

## ***Golden Ray: Chief Officer***

**Q:** Please state your name and position.

**A:** I am Chief Officer Park Hyun-jin of the *Golden Ray*.

**Q:** After entering the Port of Brunswick, when did you receive the stowage plan?

**A:** I received the pre-stowage plan before we reached port. I did not receive the final stowage plan before leaving port.

**Q:** Please fully explain the process through which cars were loaded onto the ship this time at the Port of Brunswick, including receiving the stowage plan and entering changes in ballast water quantity and/or cargo shipment into the LOADCOM.

**A:** At the Port of Brunswick, apart from transferring water between port and starboard heeling tanks, there was no increase or decrease in the quantity of ballast water. The bunker and water quantity can be checked on the IMACs computer, based on which the relevant numbers are entered into the LOAD COM. The data for the stowage plan was entered into the LOAD COM based on the pre-stowage plan. Usually stowage data is entered after loading is completed. At the Port of Brunswick, because we didn't receive the final stowage plan before leaving port, we estimated the data values based on the pre-stowage plan.

**Q:** Why didn't you receive the final stowage plan before leaving the Port of Brunswick?

**A:** The planner did not give us the plan before we left port.

**Q:** Were there any differences between the pre-stowage and final stowage plans?

**A:** Usually, there is little difference, if any. This was also true at the Port of Brunswick.

**Q:** Before entering port, did you check ship's stability based on the pre-stowage plan?

**A:** Before entering port and after receiving the pre-stowage plan, we made a weight estimation based on the average weight of each car.

**Q:** Please explain when and how draft measurements are usually done and how the duty officers report the draft results to the chief officer.

**A:** Normally, the draft is measured after all cargo has been loaded. After the ramp is closed and the ship is set upright, the drafts of the bow and stern of the ship's alongside area are checked by the chief officer, after which the chief officer boards the ship via gangway. And it's possible to have the crew members (officers) check the draft, but I always check drafts myself.

**Q:** At the Port of Brunswick, when, how, and by whom was the draft measured and recorded?

**A:** I was the one who measured the draft at the Port of Brunswick. After the

cargo was loaded and the ramp closed, the ship was set upright. I checked the draft of the stern and bow of the ship's alongside area and notified the third officer of the results via walky-talky. He then wrote it down in the departure report.

**Q:** Who was the last person to sound the ship's ballast tank? When was this done? How was this reported to the chief officer and then recorded?

**A:** We are required to do a sounding manually once per day. At 8 a.m., the quartermaster does the sounding after off-duty of bridge and reports the results to the chief officer. I record the sounding results in the ballast sounding report. There was no difference between the IMAC sounding gauge and the actual measurements that were taken.

**Q:** Before the *Golden Ray* left the Port of Brunswick, how much ballast water did it have? What was the sounding depth?

**A:** I don't really know. It's difficult to remember the exact measurements for every tank.

**Q:** How frequently is the amount of water in the ballast water tank measured?

**A:** As I mentioned earlier, tank measurements are taken every day.

**Q:** In the event the ballast water is not measured via sounding by a crew member but with the tank gauge, when is the last calibration done?

**A:** The last calibration is done by the ship's chief officer with a sounding gauge

before entering port.

**Q:** How is the weight of the cargo/freight specified in the stowage plan verified (double-checked)?

**A:** The pre-stowage plan shows only the number of cars, not the weight. We can check the total weight of the cargo if we receive a final plan, but this time we didn't receive a final plan before leaving port. In such cases, the cargo weight is calculated by multiplying the number of cars by the average weight of one car.

**Q:** How did you calculate the average weight?

**A:** At the Port of Brunswick, I did not receive a final stowage plan. Instead, I was given the pre-stowage plan. Because I had access to only the number of cars and did not know the car type, I calculated the total weight based on the average weight of the given number of cars.

In general, based on my experience, a small car weighs 1.3 tons, and a mid-sized car weighs about two tons. After the cars are loaded onto the ship, the actual weight is usually very similar to my initial calculation.

Regarding the difference between the entered values for the LOAD COM data used for the safety inspection (for things such as the ship's stability) before entering port based on the pre-stowage plan and the entered values for the LOAD COM data based on the pre-stowage plan before leaving port, the weight of the cargo was the same. However, there may be some differences in the values for ballast water, bunker, water, etc.

The numbers of loaded and unloaded cars specified in the pre-stowage plan that we received upon entering port and the numbers upon leaving port were almost identical. Therefore, I don't think that there was any substantive difference between the total weight of the cars (based on average weight per car) and the actual total weight. Also, the draft was almost exactly the same upon both leaving and entering port.

**Q:** Before leaving port, were any changes made to the quantity of ballast water or to the initial version of the stowage plan?

**A:** No.

**Q:** When and how was the ship's listing corrected before leaving port of Brunswick?

**A:** Before leaving port, the ramp was closed, the ship was set upright, and the listing was corrected using the heeling tanks.

**Q:** Do you have any evidence that lashing the loaded cars were completed safely in the ship and/or confirms that you followed such procedure?

**A:** After the cargo is loaded and the lashing man finishes lashing all vehicles, the crew member on duty immediately checks whether it has been done properly. If there is a problem with the lashing, the situation is reported to the chief officer. This ship has checklist for checking for the lashing, but does not keep documents or evidence on lashing.

**Q:** Compared to other car carrier vessels or other voyages of the *Golden Ray*, was there anything different this time about the way the cargo was loaded?

**A:** No.

**Q:** Compared to other car carrier vessels, is the *Golden Ray* manoeuvre differently? Does the *Golden Ray* lash cars in a different way?

**A:** No.

**Q:** Before leaving port, did you or anyone else on the crew take a measurement of the density at the Port of Brunswick? If so, what was the figure?

**A:** We did not measure the density. During the USCG interview was held in Brunswick before, I said that I entered the density value based on fresh water on LOAD COM. But now that I think about it, I did not revise sea water density value(1.025) entered into the LOAD COM to fresh water.

**Q:** Is there any possibility that the data most recently saved on the IMACs and LOAD COM are different from the amounts of ballast water and cargo (cars) that were actually on the *Golden Ray* at the time?

**A:** The IMAC data will most likely be the same, without any differences. There may be slight differences between the LOAD COM data and the final cargo amount because it is based on the pre-stowage plan.

**Q:** Do you have anything else you wish to say?

**A:** No.

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Interviewee: Park Hyun-jin (Chief officer, *Golden Ray*)

Interviewer: Kim Byeong-gon (Investigator, Korea Maritime Safety Tribunal)

Interviewer: Hwang Jeong-il (Investigator, Korea Maritime Safety Tribunal)