



National Transportation Safety Board

Marine Accident Brief

Flooding and Sinking of Fishing Vessel *Alaska Juris*

Accident no.	DCA16FM047
Vessel name	<i>Alaska Juris</i>
Accident type	Flooding and sinking
Location	Bering Sea, about 160 miles* west of Adak, Alaska 52°32.0' N, 178°41.0' E
Date	July 26, 2016
Time	About 1130 Alaska daylight time (coordinated universal time – 8 hours)
Injuries	None
Property damage	\$4.3 million est.
Environmental damage	Approximately 87,000 gallons of diesel fuel and lubricants
Weather	Poor visibility, fog, light winds at 10 knots, slight seas with swells 3–4 feet, air temperature 45°F, sea temperature 49°F
Waterway information	The Bering Sea is north of the Aleutian Islands, which form an island chain in the north Pacific Ocean.

On July 26, 2016, about 1130 local time, a crewmember on the fishing vessel *Alaska Juris* discovered flooding in the engine room while it was under way in the Bering Sea, approximately 160 miles west of Adak, Alaska. Shortly afterward, the rapid ingress of water caused the main engine and generators to shut down, resulting in a loss of propulsion and electrical power. There was no attempt to dewater the vessel, which sank later that day. All 46 persons on board abandoned ship into liferafts and were rescued without injury. The *Alaska Juris*, which was carrying approximately 87,000 gallons of diesel fuel, had an estimated value of \$4.3 million.



Alaska Juris, abandoned on the day of the sinking. (Photo courtesy of US Coast Guard)

*Unless otherwise noted, all miles in this report are nautical miles.

Flooding and Sinking of Fishing Vessel *Alaska Juris*



Accident site where *Alaska Juris* flooded and subsequently sank in the Bering Sea, west of Adak, Alaska. (Background by Google Maps and Google Earth)

Background

The *Alaska Juris* was one of four factory trawlers that were owned and operated by Fishing Company of Alaska. It was built in 1975 as a tuna seiner but was converted about a decade later to a commercial fishing trawler and processing vessel. The 41-year-old vessel was being used to catch fish in the Bering Sea, mainly near the western end of the Aleutian Islands. The vessel operated about 10 months a year and was docked the other 2 months to undergo repairs, maintenance, and regulatory inspections.

At the time of the accident, there were 46 persons on board: 2 deck officers (a captain and a mate), 2 engineers (a chief and a non-credentialed assistant), 5 Japanese nationals (a fishmaster and 4 technicians), 2 National Oceanic and Atmospheric Administration (NOAA) observers, and 35 other crewmembers who worked mostly as fish processors.

The Japanese fishmaster and technicians were employed by a separate company named North Pacific Resources. North Pacific Resources was the US subsidiary of Anyo Fisheries Company, a Japanese fish broker that received all the catch from Fishing Company of Alaska. The parent company was Yamada Industries.

About 8 years prior to this accident, another Fishing Company of Alaska vessel sank in the Bering Sea. On March 23, 2008, the sinking of the fish-processing vessel *Alaska Ranger* occurred 120 miles west of Dutch Harbor after flooding was discovered in the rudder room while it was

Flooding and Sinking of Fishing Vessel *Alaska Juris*

transiting to a fishing ground.¹ The crew abandoned the vessel before it sank, but 5 of the 47 persons aboard died in the accident. Similar to the *Alaska Juris*, the 35-year-old *Alaska Ranger* was not recovered. Following an investigation, the National Transportation Safety Board identified several safety issues related to company operations, emergency response, and implementation of the US Coast Guard's Alternate Compliance and Safety Agreement (ACSA).

The 218-foot *Alaska Juris* was enrolled in ACSA, a voluntary examination program that the Coast Guard developed in 2006 to ensure the safe operations of the Alaska head-and-gut (H&G) fleet in lieu of class and load line certification.² Under ACSA, the *Alaska Juris* was required to comply with annual examinations and structural integrity inspections at drydocks twice in every 5 years.

At the vessel's last drydock examination in 2014, the Coast Guard discovered more than 50 mechanical couplings used as temporary repairs on vital engine room piping. Although most of these repairs had been addressed, witness interviews confirmed that a number of the couplings were still in place at the time of the accident.

With the participation of the NTSB, the Coast Guard convened a District Formal Investigation Hearing in December 2016 to hear testimony and establish the facts of the sinking of the *Alaska Juris*.

Flooding Event

On the morning of July 26, 2016, the *Alaska Juris* brought aboard approximately 65 tons of mackerel from its first haul, after departing Adak, Alaska, the previous day. Sometime after 1100, while the vessel was under way toward another fishing ground, a Japanese technician making a round of the upper engine room noticed what he perceived was steam coming from an area around the main engine.³ Realizing such an occurrence in the engine room was not normal, he went below to investigate the source. When he reached the bottom of the ladder, he discovered a cascade of water raining down from the overhead onto the engine near the reduction gear. The interaction of cold water with the hot surfaces of the engine machinery was generating the steam.

¹ The NTSB determined that the probable cause of the sinking of the *Alaska Ranger* was "uncontrolled, progressive flooding due to a lack of internal watertight integrity and to a breach of the hull's watertight envelope, likely caused by a physical rudder loss. Contributing to the loss of life was the vessel's movement astern, which likely accelerated the flooding and caused the liferafts to swing out of reach of many crewmembers." Marine Accident Report NTSB/MAR-09/05, p. 72.

² With the launch of the ACSA program, the Coast Guard determined that vessels in the H&G fleet "constitute fish processing vessels for regulatory purposes." Source: *Federal Register*, vol. 71, no. 162 (August 22, 2006), p. 48932.

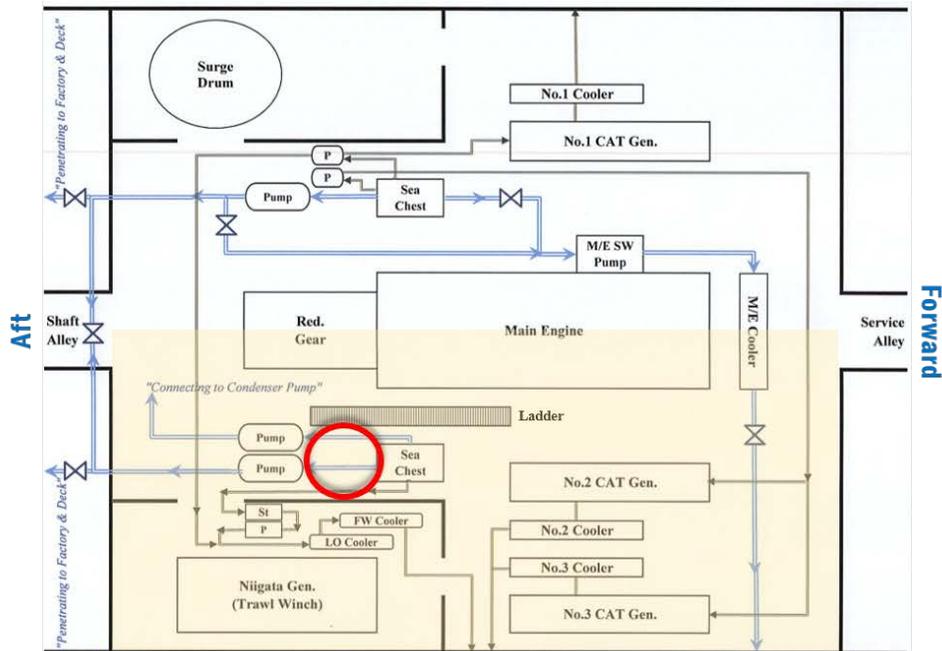
Safety risks presented by the fleet were identified, including that the vessels "require a sizeable crew...[and] can operate in the most remote areas of the Bering Sea, far from search and rescue support." Source: "Alternative Compliance and Safety Agreement (ACSA) for the Bering Sea/Aleutian Island and Gulf of Alaska Freezer Longliner and Freezer Trawler Fishing Fleets," signed by Commander, Thirteenth Coast Guard District, and Commander, Seventeenth Coast Guard District, June 15, 2006 (hereafter cited as "ACSA").

Through ACSA, the H&G fleet was exempted from the survey and classification requirements of Title 46 *Code of Federal Regulations (CFR)* 28.720 and the load line requirements of Title 46 *CFR* subchapter E, using the Coast Guard's exemption authority at Title 46 *CFR* 28.60.

³ The Japanese technicians monitored and maintained certain equipment in the engine room, specifically the Niigata generator and refrigeration equipment, whereas the vessel's propulsion engine, generators, service equipment, etc., were operated and maintained by the crew of the *Alaska Juris*.

Flooding and Sinking of Fishing Vessel *Alaska Juris*

According to the Japanese technician, the water was “spurting up” from under the aft portion of the starboard generator and displacing the deck plates. Although the water was approximately 5 feet above the bottom of the center of the bilge, no bilge alarm had sounded. Based on the description and height of the water, at least four bilge alarms should have been activated throughout the lower engine room.



Location in the lower engine room (in photo, looking forward) where water was observed “spurting up” under the starboard generator and displacing the deck plates. (Diagram courtesy of Fishing Company of Alaska; photo by M. Shackelford)

Flooding and Sinking of Fishing Vessel *Alaska Juris*

Alarmed by the discovery of the water ingress, the technician immediately ran up to the engine control room to alert the chief engineer but could not find him. About 5 minutes later, after searching through nearby areas of the vessel, the technician returned to the control room where he found the chief engineer and notified him of the flooding.

The chief engineer said that, once he saw the flooding, he phoned the bridge from the control room. He did not start the bilge pumps immediately, because he wanted to notify the bridge first, as he explained during the hearing, nor did he start them on his return to the lower engine room, because he said by that time the flooding had already caused the generators to shut down, thereby rendering the pumps inoperable.

The captain arrived to witness the flooding within a minute or two of receiving the chief engineer's phone call. His description was not unlike the chief engineer's and the Japanese technician's: the shaft coupling by the reduction gear was "throwing up" seawater into the overhead, where it then poured back down onto the deck plates.

The captain ran back up to the bridge to slow or stop the vessel, thinking, in case the vessel had been holed, the slower speed would stem the intake of water. Before he could reach the controls, the flooding caused the engine and generators to shut down and consequently the vessel to lose propulsion and electrical power.

His next action was to wake up the mate to assist him on the bridge, and then he proceeded to radio other fishing vessels in the area (the closest vessels were 35–40 miles away based on automatic identification system [AIS] data). At the time, the *Alaska Juris* was approximately 160 miles west of Adak. The captain also sent a distress signal via the Global Maritime Distress and Safety System (GMDSS). At 1134, the Coast Guard received notification that the vessel's emergency position indicating radio beacon (EPIRB) had been activated.

The captain returned to the engine room, where the water flow deflecting off the overhead had ceased, but the water level continued rising. Emergency lighting and handheld flashlights were the only illumination available. He could see the water continuing to rise and instructed the chief engineer, who was standing in water up to his knees, to close the aft watertight door. The water level was about 2 feet above the deck plates within about 30 minutes of notification of the flooding, based on the captain and chief engineer's last estimate.

Some of the crewmembers attempted to connect and start the portable emergency pump, but the captain and the chief engineer told them to stand down due to the large volume of water.

Response and Rescue

The captain ran through the passageways waking up as many personnel as he could, while instructing others to do the same, telling them to refrain from any dewatering attempts and instead prepare for abandoning the vessel. The order to abandon ship was transmitted in the same manner as news of the flooding—by word of mouth; no general alarm or announcement from the bridge was made in either circumstance. Despite the method of communication, everyone on board mustered on deck outside the navigation bridge and began donning immersion suits.

The satellite telephone number associated with the vessel that the Coast Guard attempted to call initially was incorrect. After contacting the company and obtaining the correct phone number, the Coast Guard at 1144 confirmed with personnel on the *Alaska Juris* that it was sinking.

Meanwhile, the fishing vessels contacted by VHF radio were en route to the accident site. The Coast Guard, along with launching its own vessels and aircraft, coordinated rescue efforts by

Flooding and Sinking of Fishing Vessel *Alaska Juris*

radio among the *Alaska Juris*, the fishing vessels, and nearby merchant vessels *Spar Canis* and *Vienna Express*, which were contacted via the Automated Mutual-Assistance Vessel Rescue (AMVER) system.⁴

As rescue operations commenced, preparations for abandoning ship continued. Two liferafts were deployed from the port side of the vessel and a third from the starboard side. Although several crewmembers had to be pulled aboard after falling into the water, a majority of the crew were able to board the liferafts in their immersion suits without entering the water. However, a couple of the crewmembers selected the wrong-sized suit and several did not follow the muster list when boarding the liferafts. The senior officers of the *Alaska Juris*, for example, assembled into one liferaft on the port side. Investigators learned that the liferaft muster list had not been updated for the current crew.

The crew in the liferaft on the starboard side attempted to join the other liferafts on the port side but the wind and current caused it to drift away from the vessel faster than the crewmembers could paddle. At that point, the captain abandoned the vessel and entered one of the liferafts on the port side.



Two of *Alaska Juris*'s liferafts with a total of 28 crewmembers aboard. A third liferaft with the other 18 crewmembers had drifted away after being deployed from the starboard side of the vessel. (Photo courtesy of bulk carrier *Spar Canis*)

Although disorganized, as evidence from the two weeks of investigative hearing revealed, the disembarkation from the vessel was facilitated by favorable weather. Calm seas with little to

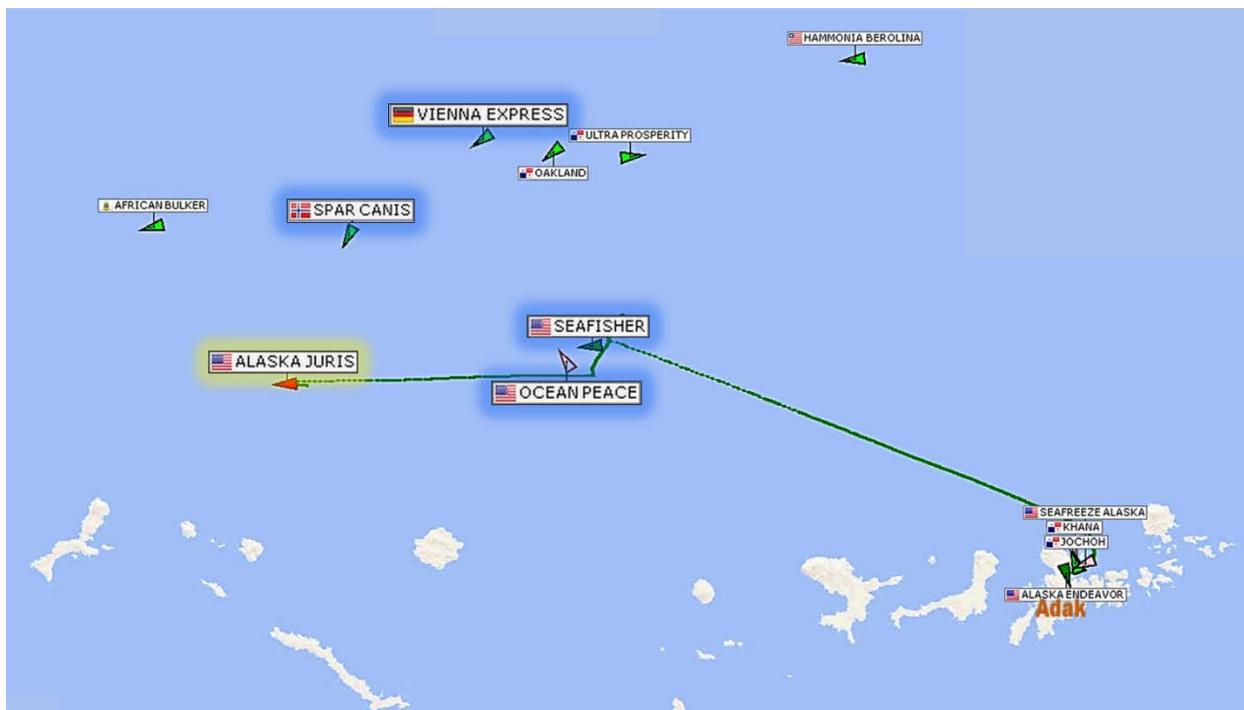
⁴ AMVER is a worldwide voluntary ship reporting system operated by the Coast Guard that provides search and rescue authorities accurate information on the positions and characteristics of vessels near a reported distress.

Flooding and Sinking of Fishing Vessel *Alaska Juris*

no wind on the day of the sinking was an “exception,” according to the *US Coast Pilot*, where the weather over the Bering Sea is “generally bad and very changeable.”⁵ On average, calm winds are experienced only about 2.5 percent of the time in the month of July.

About an hour and a half after initial discovery of the flooding, the vessel was completely abandoned with the entire crew aboard 3 liferafts (having a capacity of 20 persons for one liferaft and 25 persons each for the other two). A total of 28 crewmembers in 2 liferafts were alongside the port bow of the vessel to which they were still tied, while the other 18 crewmembers were in the third liferaft drifting away from the vessel’s starboard side out of view. With portable radios aboard all rafts, crewmembers were still able to communicate with each other.

The *Spar Canis* was the first of the good Samaritan vessels to arrive on scene. The bulk carrier deployed its rescue boat into the water but did not attempt to rescue crewmembers from the liferafts. Before resuming its transit, the *Spar Canis* remained in the area until the fishing vessels *Ocean Peace* and *Sea Fisher* arrived. The *Ocean Peace* recovered the 28 survivors from the 2 liferafts that were deployed from the port side of the *Alaska Juris*, while the containership *Vienna Express*, via its pilot ladder, recovered the 18 survivors in the third raft and then transferred them to the *Sea Fisher*. Once the crewmembers from all 3 liferafts were aboard the *Ocean Peace* and the *Sea Fisher*, the two fishing vessels departed the scene and headed for Adak.



The vessels in the vicinity of the *Alaska Juris* immediately following the distress call, based on automatic identification system (AIS) data. The response vessels are highlighted in blue. (Image courtesy of Coast Guard)

After all personnel were accounted for aboard the two good Samaritan fishing vessels, the Coast Guard stood down its response. In total, the Coast Guard assets that responded to the distress

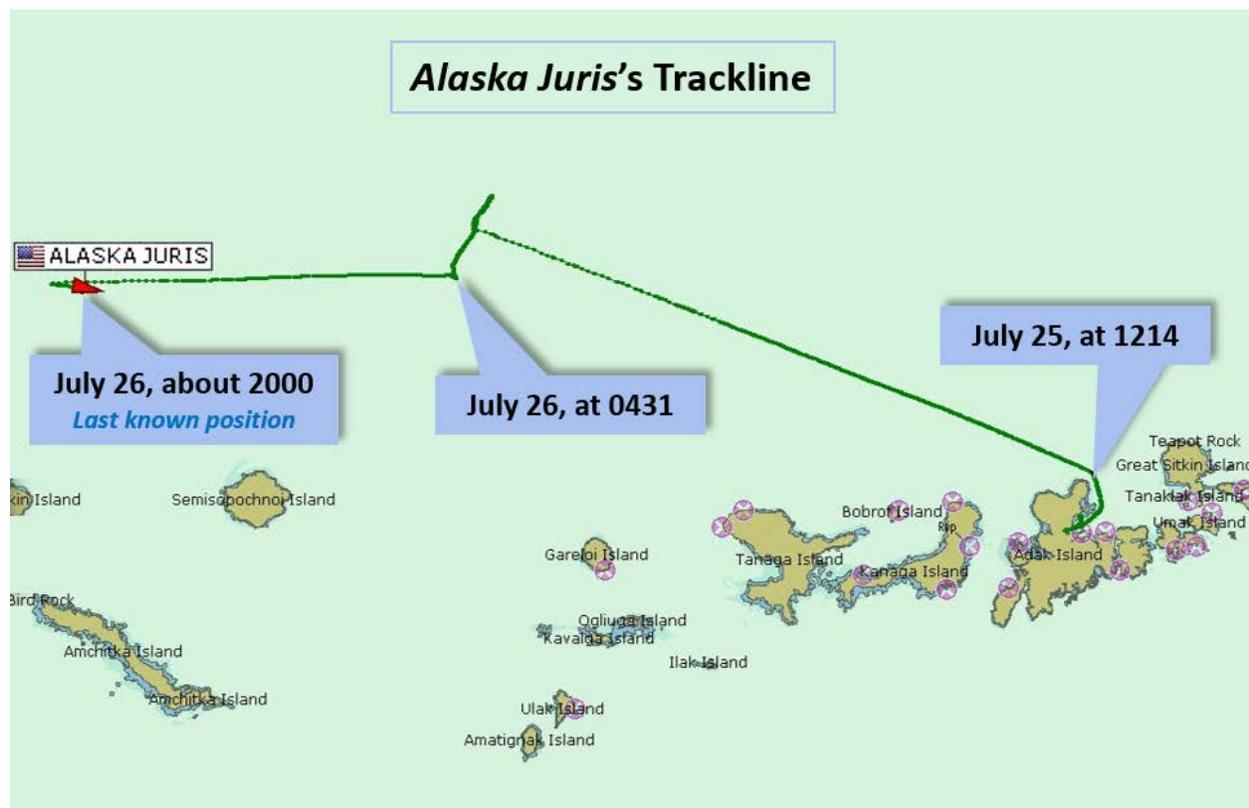
⁵ *United States Coast Pilot 9, Alaska: Cape Spencer to Beaufort Sea*, 34th ed. (Washington, DC: US Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service, 2016), p. 400.

Flooding and Sinking of Fishing Vessel *Alaska Juris*

call from the *Alaska Juris* included two C-130 fixed-wing aircraft, two Jayhawk helicopters, and a 378-foot high-endurance cutter, the CGC *Midgett*.

The next day, a C-130 was dispatched to fly over the area but was unable to locate the vessel near its last known position, where it was presumed to have sunk in 11,100 feet of water. The only evidence of the sinking observed by the overflight aircraft was an oil sheen, likely the result of 87,000 gallons of diesel fuel and lubricants that the vessel carried. The value of the vessel, which was not recovered, was estimated at \$4.3 million.

The captain, mate, chief engineer, and assistant engineer submitted samples for drug testing; the results were deemed inconclusive. Alcohol testing was not conducted on any of the crewmembers.



The vessel's trackline in the Bering Sea, beginning with the departure from Adak and ending with the approximate location of the sinking. (Image courtesy of Coast Guard)

Analysis

Before departing the engine room for the last time, the captain and, a short time later, the chief engineer, ensured that all watertight doors were closed, according to their testimony. (The assistant engineer and other witnesses testified that the doors often were kept open while the vessel was at sea.) The vessel had a progressive flooding analysis booklet that stated that flooding of the engine room would not be sufficient to sink the vessel. (The captain acknowledged his awareness of the booklet but never referred to it during the accident.) Because the vessel sank, it is clear that flooding progressed beyond the engine room. If the doors were indeed closed, it is possible that they were no longer watertight, or that bulkhead penetrations allowed flooding of seawater into other compartments, which eventually destabilized the vessel.

Flooding and Sinking of Fishing Vessel *Alaska Juris*

Crewmembers could not explain why the bilge alarms did not sound at the time of the sinking, but various testimonies confirmed that the alarms had been functioning prior to the accident. Although testing was not conducted on a routine basis, water present in the bilge on several occasions due to planned maintenance or normal accumulation had activated them automatically.



Bilge pumping system in the engine room. The opened watertight door leads to shaft alley. (Photo by M. Shackelford)

Abandonment

Although crewmembers testified about participating frequently in safety drills for firefighting, abandoning ship, dewatering the vessel, and donning lifejackets and immersion suits, overall the events surrounding the abandonment of the vessel did not follow normal procedure. First, at no time was the general alarm or whistle signals sounded, nor a public-address system used to announce the flooding or the order to abandon ship. Alert of the emergency was communicated by knocking on doors and yelling in the passageways.

Second, crewmembers donned immersion suits in the wrong sizes. The suits were stored in two bins, one on each side of the navigation bridge on the wheelhouse deck, and were in packaging color-coded according to size. When the crewmembers joined the vessel, they tried on the suits for the best fit to ensure sufficient quantity and appropriate sizing and were responsible for remembering the color of the package in case of a drill or an emergency. Despite these preparations, some donned immersion suits in the wrong size. An ill-fitting immersion suit can compromise its protection against loss of body heat once survivors are submerged in water. Also, if a suit is too large, it can fill with water and the added weight can make a task, such as hoisting oneself out of the water and into a liferaft, very difficult. Conversely, if a suit is too small, it may be difficult, if not impossible, to don.

Third, after everyone had donned immersion suits, the embarkation ladders to the liferafts were not deployed properly. The liferafts were cradled on the wheelhouse deck at the embarkation area in accordance with the vessel's safety plan. However, the ladders were deployed from the deck below, where they were tied to the rail for the crew to disembark. As a result, crewmembers had to climb over the rail to disembark and, instead of just the bottom of the ladder touching the

Flooding and Sinking of Fishing Vessel *Alaska Juris*

water's surface as intended, about 10 rungs of the ladder and the spreader were in the water. The spreader, also known as the "preventer," is a longer rung designed to lay against the vessel's side and prevent the ladder from twisting. An overhead photo of the *Alaska Juris* shows the spreader floating in the water on the port side. Moving the ladders from their designated position to the lower deck shortened the climb into the raft, but with the wave action against the hull it added a degree of difficulty for crewmembers climbing over the rail and down the ladders in immersion suits. Further, it could have added the risk of the lower portion of the ladder damaging or puncturing the liferaft.



Aerial view of *Alaska Juris* after abandonment. A significant portion of the embarkation ladder that was improperly deployed over the port rail floats alongside the hull in the water. (Photo by Coast Guard)

Fourth, many crewmembers did not follow the muster list when abandoning to liferafts but instead entered the raft of their choice. Crewmembers are assigned to a particular liferaft to evenly distribute personnel and to ensure each raft has crewmembers with suitable knowledge and training on board. In this case, the liferaft that drifted away had no experienced officers on board, which could have affected survivability.

During the hearing, investigators questioned the captain's decision to abandon the vessel. He said he felt that there was no other choice due to the amount of flooding, yet the *Alaska Juris* remained upright and almost on an even keel for another 8 hours. When asked if there was any consideration given to going back aboard to reassess his decision, the captain stated that he attempted several times to return to the vessel, but other crewmembers in the liferaft convinced him that doing so would be too risky. Ultimately, he believed that he had made the right decision to abandon when they did, as supported by the safe rescue of the entire crew.

Flooding and Sinking of Fishing Vessel *Alaska Juris*

Vessel Management

Based on the overall perception by a majority of the crew interviewed, the vessel was receiving increased attention by management. In the last couple of months prior to the sinking, a new chief engineer had been brought aboard, and, according to him and the captain, improvements were being made to the vessel. However, there was less consensus regarding the management of the vessel. Testimony revealed a power struggle between the American and Japanese crews, particularly between the captain and the fishmaster. The captain stated that he threatened to quit if the Japanese crewmembers did not follow his instructions.

In the hearing, some witnesses claimed that the Japanese crewmembers were receiving preferential treatment, which included not participating in safety drills and disregarding the captain's orders without admonishment. The Japanese crewmembers also reportedly made calls to company personnel ashore to influence the discipline or dismissal of other crewmembers.

Questions were raised during the hearing regarding the level of qualified personnel aboard the *Alaska Juris*. While a new chief engineer had been hired to increase the experience and talent on board, the assistant engineer was not certified for his position. The ACSA program allowed a crewmember to sail as an assistant engineer if that individual was on a list to be enrolled in an engineering program, but at the time of the sinking the assistant engineer was not on such a list.

Company port engineers said they provided the vessel with all the support and maintenance that was requested. On the contrary, a chief engineer who had been hired 3 months prior to the sinking refused to continue in the job after just one day aboard because he felt the vessel was "unsafe." He believed that the previous chief engineer (not the one on board at the time of the accident) and the company neglected to maintain the vessel in a satisfactory condition. When he heard of the *Alaska Juris*'s sinking, he said he was "not surprised."

Alternate Compliance and Safety Agreement

As an alternative to being classed or having a load line certificate, the *Alaska Juris* was enrolled in the Coast Guard's ACSA program. With enrollment based on voluntary compliance, the program was established for the H&G fleet fishing the waters of the Bering Sea "to achieve an equivalent level of safety to classification and load line requirements" by participating in inspections and implementing safer operating procedures.⁶ According to its policy document, the H&G fleet posed significant safety risks because of "fleet-wide deficiencies in vessel stability, watertight integrity, and maintenance . . . [and in] emergency training, drills, and crew safety competencies." Before ACSA was launched, the Coast Guard identified 64 vessels as constituting the H&G fleet, although not all remained in the program for various reasons.

To enroll, applicants had to provide documentation of "good cause" for the exemption from classification and load line regulations along with details of how they would provide an equivalent level of safety.⁷ Vessels that did not enter the program would be required to suspend fishing activities considered processing, as monitored by catch records of the National Marine Fisheries

⁶ ACSA.

⁷ Coast Guard Commandant, "Exemption Letters for Existing Fish Processing Vessels," policy letter 06-03, July 1, 2006.

Flooding and Sinking of Fishing Vessel *Alaska Juris*

Service. The program was administered from Seattle, the home port of the H&G fleet, and the examinations were conducted initially by a marine inspector from Coast Guard Sector Seattle.

During the hearings, Coast Guard personnel and civilian mariners acknowledged shortcomings and lapses in the program due to complexities such as insufficient staffing of inspectors and inadequate time available for conducting annual inspections for each vessel, which had to be completed for the entire fleet during the two months the vessels were not fishing. In addition, some of the inspectors lacked the qualifications to inspect the vessels properly. The Coast Guard is currently examining the program and attempting to implement changes based on the findings from this investigation.

The safety issues that surfaced during the investigative hearing were similar to those identified in the *Alaska Ranger* investigation. Although the crew on the *Alaska Juris* abandoned the vessel without injury, the process deviated so far from standard procedures practiced during drills that, if the conditions had been anything other than ideal, the outcome might have been less favorable. No alarms were sounded, nor announcements made; embarkation ladders were deployed improperly; the wrong-sized immersion suits were donned; personnel embarked in unassigned liferafts; and liferafts were deployed without waiting for orders from command personnel. For a vessel sinking fast due to fire, collision, or a similar catastrophe, departing from standard procedures may be necessary, but such deviation is difficult to understand for a sinking vessel that remained relatively upright and on an even keel in good weather for about 8 hours following discovery of the flooding. Likely, it was the favorable weather, the timely assistance of the Coast Guard, and the presence of good Samaritan vessels that saved lives.

Probable Cause

The National Transportation Safety Board determines that the probable cause of the sinking of the fishing vessel *Alaska Juris* was a lack of watertight integrity, which failed to contain flooding in the engine room.

Fishing Vessel Safety

Operators of fishing vessels should consider the following procedures while at sea to ensure the safety of their crewmembers as well as the safe operation of their vessels:

Watertight integrity

- Close all watertight doors while at sea. Check and perform maintenance to ensure doors are properly sealed.
- Maintain watertight integrity of all bulkhead penetrations.

Bilge system, sea chest valve operation, and engine space dewatering

- Establish procedures for testing bilge alarms on a routine basis and maintain logs of these tests.
- Maintain bilge piping and pumps in good working order.
- Ensure that sea chest valve handwheels and reachrods can be accessed easily and operate properly.

Dewatering equipment and training

- Ensure that portable dewatering pumps have sufficient capacity with appropriate lengths of suction and discharge hoses to dewater all spaces.
- Train dewatering teams on a routine basis.

Vessel stability

- Ensure that captains, mates, and engineers are familiar with all aspects of their vessel's stability (intact and damage) for all operations.

Abandonment

- Update liferaft assignment sheets after crew changes.
- Ensure that crewmembers have access to properly sized immersion or exposure suits.
- Train crewmembers on proper use of all lifesaving and survival gear, including ladders, liferafts, and sea painters (lines).

Flooding and Sinking of Fishing Vessel *Alaska Juris*

Vessel Particulars

Vessel	<i>Alaska Juris</i>
Owner/operator	Alaska Juris Inc. / Fishing Company of Alaska
Port of registry	Seattle, Washington
Flag	United States
Type	Fish-processing vessel
Year built	1975
Official number (US)	569276
IMO number	8856572
Classification society	N/A
Construction	Steel
Length	218.2 ft (153.4 m)
Depth	25.9 ft (7.6 m)
Beam/width	42 ft (20.4 m)
Gross tonnage	1,658 gross tons
Engine power; type	3,500 hp (2,610 kW); diesel reduction
Persons on board	46

NTSB investigators worked closely with our Coast Guard counterparts from District 17, Sector Anchorage, and Training Center Yorktown throughout this investigation.

For more details about this accident, visit www.nts.gov and search for NTSB accident ID DCA16FM047.

Issued: July 24, 2017

The NTSB has authority to investigate and establish the probable cause of any major marine casualty or any marine casualty involving both public and nonpublic vessels under Title 49 of the *United States Code*, Section 1131(b)(1). This report is based on factual information either gathered by NTSB investigators or provided by the Coast Guard from its investigation of the accident.

The NTSB does not assign fault or blame for a marine casualty; rather, as specified by NTSB regulation, “[NTSB] investigations are fact-finding proceedings with no formal issues and no adverse parties . . . and are not conducted for the purpose of determining the rights or liabilities of any person.” Title 49 of the *Code of Federal Regulations*, Section 831.4.

Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by conducting investigations and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report. Title 49 of the *United States Code*, Section 1154(b).
