

4. Summary (Conclusion)

Based on our investigation reports on fatal and collision accidents the four serious accident investigation cases mentioned in this digest, we summarized as follows how these accidents occurred, and what the lessons which will help prevent recurrence are.

Status of collision accidents in the target areas

◆By the type of vessel

The accidents are classified by the type of vessel as follows: 39 cargo ships (36.4%), 28 fishing vessels (26.2%), and 12 tankers (11.2%). For cargo ships and tankers, comparing the number of vessels involved in collision accidents in the target areas with those occurring in general areas shows that the frequency of accidents occurring in the target areas is approximately 2 times higher.

◆Breakdown of the fatalities and injured

Out of the 50 cases, there were 18 fatalities and injuries occurring in 10 cases. All of them involved small vessels less than 5 tons: 4 fishing vessels, 3 recreational fishing vessels, and 3 pleasure boats, with 3 fatalities (1 fishing visitor, 2 fishing vessel skippers), 1 serious injury, and 14 light injuries.

◆Categories of Causes

When the causes are broken down by accidents, the number of accidents caused by human factors is 40 (80.0%), and the number of human/environmental factors is 8 (16.0%). All of them involve "human factors or a combination of multiple factors involving human factors". Moreover, when human factors are broken down by vessels, "judgment errors" are characterized by a fact that 32 out of the 33 vessels (36.3%) made "wrong assumptions".

Lessons from the accident investigation cases

- Keep a proper lookout, effectively using radar and other available means and not relying solely on visual observation.
- When performing work other than maneuver of a vessel, only after accurately understand the situation of surrounding vessels and safety has been confirmed, complete that work quickly so that it does not interfere with a proper lookout.
- In a crossing situation, continue to keep a proper lookout in order to judge the risk of collision properly.
- Vessels sailing along the recommended route should sail on the right side of the center line of the route.
- If the other vessel does not take action to avoid a collision, immediately give a warning signal.
- If one's own vessel shall become the stand-on vessel, take such action as will best aid to avoid collision.
- If one's own vessel shall become the give-way vessel, take early and substantial action in order to keep sufficient distance from the other vessel.

For sailing near the western entrance to the Kurushima Kaikyo Traffic Route

- management company should:
 - Instruct their crewmen more specifically on the points that should be followed when visibility is restricted (reporting to the master, etc.).
 - Instruct their crewmen to confirm the intention, etc. of the other vessel using VHF radio when they find a vessel sailing in the opposite direction under restricted-visibility conditions because when the tidal current of the Kurushima Kaikyo Traffic Route is flowing southward, there may be conditions where the courses of vessels entering the Kurushima Kaikyo Traffic Route and vessels leaving it intersect northeastward in waters off to the north of Kajitorinohana.

A word from Director for Analysis, Recommendation and Opinion

We believe that in the marine areas that are congested with many vessels using the same waters, the high traffic volume calls for a greater level of watchfulness than usual when maneuvering a vessel.

However, nearly 40% of target vessels ran into a risky condition as a result of operation based on optimistic assumption, with thoughts such as "I assume there aren't any other vessels around" or "I assume the other vessel will make way".

We hope that the content introduced in this document can be seen as lessons to learn from, leading to operation in preparation for all possibilities, with considerations such as "I think perhaps there might be other vessels around" or "I think perhaps the other vessel might not make way" shall be practiced.

We welcome your comments on "JTSB Digests" and inquiries for visiting lectures

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