

Case study 1st Draft – the narrative part

1. Title

Team and leaders in time shortage

2. Executive Summary

The incident being described is not a typical one. Discussing the teamwork and crew actions, we usually consider those on the bridge and in the engine room. This case presents teamwork in an emergency situation, a spillage, one of the most serious accidents on board the tankers. It can lead directly to a disaster, as is the case with the world's largest oil spills. The case is considered interesting and exemplary as it happened upon relieving of the watch at noon, when the crew was having lunch in the mess room. At the beginning of the incident, the AB (able seaman) and the Second Officer were on deck, but very soon the entire crew, without exception, was involved in the clearance of the oil spill. The emergency situation involving the whole crew shows the significance of team cooperation and the role of leadership and exemplary performance in management of hazards in an emergency.

3. The narration

3.1. The scenery



The case presented below is a good example of the role of the human factor at sea and more specifically the role of team cooperation and leadership in dealing with emergency situations. The narrator is Captain Georgi Panayotov, who was a Second Officer on board the ship which suffered distress in 2004.

The ship was "Seasprite", crude oil carrier, Suezmax type, 160,000 t of cargo, with displacement of 200,000 t, operated by "Thenamaris". The ship was in Puerto Jose, Venezuela at the time of the incident.

The ship was hired on a time charter from Puerto Jose, Venezuela to St. Croix, Virgin Islands, Puerto Rico, unincorporated territory of the United States. Two types of oil - heavy and light crude oil - were exported to one of the largest American refineries, located offshore, in the Caribbean Sea, supplied with Venezuelan oil.



"Two courses - 1°, 181°, 30 hours of passage, 32 hours of loading, and 32 hours of unloading. I spent 8 months and 12 days on board this ship. Along with "Kim Jacob", another tanker ship, we supplied the US refinery on St. Croix Island."

3.2. Introducing the people involved

The Second Officer

Capt. Georgi Panayotov was Bulgarian. He was 47 years old. He graduated from "N. Y. Vaptsarov" Naval Academy. He had served as an officer in the Bulgarian Navy for 13 years. Later, he started a career in the merchant shipping. He had already had 11 years of experience on board tankers at the time of the incident.

The Chief Officer

"The Chief Officer was Greek. He was 40 years old, a graduate of the Greek Maritime Academy. He had already had 13-14 year experience on board tankers at the time of the incident. Being a very attentive and communicative officer, he was loved and respected by the whole crew. He cared a lot about the people regardless of their level in the crew and their nationality.

The Chief Officer's role is especially important on board the ship, therefore his personality is an extremely critical factor. We spend 4-5 months on board a ship with other 18-20 persons, without our families. It is necessary that everyone lives and works in a calm and friendly environment. Therefore, everyone should contribute to such an environment. The Chief Officer managed to create an environment of trust and mutual respect."

The Chief Engineer

"The Chief Engineer was also Greek. He was 47 years old, a graduate of the Greek Maritime Academy. He had already had over 20 years experience as a naval ship engineer. I would say that he was quiet, shy, and very attentive. When I embarked the ship, my luggage was delayed and arrived a week later. He called me and gave me overalls and other equipment necessary for my work on board.

He had a very subtle sense of humor which was greatly appreciated by the crew. He was the preferred partner in informal conversations."

The Master

"The Greek Master of the ship, Stavros Zaveris, was a wonderful person, not only an experienced master, respected by his crew, but also a very good man. He is one of the best people I have worked with. He did some simple and ordinary things that stirred up my emotions. For instance, he ordered special flowers and soil from Greece and planted them around the bridge. The greenery created a warm and relaxing atmosphere. He was also one of the greatest cooks. He regularly assisted the chef in making specialties. Once he got on the bridge and said, "Go to the galley and try what I have prepared." I said, "Captain, I cannot leave the bridge, you know" and he replied, "No problem. I will take over the watch, you go down." This had never happened to me before. Someone may think it is a joke, but it was a fact.



He has always been a very positive person, caring for the crew. I have never met another Master who returned on board after a visit to any port city carrying three bags full of food - one for the cargo control room, the other for the engine control room, the third for the bridge or the deck department. This happened every two or three days. He allowed some of the religious holidays, the Independence Day of the Filipinos, Easter and others to be celebrated on board. He showed amazing respect to every crewmember. He constantly took care of the crew - checking regularly what supplies were necessary to be ordered. And no problem had occurred during loading and unloading operations so far. Master's attitude towards the crewmembers established a spirit of respect and dignity - regardless of the mariners' positions in the hierarchy of the ship's crew and their national and cultural affiliation."

The AB

"The AB was Filipino, about 40 years old, very skilled, with 20 years of experience at sea, hard working, strict and disciplined."

The rest of the crew

"It was a multinational crew, almost all officers were Greek, including the Pumpman, the Electrical Officer and I were Bulgarian, and the rest of the crew were Filipino. As per the policy of "Thenamaris", all ratings were Filipino. In fact, the crew consisted of three nations. The relationships and the cooperation within the crew were exemplary. The Master, being respectful of the cultural and religious differences, contributed greatly to the friendly environment."

3.3. The challenge

Capt. Panayotov remembers and describes the incident: "The incident I would like to describe is not a typical one. Discussing the teamwork and crew actions, we usually consider those on the bridge and in the engine room. Here I will present a team work in an emergency situation, a spillage, one of the most serious accidents on board the tankers. It can lead directly to a disaster, as it has happened with the world's largest oil spills. That incident would have occurred anywhere and it was not our fault. Telegraphically, a new terminal equipped with new valves."

"At 1205, when I was relieving the Greek Chief Officer from 6-hour duty, the cargo alarm was sounded on deck indicating to the cargo control room that there was an oil spillage."

The duty AB on deck sounded the cargo alarm to the cargo control room by VHF. The Second Officer, Capt. Panayotov (the narrator), was on watch. The Chief Officer was also there as at the moment of the incident he had just been relieved from watch.

Capt. Panayotov continues the story: "Looking through the skylight, we observed that the chiksan was getting disconnected from the ship and crude oil started to spill on the deck, of course, not to leak into the sea. A huge amount. Keep in mind that when a tanker is loaded, as was in this case, by a line with a rate of 3,000 cubic meters per hour, this makes 1 cubic meter per second; you can imagine what it means regarding spillage. Meanwhile, our ship was slightly listed to portside. We had been moored port side



alongside. Oil started spilling from the manifold as well, as the chiksan had already got disconnected. Actions in such a situation should be immediate, instantaneous:

First, I shouted to close the manifold.

Second, I ordered to turn on the pump to suck all the oil that would leak into the tray under the manifold.

And I had to correct the slight list - 0.3, 0.4 to portside – immediately, as if the oil passed over the portside stem it would spill straight into the sea. The Civil Liability Convention 176 says that even if one litre leaks overboard, you bear full financial and legal responsibility, regardless of the reasons, and regardless of whose fault it is. As the ship was being loaded, we had to deballast. In order to prevent the starboard list, we immediately closed the starboard ballast tanks and continued deballasting only from the portside tanks, so that the ship would lean to portside and the whole quantity of spilled oil to be spread on deck without spilling overboard. The stem was 22 cm.

Meanwhile, the Venezuelan inspector was on board the ship to have lunch. Seeing what was happening, he started asking in Spanish - what was the reason, why was the loading arm disconnected.

About 1225 hours the spilling was stopped and thanks to the starboard list the whole quantity was spread on deck. The ship's LOA was about 280 m. The whole area from the manifold to the superstructure (roughly somewhere about 90 m) was covered with crude oil. Under Murphy's Laws, so to speak, sometimes things happen beyond our control. The Filipino released the pump for pumping the oil very quickly, causing the air valve to burst. Therefore it could not suck up.

3.4. The dilemma

"It was not our fault. We found out that a pneumatic air valve had burst, which automatically required disconnecting of the loading arm to prevent the oil from spilling into the sea but rather leaking onto the deck, i.e. we had to take the necessary measures. If we took an immediate action, we would prevent the spill. If not, the situation would get very complicated, both legally and financially."

"... The prevention of oil spillage from a tanker is equal to prevention of collision or grounding by other types of ships. These are some of the most serious accidents that happen at sea, and this incident meant to us a disaster."

During the incident "... everyone was at lunch, and everyone had taken off their overalls and their safety shoes. The temperature was 42 degrees. It takes time to put on your safety shoes, and I told you what happened in 1 second. We were all extremely worried. It all happened instantly, within 4-5 minutes. There were serious consequences. However, this incident clearly showed good teamwork."

"The best case scenario for the ship and the company is to avoid paying claims. I will never forget this incident, my heart had sunk. There is no person who would not worry in such situation, but the conclusion I can make is that we did not panic. There was no panic. If there was any panic, it could lead to delayed reactions. Secondly, there were no insults or grievances that someone had caused it, and finally the whole crew, including the cook, came on deck."

"If the duty Able Body seaman had not checked if all Kingston valves were closed and sealed, the situation could have been a lot worse. If only one of them was left unsealed, the oil would spill into the sea, and there were about 25 on each side. If his colleague the Bosun, the Third officer or the Second officer (the



four crewmembers carrying out the inspection) had not inspected them afterwards, the incident would have been fatal."

3.5. The resolution

Cleaning of the spill on deck took more than 12 hours; the temperature was about 42°C. The full procedure was under the direct supervision of the Master. He personally participated in the cleaning and constantly made sure that there was no fatigue due to the high temperature. He ensured that everyone received the required amount of drinking water and after the critical first hours he distributed the crew into small groups to have dinner. He himself did not leave the deck before the completion of oil clearance.

Every crewmember was on deck. Only the chef, who joined on his own initiative, was released by the Master. He still had to prepare the dinner. Everyone else, including the stewards, worked on deck.

The Chief Engineer played a significant role in dealing with the consequences of the spillage. He made every crewmember from the engine room participate in the cleaning of the deck, repairing the damaged manifold pump, and transferring the spilled crude oil from the tray under the left manifold to the slop tanks. He supervised the operation of the portable pumps on both sides of the superstructure on the main deck pumping the crude oil into the slop tanks. He personally took part in the cleaning of the deck and managed the shifts in the engine room. He even preserved his sense of humour in that tense and awkward situation. This was keeping the crew in good spirits. Until 0300 he participated in the recovery of the loading operations. His actions were inspiring not only for the engine room crewmembers.

The Chief Officer also took part in cleaning the deck from the crude oil and washing it with chemicals.

"On the following morning the crewmembers were very impressed by his gratitude to the persons on duty on the deck, who had executed the plugging of the dozens of Kingston valves very strictly and accurately."

As is obvious from the case, the role of the ship's crew management level is very important for motivating all crewmembers to observe strictly the ship safety procedures in such situations.

The personal involvement and exemplary actions of the Master, the Chief Officer and the Chief Engineer in cleaning the deck had a positive effect on the responsibility of the whole crew and the serene working atmosphere despite the adverse weather conditions and the extreme tiredness.

"No crewmember requested a break until completion of the deck cleaning. This responsibility showed respect for the Master and the other officers' leadership skills not only in this particular situation but during the whole contract."

Preparatory Questions

- 1. Describe the key persons in the event? Who participates in the story?
- 2. What has happened suddenly? What was the actual situation?
- 3. Describe the reactions of the crewmembers in the incident.