National Transportation Safety Board

Marine Accident Brief

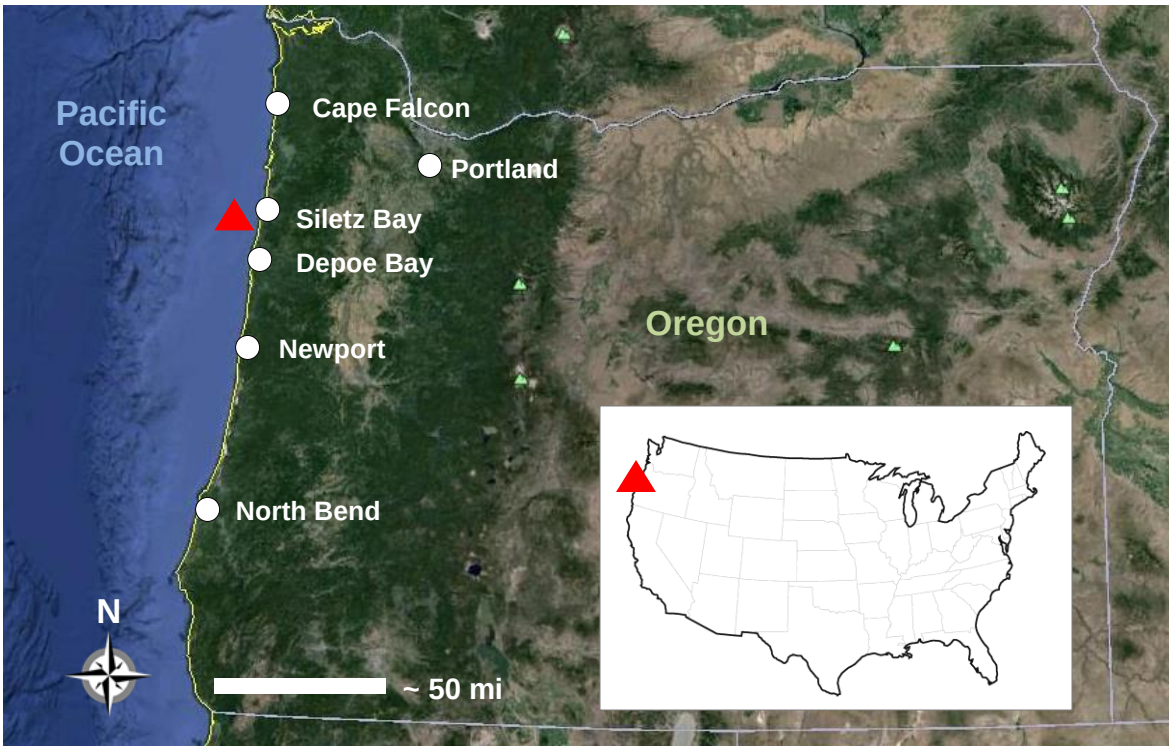
Sinking of Fishing Vessel *Blazer*

Accident no.	DCA15LM004
Vessel name	*Blazer*
Accident type	Sinking
Location	Pacific Ocean, about 8 miles* west of Siletz Bay, Oregon, and about 80 miles southwest of Portland, Oregon; 44°57.6' N, 124°3.3' W
Date	November 29, 2014
Time	0611 Pacific standard time (coordinated universal time – 8 hours)
Injuries	Minor injuries sustained in the rescue effort
Property damage	Total loss of vessel, valued at $950,000
Environmental damage	No sheen sighted despite strong smell of diesel fuel (2,000 gallons on board)
Weather	Fair visibility, northwest winds at 25 to 30 knots, 10- to 14-ft seas, air temperature 42°F, water temperature 55°F
Waterway information	Near coastal waters off the Oregon coast

On November 29, 2014, at 0611 local time, the 73-foot-long fishing vessel *Blazer*, loaded with Dungeness crab pots, sank in the Pacific Ocean about 8 miles west of Siletz Bay, Oregon. All five crewmembers abandoned ship and were rescued by the US Coast Guard. The *Blazer*, valued at $950,000, sank with 2,000 gallons of diesel fuel and mixed lube oil products on board. No pollution was sighted.

Fishing vessel *Blazer* in May 2013. (Photo provided by the Coast Guard)

* Unless otherwise noted, all miles in this report are nautical miles (1.15 statute miles).

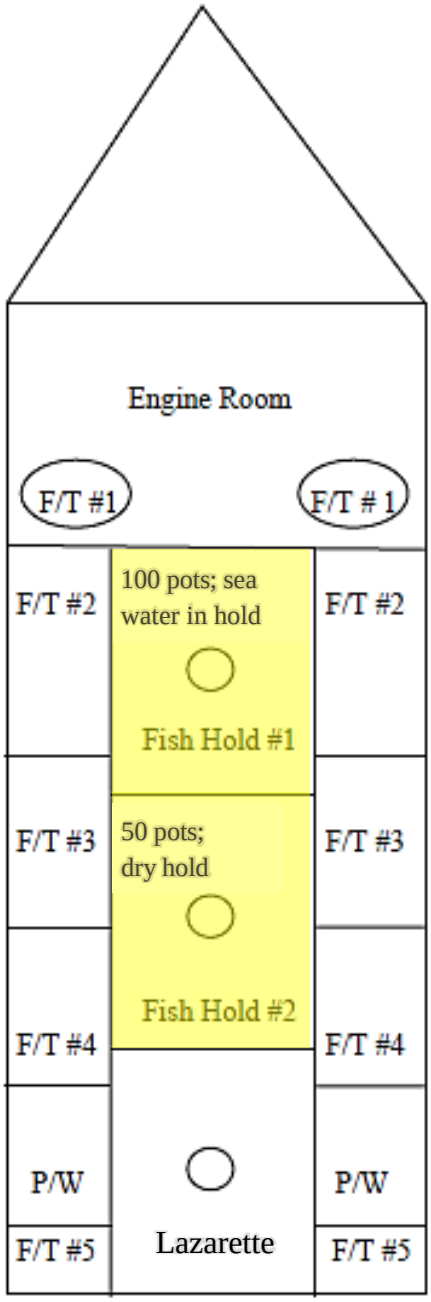


Satellite image showing part of the state of Oregon. The accident site is marked by a red triangle. (Background by Google Earth)

The *Blazer* departed its home port of Newport, Oregon, shortly after midnight on November 29, 2014. The captain and four crewmembers intended to transit about 80 miles north to a fishing site off Cape Falcon, Oregon, and set Dungeness crab pots there. The captain had more than 40 years of experience in the fishing industry, including crab fishing off the Alaska coast, and previous experience as captain of the *Blazer*. However, he had not previously operated the vessel with Dungeness crab pots on board. He consulted with the vessel owner, DDR Fisheries, and the decision was made to load and transport 500 crab pots to the fishing site.

Dungeness crab pots strapped onto the *Blazer*'s deck before the vessel left Newport, Oregon. (Photo provided by the Coast Guard)

Of the 500 crab pots on board the *Blazer*, 350 were stowed on the main deck; 100 were stowed in the forward no. 1 fish hold, which was deliberately filled with sea water to trim down the vessel's bow; and 50 were stowed in the no. 2 fish hold, which was dry. Each crab pot weighed 110 pounds, including weights, buoys, and line, for a total weight of about 27.5 tons.



Because of several changes in ownership over the years, no blueprints or official drawings were available for the *Blazer.* **The following dimensions, capacities, and conditions are estimates only and may not be exact:**

- Fish hold no. 1: 15 ft wide x 15–20 ft long x 11 ft deep
- Fish hold no. 2: 15 ft wide x 12–15 ft long x 11 ft deep

The fish holds are highlighted in yellow in this drawing; together, they contained 150 of the 500 Dungeness crab pots carried on board the vessel. The remaining 350 pots were stowed on the main deck.

Each of the following numbered fuel tanks had a port and starboard compartment:

- Fuel tank no. 1: 500-gallon capacity; half full
- Fuel tank no. 2: 750-gallon capacity; full
- Fuel tank no. 3: 500-gallon capacity; half full
- Fuel tank no. 4: 500-gallon capacity; empty
- Fuel tank no. 5: 500-gallon capacity; empty

- Potable water tank: 500-gallon capacity; full
- Hydraulic tank (in the bow): 175-gallon capacity; 3/4 full
- Lube oil tank (engine room): 150-gallon capacity; 1/4 full
- Waste oil tank (engine room): 150-gallon capacity; (empty)

- Lazarette: 15 ft wide x 12 ft long; contained 3 individual compartments, each 4 ft long. The first compartment held miscellaneous gear and crab lines; the second contained the rudder post and steering ram; the third was empty.

Vessel compartments on board the *Blazer*. (Original drawing by the Coast Guard, based on the captain's description)

The captain told investigators that, when the *Blazer* left Newport, the vessel was on an even keel and had about 12 to 18 inches of freeboard. He said that, during the departure, he tested the stability by turning the wheel in an exaggerated manner, rocking the vessel from side to side. He said he "felt good" about the stability, so he continued to sea. At the time, the northwest winds were 15 to 20 knots, and the seas were 6 to 10 feet.

When the *Blazer* had been under way for about 1 hour, the other crewmembers went below deck to sleep while the captain stayed in the wheelhouse. As the voyage continued, the weather deteriorated, with the northwest winds and the seas increasing to 25 to 30 knots and 10 to 14 feet, respectively. About 0345, some 3.5 hours after leaving port, the *Blazer* began listing to starboard at an angle of about 5 to 7 degrees. The captain made a slight course change to port so that the vessel's bow would head more directly into the seas (as opposed to the waves hitting the side of the vessel), but the starboard list remained. The captain noted that the crab pots on deck did not appear to have shifted and that no bilge alarm had activated.

The captain then tried to correct the list because he thought that it may have resulted from flooding in either the dry no. 2 fish hold (which held 50 crab pots) or in one of the empty tanks. He went below deck to the engine room, where he started the pumps for the no. 2 fish hold, which he suspected was filling with sea water. He also alerted the other crewmembers and instructed them to cut loose the crab pots on the starboard side of the main deck, as the list to starboard had increased to about 10 to 15 degrees by this time. According to crew statements, during the next 20 minutes or so, the crew pushed about 50 crab pots overboard, but the list was not corrected. When the *Blazer* was listing by nearly 20 degrees, the captain began turning the vessel in a circle to starboard to heel the vessel to port, but this attempt was unsuccessful. When the starboard list neared 30 degrees, the *Blazer* lost steerage ability. At that point, the captain concluded that he could not save the vessel and began preparations for all of the crewmembers to abandon ship.

At 0417, the captain broadcast a mayday call and notified the Coast Guard of the *Blazer*'s position and number of persons on board. He also sounded the vessel's general alarm about this same time. The crewmembers donned survival suits and, because of the increasing list (45 to 60 degrees at this point), had to climb up onto and over the wheelhouse to get to the vessel's port side. The crew deployed the *Blazer*'s inflatable liferaft in the water alongside the vessel. About 0425, with the starboard list about 60 to 80 degrees and the vessel nearly on its side in the water, the captain and the crew boarded the liferaft. About 15 minutes later, a Coast Guard helicopter, launched from Coast Guard Station Depoe Bay, arrived on scene. Within 15 minutes of the helicopter's arrival, a Coast Guard motor lifeboat (MLB), also from Depoe Bay, arrived to assist. The helicopter crew hoisted three of the *Blazer* crewmembers to safety, and the MLB crew rescued the other two *Blazer* crewmembers. As the *Blazer* became more submerged in the water, the vessel's emergency position indicating radio beacon (EPIRB) activated, and the signal was received by a rescue coordination center in Washington state. At 0611, the *Blazer* disappeared beneath the waves. Coast Guard personnel reported a strong smell of diesel fuel but did not see any sheen.

The crewmembers underwent toxicological testing, and the captain tested positive for a marijuana metabolite. All other results were negative.

Investigators tried to determine how sea water entered the *Blazer*. In the process, they spoke with the previous *Blazer* captain, who stated that, during his 5 years as captain of the vessel, he had on several occasions loaded 500 crab pots on board the vessel in similar configurations to that of the accident voyage without any problems. In 2006, the state of Oregon Department of Fish and Wildlife set a limit of 500 crab pots, which did not pertain to the maximum number of pots allowed on board a vessel but instead to the maximum number of pots that an operator could have submerged at any given time. Further, the crab pot limit was not based on the size of the vessel but rather on the vessel's history (pre-2006) of catching crab.

In addition, investigators evaluated the accident captain's description of the fuel tank piping system. These lines (some for filling and others for venting the fuel tanks) passed up through the main deck. The fill lines were 2 inches in diameter and capped. However, the 1.5-inch-diameter vent lines had no check valves on deck. The rough seas, coupled with the heavily loaded vessel, may have allowed water to enter the vessel via these vent lines, but this could not be conclusively determined.

Because the *Blazer* was less than 79 feet (24 meters) long, it was not required to comply with the stability standards of Title 46 *Code of Federal Regulations* (*CFR*) 28.500 or 46 *CFR* Subchapter S and therefore not required to have a stability test. In addition, the *Blazer* was not required to comply with international or domestic load line requirements (such as the International Convention on Load Lines or 46 *CFR* Part 42).

Fishing vessels such as the *Blazer* are required to comply with the basic safety requirements of 46 *CFR* Part 28 primarily related to lifesaving and firefighting. Accordingly, the *Blazer* underwent a Commercial Fishing Vessel Dockside Examination in May 2014, about 6 months before the sinking. During the examination, the vessel's bilge alarms were tested and they worked properly. The captain told investigators that the alarms may have sounded while the crab pots were being pushed overboard and during the evacuation but that neither he nor the crew heard the alarms while on deck.

Investigators verified that, during the 3 years before the sinking, DDR Fisheries invested about $200,000 in numerous upgrades to the vessel. The captain told investigators that the *Blazer* had most recently been taken out of the water in mid-September 2014 and appeared at that time to have no structural issues. From mid-September to late November 2014 (just before the accident), the *Blazer* was berthed in Portland, Oregon, and during those 2 months the captain lived on board the vessel and conducted routine maintenance. He said that he was unaware of any structural issues.

Because the *Blazer* was not required to comply with stability standards, the loads being carried on board—crab pots, fuel, water, and oil—were accepted as satisfactory based solely on the captain's and the owner's assessment, which, in turn, was based on hands-on experience and/or accounts from previous operators regarding how they loaded the vessel.

Probable Cause

The National Transportation Safety Board determines that the probable cause of the sinking of the *Blazer* was flooding from an unknown point of ingress.

Vessel Particulars

Vessel	*Blazer*
Owner/operator	DDR Fisheries LLC/accident captain
Port of registry	Newport, Oregon
Flag	United States
Type	Fishing vessel
Year built	1991
Official number (US)	973389
IMO number	8847002
Construction	Steel
Length	73 ft (22.25 m)
Draft	11 ft (3.35 m)
Beam/width	21.6 ft (6.6 m)
Gross tonnage	160 gross tons
Engine power	475 hp (354 kW)
Persons on board	Five

For more details about this accident, visit www.ntsb.gov and search for NTSB accident ID DCA15LM004.

Adopted: October 6, 2015

NTSB investigators worked closely with our counterparts from Coast Guard Sector Columbia River throughout this investigation.