

Implementation and Effect of Major Oil Recovery System Exercises

Hisashi Moriyasu

Chief

Nippon Marine Co., Ltd. Mizushima Branch

My name is Moriyasu from Nippon Marine and I am in charge of the maintenance work of oil spill response equipment of the No. 2 Setouchi Base.

At this Base, a larger oil recovery system was equipped in last April, based on the lessons learnt from Nakhodka oil spill incident in 1997.

This is called Tarantula System, manufactured by Ro-Clean Desmi, Denmark.

The system consists of three main elements, i.e. "Skimmer Head with Thruster", "Power Pack and Crane" and "Hose Reel". It has a pumping capacity of 250 m³/h and can be stored in a 20 feet container.

Using the above system and the oil storing system that was delivered in the same timing, an operating exercise was done by Petroleum Association of Japan (PAJ) off Mizushima Port in Okayama Prefecture in last May.

The items of the exercise were boom deployment in a J configuration using two vessels and its recovery, oil recovery using "Tarantula" and deployment using oil bags. I would like to make a comment on the exercise.

As an overall impression of this three-day exercise, we felt it satisfactory on the whole though it was the first major exercise for us. For some part, however, I have to say, "Success was taken for granted" as it had been fully prepared and arranged beforehand.

First, "the Shin-nichi Maru" used as a mother vessel was functionally great, with very large deck that I thought it too large, which enabled us to work in the spacious circumstance though considerably many personnel were on board for the exercise.

Probably we only have a few functional work vessels such as "the Shin-nichi Maru" in Japan as far as I know. In case of emergency, it may be impossible to charter them if they are geographically far away or they are on other duty. Considering these situations, it is

necessary to do the exercise using less functional vessels than “the Shin-nichi Maru”.

Neither a mother vessel nor work vessel can always be available.

So, if it is impossible to charter these vessels in case of incident, early mobilization will be considerably disturbed.

Therefore, especially for work vessels, it seems to be one of the ideas that we usually make a list of their names and contact addresses and establish a report system for regular check of their position.

Concerning the unification of the communication systems between the commanders on the deck, between the mother vessel and work vessel, between the vessels and shores, it was done by using the radio equipped in the mother vessel. In the event of emergency, however, the appropriate communication would not be made if not fully prepared. Therefore, we should establish the way to secure the effective communication including the preparation of the apparatus.

The command system on board, too, worked smoothly in the exercise as it was prepared. However, it is uncertain if it will work well in case of emergency.

Second, my experience as a commander in this exercise made me keenly realize the followings: after a commander image an ideal J configuration and check a tidal current, a wind direction and a wind force while heading for the site, he should make decisions exactly and quickly, and provide the instructions to the mother vessel and work vessel.

In order to accomplish the above successfully, the followings are important, : a commander should provide his instructions clearly; the mother vessel and work vessel with good performance are required to be chartered in the confined area of Seto Inland Sea; a commander should learn the ability for judging marine conditions.

Finally, I have to say what I took in the exercise. Paradoxically, the matters categorized as “Success is taken for granted” in an exercise may be easily changed to the matters categorized as “Success can not be expected” in some incidents.

We will continue to do daily maintenance work and exercise for an emergency.

That’s all for my presentation.