On the Development of Japan-Marine Accident Risk and Safety Information System

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1. Introduction
In order to improve the safety of marine traffic, Japan Transport Safety Board launched a web-based marine accident map that provides the information about where the marine accidents have occurred. This map, the Japan-Marine Accident Risk and Safety Information System (J-MARISIS), was launched in Japanese at the end of May 2013.

2. Japan-Marine Accident Risk and Safety Information System
This system enables you to view accident summaries and investigation reports for accidents and serious incidents, as well as vessel traffic, water routes, and fishing spots, on the same map. By disclosing the risks of accidents in each marine area, this system is designed to alert those who are on board ships that are sailing through the area to potential risks. By doing so, the system aims to prevent similar accidents and further improve the safety of marine traffic.

Fig.1. Map displaying accident information in English

Fig.2. Search function is available in any range

3. Using J-MARISIS while focusing on a frequently occurring type of accident
We will provide accident case studies, with statistical data, by using J-MARISIS while focusing on a frequently occurring type of accident that involves a collision between vessels in areas with high traffic density, especially areas where serious marine accidents occurred or areas where characteristic accidents occurred near the entrances or exits of traffic routes, etc. prescribed in the Maritime Traffic Safety Act (not including traffic routes themselves).

Looking at the Pacific belt zone using the system shows that areas such as Tokyo Bay, Ise Bay, Osaka Bay, Bisan Seto, Kurushima Strait, and Kanmon Strait are displayed in blue to signify that they have high traffic density, and also that there are many marks indicating accidents in these locations, which suggests that these are areas with active marine traffic and a high frequency of accidents occurring in them.

Fig.3. Traffic density and accident locations according to J-MARISIS (from the mouth of Tokyo Bay to off the Iro Saki)

4. Conclusion
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.

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.

As the result the Japan Transport Safety Board hopes that these information system will contribute to the safety of vessel operation.

References

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