



## Navigating Danger: Safety at Sea in US Waters

*With an average of 100 million Americans going boating every year, safety at sea has never been more important. Navigational safety standards mandates must be expanded to protect people at sea and match global standards.*

### History of Safety at Sea

- The International Convention for the Safety of Life at Sea (SOLAS) was first adopted in 1914 and is currently overseen by the International Maritime Organization (IMO). The IMO sets the basic minimum acceptable standards for safety at sea including traffic rules, safe vessel operating speeds, rights-of-way, collision avoidance, light and noise signal usages, and exemptions.
- Automatic Identification System (AIS) was developed to increase maritime safety, reduce vessel collisions, and enhance awareness of vessel locations at sea. It functions as the “eyes of the boat,” enabling vessels to “see” each other’s location and activity—of critical importance at night and in hazardous conditions.
- The IMO requires AIS on
  - All vessels over 300 gross tonnage on an international voyage – both on the high seas and in the EEZ of a foreign nation;
  - All cargo vessels over 500 gross tonnage, regardless of their area of operation; and
  - All passenger vessels, regardless of size or their area of operation.
- Few fishing vessels fall under these requirements, which leaves AIS requirements for fishing vessels up to individual countries and management organizations.

### Safety at Sea within the United States

- In 2019, the US commercial fishing industry had a fatality rate over 40 times higher than the national standard of other industries, making it one of the most dangerous occupations in the United States. That number is likely underreported due to lack of robust data.
- Between 2000 and 2019, 47% of all mortalities of US fishers occurred after a vessel disaster.
- In 2022 alone, multiple vessel accidents made the news in the United States, including a fishing vessel that collided with a cruise ship in 2022 off the coast of New England causing an injury and damaging both vessels. The same year, another fishing vessel sank off the coast of the San Juan Islands in Washington, endangering 5 crew members and spewing diesel into surrounding waters.
- Only fishing vessels over 65 feet are required to transmit AIS while operating out to 12 nautical miles from shore. The 65-foot carriage requirement exempts a majority of US-registered commercial fishing vessels: only 12% of the current 19,000-vessel fleet are over 65 feet.



## The Role of AIS in Maritime Safety

- In a 2021 study documenting the perils and promises of AIS data, interviews with vessel operators identified AIS data as an essential tool for navigational safety, with one explaining, “If there are problems, you immediately know with whom you are dealing. Before, you had to mention the position of the vessel concerning a particular object.”
- Other interviewees validated this sentiment, characterizing AIS as an identification system offering collision avoidance benefits.
- AIS affords vessels accurate, real-time data to identify surrounding ships and display current, dynamic positioning data for their surroundings, information that can affect navigational and safety decision-making. The transparency of this information plays a critical role in ensuring the safety of the workers on these vessels beyond just decreasing collisions.
- In simulations, literature review, and real-world scenarios, research has shown AIS to be an informative, effective collision avoidance, reporting, communication, and navigational safety tool. In a ship operation simulation, participants with AIS information avoided possible collisions faster and more accurately than the group lacking AIS.

## Navigational Safety in the European Union

- As of 2014, all European Union (EU) flagged fishing vessels over 15 meters (49 feet) in length must be equipped with continually transmitting AIS.
- Since the EU AIS mandate was instituted in 2014, the European Maritime Safety Agency reported that the number of maritime casualties has not grown since 2014 and decreased in 2021.
- There has also been a clear reduction trend in the number of fatalities resulting from marine casualties since 2014 (with the exception of 2019).

## Recommendations

The United States must strengthen its navigational safety and collision avoidance mandates to ensure the safety of its fishers at sea.

To strengthen safety at sea, Oceana recommends that the United States:

- **Require fishing vessels 49 feet or longer to transmit AIS using Class A devices:** Following the EU requirements, require all U.S. fishing vessels 49 feet (15 meters) or longer to carry and transmit AIS on the high seas.
- **Mandate notification of all AIS-off events:** Require U.S. vessels to notify the Coast Guard when a fishing vessel operator stops transmitting AIS within four hours of the halt in transmission.