Candidate – EB - Carnival UK Examiner – Hilliard Date/Time – 5<sup>st</sup> December 2015 Result – Pass

I travelled down the evening before the exam and stayed in the Liverpool North Premier Inn as my exam was at 09:15 in the morning. It's got a good Beefeater restaurant attached and the evening meal and Breakfast wasn't half bad so I would recommend it as a stop off if you want to stay the evening before. I arrived at the examination center at around 09:05 and waited in the waiting room where Capt. Hilliard greeted me and said he was conducting my exam.

Once in the exam room he took my Passport and Discharge Book off me and noted the relevant details he needed from them. He then took my TRB, Nav. and Ops. Workbooks and thoroughly went through them picking off questions as he went along for about 15-20 minutes. Most of this time however was silence and even though it was a little tense it did give me time to collect my thoughts.

# Questions

With reference to your first ship, tell me about the fire fighting systems onboard and what they protected

 I spoke about CO2 (especially about the galley arrangements as I was on Pax. Vessels), Hi Fog and Sprinkler systems and threw in the odd SOLAS and FSS code requirement, then he moved me on

He opened a report I had done about Lifeboats and asked if my company had changed the hooks or not

 Told him about MGN 540 regarding fall preventer devices and how the ships had all gone through dry dock and had had the hooks replaced to be compliant with that requirement, he seemed happy

Now asked me about the alarms that you may get on an ECDIS

 I mentioned Cross Track alarms, Safety Contours, GPS failure on the ECDIS, RADAR overlay feed fails you get an alarm. He then started asking me why the RADAR would be fed to the ECDIS and I told him about the Overlay function you can use.

He asked me what the difference between an alarm and an alert is on an ECDIS

 This one threw me a little bit, I was honest that I wasn't sure and said an alarm was when you get a visual and audible signal and an alert was just flashing text (was a guess referencing knowledge of the NACOS 5 ECDIS system). He did however move on once I had finished

He then asked what would happen to the ECDIS if the GPS feed failed

- Said it would go into a DR mode taking the last known course and speed (if speed wasn't from an independent source to the GPS) he moved on

Asked what bits of bridge kit does the GPS feed into

Told him RADAR, ECDIS, GMDSS receivers, missed AIS simply due to nerves.
However, after a brief awkward silence I clocked him write AIS on his sheet of
paper and circle it. I left it a moment and after his next question said 'Ah its
AIS as well that GPS feeds to'. He then looked at me, looked at his sheet, and
moved the smartie black board to cover more of the sheet he was making
notes on....

Asked how I would fix the position of the ship using anything other than GPS in this situation

Told him about X band being better due to target discrimination, wavelength
of X Band, EBLs, Pls, Reference targets on a RADAR, using the chart underlay
on the RADAR, Celestial, Visual. He moved on

Now told me I was in the Singapore straits, how would I set up the ARPA?

- Told him low CPA, TCPA alarms, ensure the RADAR is sea stabilized. He moved on

Now he asked how would I set the Gain

Told him what it was (Amplifies the received signal) and that I'm looking for good target detection on the display, avoiding too much clutter coming back from the sea if you set it too high or if it was raining etc. He wanted more so I continued to talk about setting the Sea/Rain clutter properly and said that if it was flat calm go to a low range and use any reflected echoes in the immediate vicinity of the vessel he seemed happy and moved me on

Now he said the helmsman says the rudder goes hard to starboard and stays there, action?

 Said I would switch over to my secondary steering pump as on my ships we always kept one there for use

What does the pump do?

- Told him about Rotary Vane steering gear and how it works

What is Emergency Steering?

 Told him about the steering methods down in the steering flats that I had on my last vessel (NFU push buttons and emergency Tiller on the gear itself)

He then asked the difference between Emergency Steering and Auxilliary Steering

- This one threw me a bit as I was not sure at all about the answer to this so he moved on

He then said to me the Gyro has failed and you need to steer the ship by magnetic compass, action?

 Told him I would acquire the latest Variation and Deviation for the ships heading

He asked where would you find the deviation and when is it calculated?

 Told him on the deviation card and that it is calculated during construction of the vessel and on the sea trials and he moved on

# Approaching TRS, what are the signs?

- High sea temp, long low swell, high winds, high humidity, 3Hpa drop in pressure if you are around one, 5Hpa drop if you are in the immediate vicinity of one, he was happy at this and moved on. He asked which direction the wind would move if in the northern hemisphere so I said it would back as the wind rotates anticlockwise around a TRS in the North, this was a stab in the dark but he moved on so I assume he agreed.

Which Semi-Circle of a TRS does the ship need to be in to be safer?

- The Navigable Semi-Circle

# What is the Dangerous Semi-Circle?

Told him by drawing in the air how a TRS in the Northern Hemisphere would back on itself and the side in which it was on, also said it was where the highest winds are. This is about all I could remember so he gave me a drawing of a TRS (no labels) and asked me to name some parts to check my understanding. I told him the 2 semi circles and he was happy at just this and moved on

How would you know you were in the dangerous Semi-Circle?

- I said to him that I knew he was getting at the way in which the wind would change direction with reference to the vessel and said I would have to reference The Mariners Handbook and a report I had written in order to tell him the answer to this confidently. He was fine with this so moved on

Onto GMDSS...

NAVTEX, what are the 4 things you cannot not receive on NAVTEX

- Told him the data for the letters A,B,D and L

Then asks what the above letters meant

- I told him SAR, MET warnings, Nav Warnings and I could not remember the other, told him this and he moved on regardless

He asked what is contained in the GMDSS log book?

 Operators, Masters Signature, Instructions for how to do the tests, Received calls etc. So what is recorded each day in the GMDSS log?

 Other than the daily GMDSS checks which I explained to him I did not know anything else, he was wanting something else but still even now I don't know what he was getting at, I would note it here if I did

He then asked me how I would maintain and replenish a Dry Powder extinguisher?

Told him ours of this type were done ashore but if I was to do it put in the appropriate amount of powder, correct pressure and safety tag in place, screw the top on tightly once finished and then recheck the pressure once the process is complete. I also mentioned the PPE I would wear (dust mask, goggles). He seemed happy and moved onto checking through my TRB tasks. He didn't say anything and after about 5 minutes handed it back to me and moved onto his next question

He asked me what the difference was between a watertight and weather-tight door?

- Told him a watertight door is what it says on the tin, that being that they are indeed 'watertight'. Whereas a weather-tight door only stops the movement of water before it would eventually give way as they are not fully watertight. He seemed happy with this response and moved on

### Classes of Watertight door?

- I told him I had been trained onboard with A, B and C classes of WTD. These being:
- A Can leave them open
- B only open if there is continuous worker occupancy in an adjacent space
- C Kept closed
- I did however mention that COSWP 2015 has implemented A, B, C and now a D class WTD. As I could not remember at the time what a D class was (and still can't now as I write this) I said that my Company's ships are now implementing the training to make crew members aware of the new class of WTD. He was happy at this and moved on (bullet dodged)

He now gave me a model of a ship and told me turn it short round

- I asked him what propeller I had and he gave a fixed right hand turning propeller.
- What followed was an explanation to turn short round (Kudos to Captain Mac. for this at Fleetwood) which he was happy with but he asked me to do it again but telling him what Revolutions I would set on the engines as he had not quite heard me the first time I said it apparently
- I did as he asked but he questioned the fact that I said put the engines to full ahead for a short burst to get the momentum going for the vessel as we were only going dead slow ahead for the situation he gave me. I just said in order to get a flow of water over the rudders to get more steerage but the amount of revs. I applied would change with the prevailing circumstances and

conditions (currents, how constricted are the waters we are in etc.), at this he point he moved on.

#### **ROR**

At this point I was told to put the ships model down that I was holding and to stop moving it about as this was annoying him. Once the ship had regained control and was on a steady heading, he put a vessel on my port side, 4 points to port on the smartie board. It was a vessel towing, towing vessel was less than 50m, tow was less than 200m viewed from the starboard side.

- I explained what it was, told him it was a PDV, therefore this was a crossing situation. I then explained rule 15 and told him I was the stand on vessel and would now comply with rule 17 as well as 15. He was happy and moved on

Next situation was the smartie board again except this time displayed was the sidelights plus one masthead and he put it ahead of my model ship.

 I told him what the vessel was, I explained rule 14 to him (head on), explained my action under that (Bold to starboard, quoted the rule 8 bit regarding alterations etc.) and told him the sound signal I would sound for this (also supplement with the maneuvering light)

He then gave me the light magnets and said the vessel now goes NUC, what would she show?

 I took off the Masthead light and replaced it with two all round red lights in a vertical line where they can best be seen and said that once I stopped making way I would then take off the sidelights. He was happy with this and moved on

He now got off his seat, got out a chart and put it in front of me. It was a chart covering the Dover Strait. He took my model vessel and put me in the lane heading down to the South West. He then placed a PDV, 10m in length on my Starboard Bow (smaller ship model) and asked me what my actions would be, stating that a risk of collision existed

 Quoted the bit of rule 10 regarding PDV less than 20m not impeding the passage of another PDV. Sound 5 Short blasts/flashes on Man. Light and inform the master. He was happy and moved on

Placed me as a crossing vessel over the TSS (outskirts of the lane heading NE) and put a CBD on my port side 4 points to port, action?

Told him about rule 10 not relieving me of any duty under any other rule, mentioned responsibilities of my vessel under rule 18, mentioned rule 3 definition of a CBD, this lead me onto explaining that rule 15 also applied in part here too however as she is CBD I am going to have to do something instead of stand on. Mentioned rule 17 to say about avoiding going to port for a vessel on my own port side in a crossing situation. Action to take was either bold alteration of course to starboard and go with the general

direction of traffic flow, slow down and then come to port and continue to cross the TSS once she is passed me on my port side. Or could slow down and pass ahead.

He now gets out a RADAR plot with at least ten vessels on plus a RACON, tells me its relative vectors on all of them and to explain what each ship is doing, giving course and speed where appropriate.

- This question isn't actually that bad, my only advice is to take your time and don't say anything stupid that could lose you the stamp on your NOE!!
- There was only one that had a risk of collision and it was crossing from port to starboard and it was heading NE'ly.
- I was overtaking it under rule 19 so quoted the bit that applied told him I would go to Port as they would go to Starboard (not altering towards a vessel abeam of abaft the beam) this way would move away from each other. He was happy and moved on
- Only thing to note is the RACON relative vector did not match my heading marker, said to him its because you have got it sea Stabilized and he nodded for the first time in the entire exam and moved me on

#### Buoyage

Preferred Channel to Port region A

All the Cardinal Marks with a little ship with a north marker, told me to drive around them as I would in real life

After this he said I had passed

Big thanks to all the lecturers that have helped along the way, especially Mr Ward for organizing everything and putting on the extra sessions here and there.

Best of Luck for everyone one else going up for this exam ©

(Just a note the exam time was around 1hr 15mins)