

TOR HOYLAND began his watch at 0400

Was on standby, everything was normal, everything looked normal, he was there on his duty. At 0637, was a big explosion, he was walking around engine control a few minutes before that.

After the explosion he looked to his right and saw steam and smoke arising. One big explosion with some vibration. He called the chief engineer, he came very quickly, and he was in the control room making notes. He did not leave the room until the abandon ship signal.

The person he relieved, Mr. Kristenson, the second engineer did not indicate any problems. Everything was normal with him as well.

He would work in all engine rooms typically. During standby there is always one engineer in the boiler room and another someplace else.

No alarms before the explosion. No indication at all before the event. Nothing unusual heard before the event.

Typically his watch is turbine generators-5 of 6 were running at the time of the event. Turbine generator No. 12 was shut down at the time. It had been shut down for many days. It is not typically used. They use a diesel generator instead.

Fuel oil pressure on the burners was about 1 . something. Normal pressure range is 5.6 at full speed, while in port with light load, it would be 1 . something.

Normally 1<sup>st</sup> burner shut off is No. 1 or 5, but typically they take off the one with the highest number. The stoker and the oiler do this automatically. They generally keep turbines on with the load light and speed low.

After explosion he was there when they secured the boiler room.

He talks to people in engine room a lot, "all the time" finding out what's going on. Last time he talked to the people "down below" was when he talked to the 2<sup>nd</sup> engineer and 3<sup>rd</sup> engineer by phone. He, 3<sup>rd</sup> engineer answered his phone in the boiler room, just few minutes before the explosion. He was busy with ballast and other duties.

He must stay in control room the entire time. If he left, the other 2<sup>nd</sup> engineer had to be there.

Responsible to take care of all the instruments, and to recognize if there is something wrong, and to respond as quickly as possible. If so, he also tells guys what to do, but they also have same alarms as in the control. In control room one guy in control room, and one watchkeeping forward, one guy in boiler room, and one second engineer working around the whole area and one explosion. Three Filipino guys had been there many years. The others had been with the ship since November and the other about a year.

Mr. Hoyland has been on the ship since June 94. Two years ashore. Except for two years ashore in non-marine related stuff, from May 2000 to May 2002.

He was with this ship in November 2002, one contract on this ship a few years ago. First time on the Norway from Dec 98 to April 99.

Before much more people down there, now fewer. In 98-99 one guy in control room, a watchkeeper forward, one in boiler room, and a number of 2<sup>nd</sup> engineers, maybe 3 or 4. Much more to do. Nothing has been missed. No change in the number of abnormalities missed.

TRANSCRIPTION BEGINS HERE

BEGINNING AT 1448

Left off before break that fuel oil temperature was high. In the same conversation with the engineer he told him to check the temperature, which was about 140 C-there were no alarms.

Normal temperature is 130C.

This is a normal thing when they going from high to low load in the boiler, the temperature down below will change. The temperature is controlled down below by a couple of people-he cannot answer if it is manually controlled.

The status of the ballasting operation is that they had begun it. He does not remember the time they had begun it-but it is in the log book. The tanks that were to be deballasted (TAPE INSERTED) were half pick, 12-5, 12-6, 11-5, 11-6, 10-11, 10-12, 1-1, 1-2, and 4 pick? Normally start ballasting as soon as possible after they arrived. Normally would finish around noon.

2<sup>nd</sup> engineer went down to say goodbye and he went to get ready for immigration, a short time after he went up the explosion happened,

He talked by phone with the 3<sup>rd</sup> engineer.

Pressures and temperatures taken from the computer and not directly from the gauges. He had not entered the numbers in the log at the time of the accident. Checklists kept in the engine control room.

In response to high fuel/oil temperature, they have to make small adjustments to the fuel oil temperature.