

NATIONAL TRANSPORTATION SAFETY BOARD
Public Meeting of September 30, 2009
(Information subject to editing)

Sinking of U.S. Fish Processing Vessel *Alaska Ranger*
Bering Sea, Alaska, March 23, 2008
(NTSB/MAR-09/05)

This is a synopsis from the Safety Board's report and does not include the Board's rationale for the conclusions, probable cause, and safety recommendations. Safety Board staff is currently making final revisions to the report from which the attached conclusions and safety recommendations have been extracted. The final report and pertinent safety recommendation letters will be distributed to recommendation recipients as soon as possible. The attached information is subject to further review and editing.

SUMMARY

On March 23, 2008, the U.S. fish processing vessel *Alaska Ranger* sank in the Bering Sea 120 nautical miles west of Dutch Harbor, Alaska. The vessel was owned by Fishing Company of Alaska, Inc., headquartered in Seattle, Washington. Five of the 47 people on board died in the accident.

CONCLUSIONS

1. The flooding of the *Alaska Ranger* appears to have begun in the rudder room, likely as the result of the loss of a rudder.
2. A lack of internal watertight integrity allowed the progressive flooding that eventually sank the *Alaska Ranger*.
3. A loss of electrical power caused the pumps that controlled the pitch of the vessel's propellers to lose hydraulic pressure, which allowed the propeller blades to move to an astern pitch (contrary to the ordered position) and, because the main engines were running, propelled the *Alaska Ranger* backward.
4. The *Alaska Ranger* would not have traveled astern if the vessel's controllable-pitch propeller system had been equipped (as it originally was) with hydraulic pumps driven off the main propulsion shafts.
5. The astern movement of the *Alaska Ranger* before the sinking caused the vessel to move away from the liferafts and prevented crewmembers from entering the liferafts from the vessel as intended.

6. Slowing or stopping the main engines would have arrested the vessel's astern motion, which might have slowed the flooding as well as prevented the liferafts from deploying out of reach.
7. There is no evidence that the fishmaster compromised the *Alaska Ranger* master's ability to exercise his command authority.
8. Fishing Company of Alaska personnel were under the mistaken impression that the *Alaska Ranger* had been strengthened for operation in ice.
9. Fishing Company of Alaska failed to ensure that its engineering officers met Coast Guard requirements for licensing and manning, but there is no evidence that the qualifications of the engineering crewmembers played a role in the accident.
10. During the *Alaska Ranger*'s January 2008 dockside examination, the Coast Guard failed to identify that the vessel's engineers were not properly certificated.
11. Fishing Company of Alaska's drug and alcohol policy was not effectively implemented or enforced.
12. Under the circumstances of being occupied with rescuing survivors and treating them for hypothermia, it was reasonable that personnel on board the rescue vessels did not conduct postaccident testing for alcohol.
13. Postaccident drug-testing requirements could have been met on board the *Alaska Warrior* or in Dutch Harbor, but they were not.
14. Although toxicology testing of specimens from the ship's master, mate, and chief engineer showed no evidence of alcohol or drug use, no conclusions can be reached regarding alcohol or drug use by surviving crewmembers because postaccident testing was not conducted.
15. Despite a communication error that delayed the discovery that the fishmaster was missing, the Coast Guard's search and rescue effort, carried out under adverse weather and sea conditions, was timely and effective and minimized the loss of life in the accident.
16. The Coast Guard's seasonal basing of a rescue helicopter near the fishing grounds aided the rescue effort.
17. The drydock examination of the *Alaska Ranger* performed as part of the Alternate Compliance and Safety Agreement program was inadequate because not all hull areas specified in the program guidance were gauged.
18. Although the Coast Guard's implementation of the Alternate Compliance and Safety Agreement program was flawed, the program has provided a higher level of safety for the enrolled commercial fishing industry vessels than existed previously.
19. The Coast Guard's ability to address safety deficiencies in commercial fishing industry vessels is limited by its lack of statutory inspection authority.

20. By imposing a regulatory bar against replacing Amendment 80 vessels, the regulations that implement the fishery management plan for groundfish of the Bering Sea/Aleutian Island management area negatively affect safety by preventing vessel owners from replacing aging vessels that pose increased operating risks.

PROBABLE CAUSE

The National Transportation Safety Board determines 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.

RECOMMENDATIONS

As a result of its investigation of the *Alaska Ranger* sinking, the National Transportation Safety Board makes the following recommendations.

To the U.S. Coast Guard:

1. Conduct refresher training for your marine inspectors and commercial fishing vessel examiners on the licensing and manning regulations that apply to commercial fishing industry vessels.
2. Seek legislative authority to require that all commercial fishing vessels be inspected and certificated by the Coast Guard to ensure that the vessels provide an appropriate level of safety to those on board.

To the National Marine Fisheries Service:

3. Amend the regulations at 50 *Code of Federal Regulations* part 679, subpart H, to allow for replacement of an Amendment 80 vessel in situations other than vessel loss.

To the North Pacific Fishery Management Council:

4. Amend the fishery management plan for groundfish of the Bering Sea/Aleutian Island management area to allow for replacement of an Amendment 80 vessel in situations other than vessel loss.

To Fishing Company of Alaska:

5. Review and modify as necessary the procedures for enforcing your drug and alcohol policy to ensure full crew compliance.