JM – Bulk Carriers – Four Handy (Clyde)

Examiner: Keep

Exam time: 13:15 18/06/15

I arrived incredibly early because I knew the closer to going in the more nervous I was getting and I didn't want to crash my car trying to steer and thumb through a little blue book at the same time. It was super windy on the front and really nice if you like weather. I was totally terrified and spent ages before going in trying to read a book about space marines to take my mind off things, if you don't know it by that morning it's not going to go in the intervening hour or two before you start. Keep was very polite and took my passport and discharge book from me (It has been made clear by the examiners that you must have a passport with you, they don't like taking driving licenses as proof of ID). He asked me what I did before I came to the cadetship and what it was like working on Bulkies with full Filipino crew, after some light polite conversation he started, he seemed to follow the MGN69 page with a ruler and take his questions from there.

He asked me what kind of Lifeboats I had on my ships I told him 1 freefall

He asked me what piece of equipment is in a free fall that isn't in other lifeboats?

I wasn't sure and paused until he asked me what kind of GMDSS equipment was carried on the bridge?

I listed a few things and came to a SART and then it clicked and I said a SART is kept inside the freefall.

He asked how a SART worked?

I told him about the saw tooth pattern transmission that the SART gives off once it receives a signal from and X-band radar and that it shows up as 12 dots, arcs or circles on a radar screen.

He then asked me to draw what this looked like on a radar plotting sheet. I did.

He asked me how I might launch a freefall lifeboat?

Sound general alarm supplemented by PA announcement, check muster, ensure everyone is carrying out their roles, remove all immersion suits and lifejackets and stow them on the floor at entering, make sure everyone is strapped in, disconnect the battery and make sure no other lashings are attached to the lifeboat, start engine, give a warning, remove safety pin and release

He asked me how you would perform a simulation launch?

I went through a similar process except with fall preventers on and the deck plate lifted up so you can observe the hook disconnecting (without the boat actually going anywhere)

Next we covered firefighting equipment

He asked me what were the three components of a fire?

Oxygen, fuel and ignition

He asked me what parts of this ‘triangle’ were affected by different extinguishers?

I said CO2 removes the oxygen, dry powder remove the oxygen and foam removes heat and oxygen, water removes the heat – I don’t know if this was eloquently put across but he seemed happy about it

He said that I was on the bridge and walked around the outside to the battery room to find the electrician on the floor unconscious inside, what would my actions be?

I told him I would sound the alarm, make an assessment of the situation, being sure to make sure I was safe, that he could have been electrocuted and still be connected to a live wire, or that the space may be full of gas and either way it would be best no to try and rescue him immediately. Call the captain, go to muster, enter space with BA and protect ourselves from any electric shock, he stopped me there.

He asked me if I had heard of the Derbyshire?

I had I said it was a famous case of a Bulky sinking in 2 minutes

He asked if I knew where the vessel operated from?

I said it’s called the Derbyshire so It’s probably a UK flagged ship but that I wasn’t sure

He told me it was part of Bibby and operated out of Liverpool

He then asked me if I understood what happened with that vessel?

I told him the hatch to the bosun’s store was ripped free by heavy weather and then water started filling the bosuns store. This lead to the vessel’s nose going under which caused the ballast tanks to implode one after another in quick succession, there were no lifeboats launched and no GMDSS used.

He then asked me what kind of survey and conventions assess the watertight integrity of the vessel?

I said the Load line convention and survey.

He asked what kind of measures do we have for ensuring watertight integrity?

I said we do chalk tests, water tests and sonic tests, and that we had procedures for when the vessel is in heavy weather, I think he liked the first bit but didn’t like the procedures, he wanted something else.

He asked me what kind of Steering Gear I had on my ship and how did that work?

I said rotary vein, that hydraulic fluid was pumped in one side and sucked out of another and this pulled/ pushed the rudder round.

He asked me how we test the steering gear?

I went through the steps of the procedure, man in the steering flat, check the overall condition visually, ensure comms between bridge and SG room, switch to hand steering, check rudder

response and rudder angle indicator for all remote steering locations including emergency steering method, trip the pump to test for alarms, trip the steering stand to test for alarms.

He asked me what my last port was for disembarking and then after I told him Philadelphia, he drew a crude picture of the US coast down to florida then Iceland and then the UK. He asked why when flying to the UK I cross Iceland?

I said because the plane is flying great circle

He asked what is significant about this?

I told him it was that great circle acknowledges the fact we live on a sphere and hence the arc is in fact the shortest distance. I said on a gnomonic chart it would be a straight line

He asked me then what is the point of a Mercator chart?

I was stumped for what he was looking for a was quiet for a while, he drew some longitudinal lines on the chart and asked me to look at the angles the great circle and rhumb line he had drawn through the meridians and think what they show.

I was still stumped because I was nervous and I looked at it and said what I could see (talking your way through is far better than just blurting out guesses). I said the angles for the rhumb line were all uniform, he said yes and raised his eyebrows, eventually I said that the vessel only need steer one course with a rhumbline.

Next he gave me a series of buoy cards. Safe water mark, isolated danger, special mark and south cardinal

He asked me what sort of things special marks are used for?

I listed the things in CROFTS C acronym – cables outfalls, recreational, ODAS, firing area, TSS, Spoiling grounds, channels within channels.

He then said I was steering 089 and that I saw the South Cardinal ahead, what were my actions?

I said I would alter to starboard and pass it on my port side. He seemed to either not hear me right or hear port and get antsy so I clarified that the safe water is to the south of the cardinal mark and I would alter to starboard.

He asked me to recite Rule 6 – Safe Speed

I won't list what that is here, you should know it by heart.

He gave me a radar sheet with true trails on, relative vectors and a vessel on my starboard quarter overtaking with risk of collision.

He asked me to describe the radar set up, I did as above.

He asked me to describe what the other vessels were doing I said that on vessel was clear of me and on a reciprocal course and the other is approaching from overtaking angle and had a risk of collision

He asked how I knew it was overtaking and handed me a ruler.

I went to say because its more than two points abaft but then realised I hadn't actually checked that was true so I drew a bearing to the target and counted round 130 degrees then said it is definitely abaft my beam.

He told me it was clear weather and asked what I would do if the vessel didn't move and continued to approach on the ROC vector?

I said sound 5 short and flash 5, call master, put a man on the wheel and call engine room to inform we may be manoeuvring and changing speed.

He said that was good but what would I then do?

I said I would keep clear

He said how?

I said I could slow down

He said what else?

I stopped to think because I hadn't really rehearsed this exact scenario and I didn't want to make a mistake. Again it's better to talk through it than just blurt out an answer so I said I could alter either way to keep clear but if she is so close that I am calling the captain and on my starboard quarter and alteration to stbd might slow me down and put me into her so I said I would alter to port and parallel her course until she overhauls me.

He was happy with that though it took a while, I'm glad I stopped and thought.

He gave me some lights – CBD, sailing and trawling on the port bow – actions?

CBD I am stand on but with a change of responsibility so I should not impeded her passage. He asked If I could go to port and I said I wouldn't because if the CBD decided she had room she may alter to her stbd causing a collision

Sailing I sound 2 short and alter to port

Fishing I sound 2 short and alter to port

He gave me a tow seen from astern – yellow light and two white (one being the stern of the towed vessel) he said it was on my starboard bow and asked my actions.

I said I would take a series of compass bearing to ascertain if risk of collision exists and use all available means in the prevailing circumstances.

He told me the bearing was steady and approaching.

I said I would sound 1 short and alter to starboard monitoring until past and clear that I was at a safe distance.

He seemed happy and told me I had passed.

I exhaled audibly and said ‘thank you’, then when he said ‘it’s quite alright’ I reiterated ‘no really thank you so much’, he needed to know that I was massively relieved. I put in a lot of hard work and spent every day with my housemates reading, making revision notes, and talking through questions, but there was still more I could have done to make it easier on myself, Learning the Rules at sea helped but I should have made concrete notes I could properly revise from after each of the Orals lessons to consolidate what we learned and needed to know from those topic areas. Instead I was going back over those notes and writing them up later on. An organised plan of attack will make the nebulous sprawling mess of knowledge you need to take on board seem less daunting.