some sort" but did not know what it was. He boarded the *Whiskey Business* to investigate the source of the alarm and found the cabin door locked. Unable to enter the cabin, he looked through the windows and did not see anything unusual. About 0858, he called a marina manager and requested that someone from the marina staff be sent to the *Whiskey Business* to investigate the alarm.

At 0901, the same nearby boat owner noticed light, white smoke escaping from a partially opened window in the port aft corner of the cabin. He called 911 and requested the fire department respond to the *Whiskey Business*. The 911 dispatcher

² Marinas have shore power pedestals located on piers to allow docked vessels to use shoreside electrically generated power while moored. The pedestals include an alternating current receptacle that vessels connect to through an electrical cable for a secure waterproof connection.

notified the US Coast Guard at 0907. The dispatcher also attempted to contact the vessel's owner but was unsuccessful; the dispatcher left voicemail messages.

At 0910, the owner of the nearby boat shut off electrical power to the *Whiskey Business* by opening the shore power supply breaker on the dock. At the same time, a sheriff's deputy, a member of the marina staff, and firefighters arrived on scene. Shortly afterward, flames about a foot high were reported coming through the windows in the port aft corner of the cabin. At 0916, firefighters from a second fire department arrived.

Firefighters received a grenade-type fire suppression tool from the marina to fight the fire; however, the firefighters were unfamiliar with this device.³ Firefighters threw it into the cabin of the vessel, but it had not been successfully activated, so it did not disperse aerosol (its extinguishing agent). The rest of the cabin windows shattered soon after because of the fire, and flames reached the radar mast (see figure 3). Varnish began blistering on the boat adjacent to the *Whiskey Business's* port side. Firefighters stretched a fire hose down the pier to the *Whiskey Business* and applied water onto the fire—first from the dock, before advancing onto the boat and into the cabin.

³ The grenade-type fire suppression tools were small, portable, manually activated devices that could be tossed into a room or compartment and were designed to be a first-use method to combat several classes of fires, including combustible materials (Type A fires), flammable liquids (Type B fires), electrical equipment (Type C fires), and kitchen (Type K fires). When these devices are deployed at the scene of a fire, they release a cloud of dry spray-powdered aerosol containing potassium components, interrupting the chain reaction in the flame.



Figure 3. Fire aboard the *Whiskey Business*, about 0918 on November 5, 2024. Shore power cord had been connected from shore power pedestal to boat. (Background source: Mark Lenzi)

About 0943, the fire was extinguished. No injuries were reported, nor was there any damage to the marina infrastructure; one vessel near the *Whiskey Business* sustained superficial damage. The interior of the *Whiskey Business*'s cabin was damaged by the fire. All wooden structures, consoles, furniture, and galley equipment were consumed by the fire. Electrical panels and cables were damaged, the wheelhouse navigation systems destroyed, and all windows were blown out. The most extensive fire and heat damage was found on the port side of the cabin aft, near the air conditioning unit, located under a bench (see figure 4). Damage to the *Whiskey Business* was estimated at \$1 million.

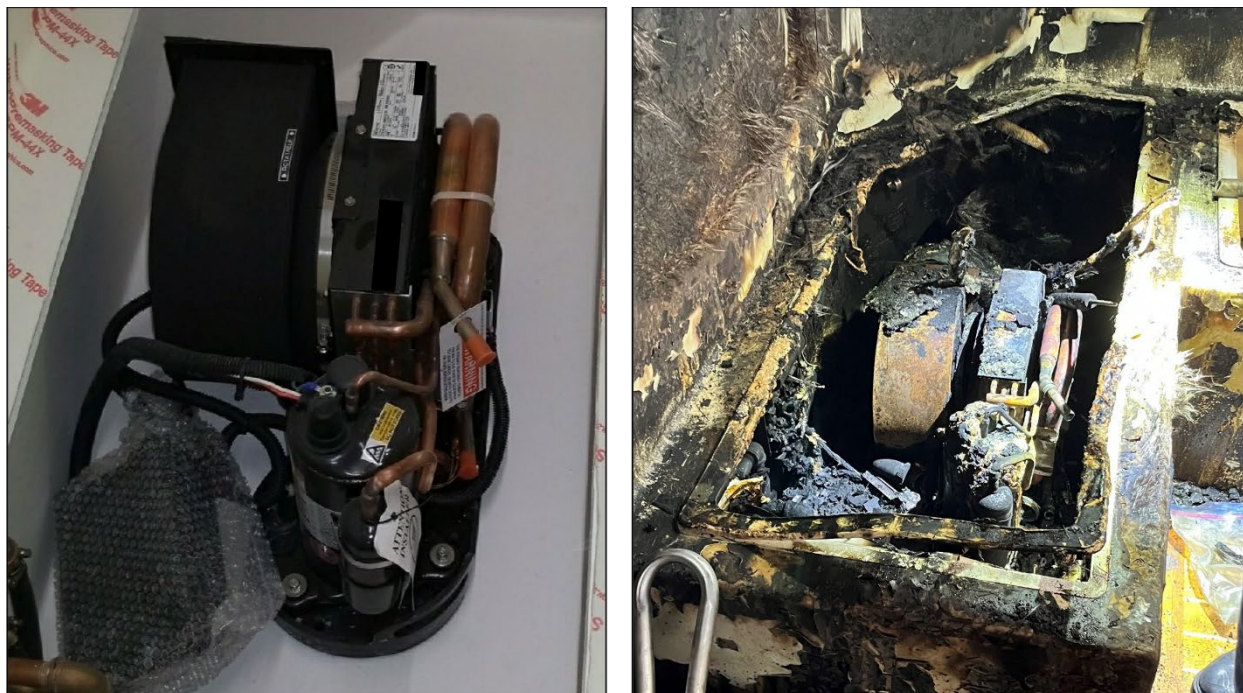


Figure 4. Left to right: Air conditioning unit aboard *Whiskey Business* in 2019 after vessel construction, and same unit after fire. (Source [left]: *Whiskey Business* captain)

In April 2024, the damaged air conditioning unit and the debris surrounding it were removed from under the bench from the *Whiskey Business*'s cabin for inspection and failure analysis at an accredited forensic testing laboratory. Additionally, the undamaged, identical unit from the forward stateroom was removed from the boat for comparative testing purposes.

In September 2024, the collected debris and system components were X-rayed by a third-party technician; nothing abnormal was found. Additionally, the shore power cable that was in use at the time of the fire was examined and tested, and no issues were reported. Electrical insulation resistance measurements were taken of both air conditioning units' compressor motors, and their values were identical. The electrical connections of the damaged compressor were examined, and the protective connection caps were found not to be burned.

Each air conditioning unit had two external soft start control devices (connected to the unit by wires) that comprised the unit's soft start system.⁴ Both soft start control devices for the damaged air conditioning unit were X-rayed and examined. The larger device was partially consumed, and the smaller device was completely consumed. According to the vessel's captain, who managed and maintained the vessel, he had replaced the smaller soft start control device in the aft unit during the winter work period in 2021; he stated he believed that he mounted it on the floor of the compartment under the bench "as [he] found it."

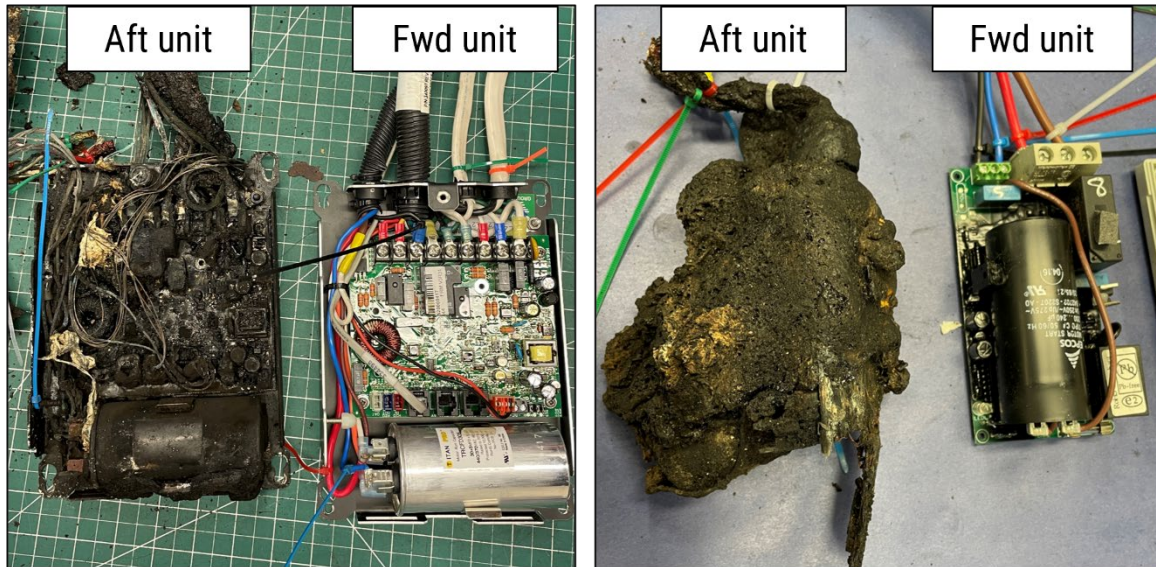


Figure 5. Left to right: Larger soft start control device from damaged air conditioning unit alongside identical forward unit (shown as an exemplar). Smaller soft start control device from damaged air conditioning unit alongside forward unit after fire.

In July 2018 (before the vessel was constructed), the manufacturer of the air conditioning units sent out a notice stating the company had become aware of an issue with the installation of their soft start control devices. The manufacturer stated:

due to improper installation, the device can be exposed to saltwater intrusion. This can cause a catastrophic failure, which can result in the device shorting and possibly causing a fire. To avoid this issue the [soft start device] needs to be located in a dry location on a vertical surface

⁴ A *soft start control device* gradually increases the power to an electric motor, allowing it to start more smoothly and efficiently. This reduces the initial surge of electricity, which can extend the lifespan of the system's components.

with the electrical connectors on the bottom... [or replaced] with our optional device that is built in a waterproof enclosure.

Aboard the *Whiskey Business*, the undamaged, forward air conditioning unit soft start device was mounted vertically on the starboard bulkhead with the electrical cables entering the device from the bottom. Neither of the soft start control devices for the forward or aft air conditioning units had waterproof enclosures.

2 Analysis

The fire aboard the *Whiskey Business* occurred while the vessel was docked and unattended. The vessel was on shore power, and only a refrigerator, a freezer, and two climate control units (one located in the forward stateroom and the other in the port aft corner of the cabin) were energized at the time. According to a witness (nearby boat owner), and photos and videos taken at the time of fire, the first signs of smoke and flames originated in the port aft corner of the cabin. The fire grew in intensity in this area and was seen breaking through the port aft windows of the cabin. A post-fire examination of the cabin interior space identified the greatest extent of fire and heat damage in the area near the aft air conditioning unit. The examination also found diminishing damage to the starboard side of the cabin and in the forward stateroom, and no fire damage in the engine room. Therefore, the origin of the fire was likely the air conditioning unit in the port aft area of the cabin.

Post-fire testing at an engineering laboratory found the shore power cable to be electrically sound; therefore, an electrical fault in the cable likely did not cause the fire. The compressor from the damaged air conditioning unit displayed similar electrical insulation readings as the undamaged compressor, and its connections were not damaged, indicating the compressor's motor had not failed. X-ray images of the debris from the surrounding area showed no potential ignition sources within the debris.

The most heavily damaged component of the air conditioning unit was a soft start control device for the air conditioning unit. According to the captain, he had replaced the device in the aft unit in 2021. Based on the captain's recollection, he believed the device was mounted on the floor without a waterproof enclosure, contrary to the manufacturer's instructions. The air conditioning unit was cooled by pressurized seawater via hoses, so it is possible that a seawater leak from a hose could have sprayed or pooled on the floor and entered the unit's soft start control device, causing an electrical fault. This water intrusion could have resulted in an electrical short circuit in the soft start control device that generated enough heat to start the fire.

3 Conclusions

3.1 Probable Cause

The National Transportation Safety Board determines that the probable cause of the fire on board the fishing vessel *Whiskey Business* was a fault within an electrical soft start control device, possibly due to exposure to saltwater, for an air conditioning unit located under a bench in the vessel's cabin.

Vessel Particulars

Vessel	<i>Whiskey Business</i>
Type	Fishing (Fishing vessel)
Owner/Operator	Private owner
Flag	United States
Port of registry	Harpswell, Maine
Year built	2019
Official number	1293040 (US)
IMO number	N/A
Classification society	N/A
Length (overall)	45.0 ft (13.7 m)
Breadth (max.)	15.0 ft (4.6 m)
Draft (casualty)	5.0 ft (1.5 m)
Tonnage	33 GRT
Engine power; manufacturer	1 × 1,150 hp (858 kW); Caterpillar C18 diesel engine

NTSB investigators worked closely with our counterparts from **Coast Guard Sector Northern New England** throughout this investigation.

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable cause of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for any accident or event investigated by the agency. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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For more detailed background information on this report, visit the [NTSB Case Analysis and Reporting Online \(CAROL\) website](#) and search for NTSB accident ID DCA24FM009. Recent publications are available in their entirety on the [NTSB website](#). Other information about available publications also may be obtained from the website or by contacting—

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