National Transportation Safety Board

Marine Accident Brief

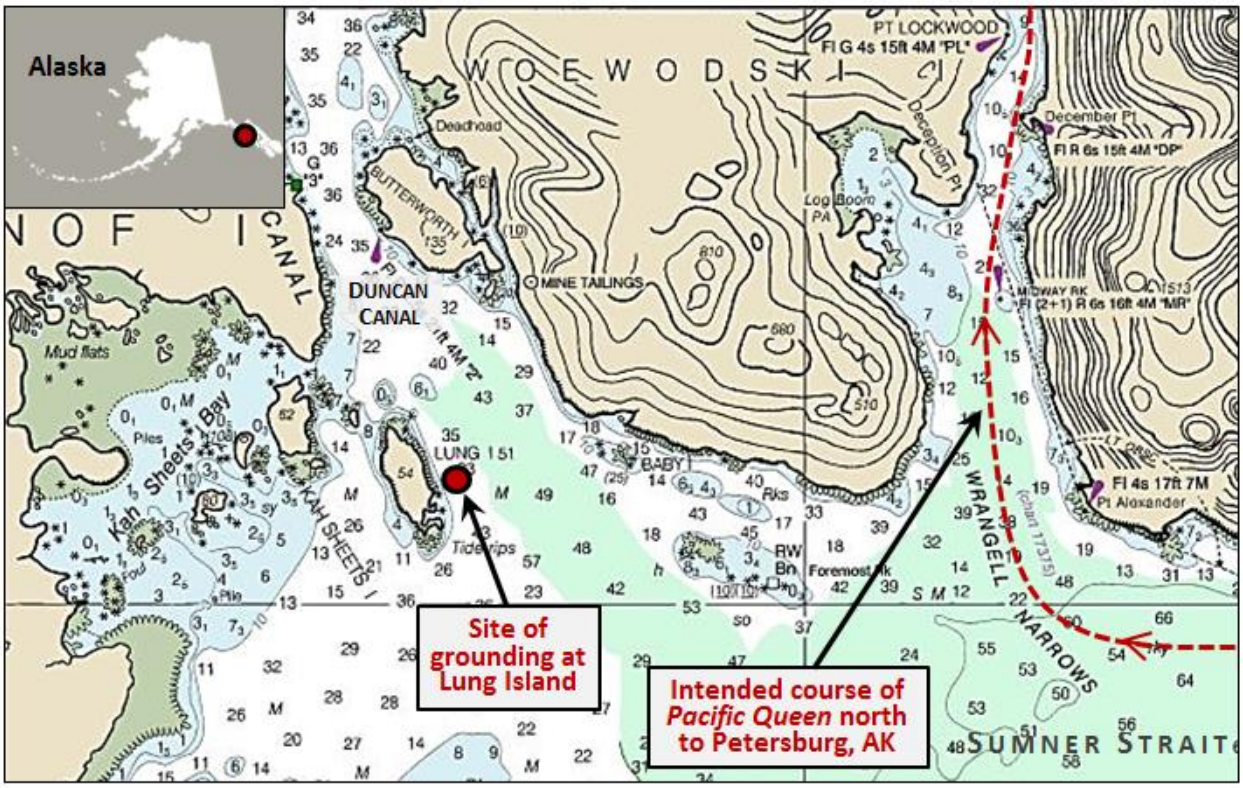
Grounding and Sinking of Commercial Fishing Vessel *Pacific Queen*

Accident no.	DCA13LM032
Vessel name	Commercial fishing vessel *Pacific Queen*
Accident type	Grounding and sinking
Location	Lung Island, Sumner Strait near Duncan Canal, southeast coast of Alaska 56°30.7′ N, 133°04.0′ W
Date, time	August 14, 2013 0100 Alaska daylight time (coordinated universal time − 8 hours)
Injuries	None
Damage	Loss of 113-gross-ton mechanically propelled vessel, valued at $225,000
Environmental damage	Vessel carried est. 2,000 gallons of diesel fuel at sinking; release of product into waterway minimal
Weather	Clear, calm winds, air temperature 60°F, sea temperature 41°F
Waterway information	Between Duncan Canal and Sumner Strait, Inside Passage, southeastern Alaska

The *Pacific Queen*, a 113-gross-ton, wooden-hulled commercial fishing vessel, ran aground, flooded, and sank in about 200 feet of water off Lung Island near Duncan Canal, Alaska, at about 0100 on August 14, 2013. The three crewmembers abandoned the vessel and were rescued without injury. The US Coast Guard reported a light sheen on the water in the vicinity of the vessel after the sinking, but no additional evidence of pollution was found during searches conducted from the air and on the water over the next 2 days.

Commercial fishing vessel *Pacific Queen* before the accident. (Photo courtesy of Coast Guard)

After unloading a cargo of salmon in Wrangell, Alaska, the *Pacific Queen* got under way at 2100 on August 13, 2013, for a 40-mile transit to Petersburg, Alaska, at an average speed of 8 knots. The captain and two deckhands were on board. The captain's watch was from 2100 to 0100. The captain stated that just after midnight he felt too tired to continue his watch and woke his relief, deckhand #1 (his brother), an hour early. However, the deckhand stated he did not remember the captain waking him. After the captain believed he had woken deckhand #1, he went to his room without waiting for the deckhand to arrive on the bridge and without conducting a face-to-face watch turnover. This sequence of events resulted in the *Pacific Queen* remaining under way at 8 knots in Sumner Strait for about an hour with no one on the bridge as the vessel approached a major course change from Sumner Strait north into Wrangell Narrows toward Petersburg.



Approximate site of the grounding and sinking of the *Pacific Queen* near Lung Island, Alaska. At right, dotted red line indicates intended course of the fishing vessel north into Wrangell Narrows toward Petersburg, Alaska. (Background: Excerpt from National Oceanic and Atmospheric Administration nautical chart 17382)

The *Pacific Queen* continued on its heading and missed the turn, and about 0100, the vessel struck the rocky eastern shore of Lung Island at the entrance to Duncan Canal. Deckhand #1 stated that he went to the bridge after the impact, discovered it was unmanned, and saw on the computer navigation screen that the vessel was aground on Lung Island. The deckhand stated he was not sure if the vessel was still under way so he put the engines in neutral, then in reverse, then to neutral again.

The captain was awakened by the impact and first went to the bridge. Deckhand #2 went to the engine room to check for flooding, and seeing no sign of water ingress, he proceeded to the bridge. The vessel's bilge alarm sounded and the engine room flooding light illuminated. All three crewmembers went to the engine room to investigate and found water flooding into the space faster than the two bilge pumps could dewater the area. Deckhand #2 was rigging a third

pump when the captain told him the damage was too severe. The captain provided deckhand #2 a survival suit and told the crew to prepare to abandon ship.

The captain went to the bridge, made a mayday call, and retrieved the vessel's emergency position indicating radio beacon (EPIRB). The three crewmembers put the vessel's skiff into the water, launched the inflatable life raft, and tied the raft to the skiff. The captain instructed deckhand #2 to secure the fuel vents on the sides of the *Pacific Queen* pilothouse. About 10 minutes after the initial grounding, the crew abandoned ship and got into the skiff with survival suits and the EPIRB.

Five minutes after abandoning ship, at about 0115, the *Pacific Queen* sank in about 200 feet of water off the eastern coast of Lung Island. The crewmembers were in the skiff for 20 to 30 minutes before being rescued by a Good Samaritan vessel, the fishing vessel *Windham Bay*, and transported to Petersburg, Alaska, about 20 miles north of the accident site. No crewmembers were injured. Ashore in Petersburg, they were tested for drugs and alcohol at about 0600, and toxicology results were negative for all crewmembers.

A Coast Guard helicopter flew over the area soon after the sinking, and the crew observed a silver sheen on the water about 0.75 miles long and 20 to 60 feet wide. Although the captain estimated the *Pacific* Queen was carrying 2,000 gallons of diesel fuel, Alaska Department of Environmental Conservation personnel believe a minimal amount of fuel was released because the fuel vents were secured prior to the sinking.

Investigators determined that flooding was not apparent when deckhand #2 first checked the engine room because the rocks struck by the *Pacific Queen* likely were preventing water ingress even though the hull was severely damaged. When Deckhand #1 put the vessel's engine astern, the obstruction was cleared, which resulted in uncontrolled flooding into the vessel below the waterline.

Pollution underwriters for the *Pacific Queen* hired Meredith Management Group to manage the spill response. Meredith Management in turn requested assistance from the Southeast Alaska Petroleum Resource Organization (SEAPRO), an association of companies in the marine industry that provides oil spill response services to its membership. SEAPRO's response vessel *Neka Bay* arrived on scene the following morning, August 15, and spent 2 days searching for the sunken *Pacific Queen*. No indication of the vessel or oil release was found during an overflight on August 16, and the search was suspended.

Light silver sheen was noted during an August 14, 2013, USCG overflight in the vicinity of the *Pacific Queen* sinking. (Photo provided by Coast Guard)

The captain was the owner/operator of the *Pacific Queen*. He had 30 years of commercial fishing experience but was not required to hold a Coast Guard license. He bought the *Pacific Queen* in 2011, and this was his third fishing season with the vessel.

As the *Pacific Queen* was a seasonal fishing vessel, the captain and crew had irregular work/sleep schedules, reporting sleep periods as short as 5 hours on some nights and as long as 8 hours on other nights. According to their sleep logs, they also slept for 4 to 9 hours during the day. This type of sleep/wake schedule variation often leads to disruptions in circadian rhythm, resulting in physical and cognitive fatigue. In addition to the varying sleep patterns, one crewmember stated that the watch schedule had been changed during the previous trip, when the typical watch duty shift was increased from 3 hours to 4 hours.

On the night of the grounding, the captain had been awake for about 13 hours, which included 6 hours of physical labor unloading cargo from the vessel. The captain stated that around midnight, 3 hours into his 4-hour shift, he became "too sleepy to carry on for another hour" and decided to wake his relief an hour early. In his fatigued state, the captain did not wait for the deckhand to reach the bridge or properly brief the deckhand before being relieved of duty.

Probable Cause

The National Transportation Safety Board determines that the probable cause of the sinking of the commercial fishing vessel *Pacific Queen* was the fatigued captain leaving the bridge unattended before he was properly relieved of his watch, resulting in the vessel continuing on its heading without navigational control and then grounding.

Vessel Particulars

Vessel	*Pacific Queen*
Owner/operator	Pacific Queen LLC/Joseph A. Lykken
Port of registry	Wrangell, AK
Flag	United States
Type	Commercial fishing vessel
Year built	1938
Official number (US)	237070
IMO number	7307689
Construction	Wood
Length	71.5 ft (21.8 m)
Beam	20.8 ft (6.3 m)
Draft	8.2 ft (2.5 m)
Tonnage	113 gross tons
Engine power, manufacturer	365 hp (272.2 kW) diesel engine
Persons on board	3

For more details about this accident, visit www.ntsb.gov/investigations/dms.html and search for NTSB accident ID DCA13LM032.

Adopted: March 19, 2015