

CD

EOOW Oral Exam: 06/11/2014, 1315.

Location: Liverpool

Examiner: P. Lewis

Duration: Approx. 60 mins (50min questions, 5min chat at the beginning and end).

Result: Pass.

The examiner sat me down and immediately took my TRB and Evidence folder off me and said that he would be looking through these throughout the exam. He then asked me for my passport and discharge book and confirmed with me that I was British and that I had worked for the RFA throughout my cadetship. He then asked me about my vessels, variances in propulsion etc.

He then started talking about the FD course at Fleetwood as it was still in its infancy, he also asked if whether myself and any of my classmates had planned to carry on studying to get a full B.ENG (Hons). This all took about 5 mins.

He then held up MGN 69 and explained that he would be following it but he will be asking question based on my taskbook.

These questions are not necessarily in the correct order and he liked to ask questions on top of questions to gauge the level of technical knowledge after the safety side had been covered.

1. He started off by asking me to write down every step I would take to obtain a Permit-to-Work for an enclosed space entry for a fuel tank whilst he started to look through my taskbook. He was obviously looking for a very detailed answer including why every step must be taken as he spent around 5 mins looking through my TRB thoroughly.
2. He then wanted to know about the atmosphere within a fuel tank, Gas contents, explosive limits etc.
3. What type of atmosphere would I expect within a STP?
4. Rounds – Started me off in the shaft tunnel, what would I be looking for
5. What is a stern tube?
6. How is it lubricated?
7. How would I know if there was bearing damage?
8. What keeps the sea water out?
9. What type of seals does a stern tube arrangement have?
10. Explain how the seals work?
11. What is a lip seal? How does it work? Draw it.
12. How is the stern tube system designed to assist in keeping sea water out if the aft seal is damaged?
13. Carry on with rounds after the shaft tunnel.
14. What would you check on an air compressor?
15. Why would an air compressor J.C.W be high?

16. What type of coolers are there?
17. What is a plate cooler made from?
18. What is a shell & tube cooler made from?
19. Bilge pumping.
20. How to pump water overboard from the bilge holding tank? (OWS)
21. Describe the procedure for operating the OWS.
22. Limitations?
23. ORB, what is it? What needs to be entered in it?
24. How to check that the OWS is working correctly?
25. Special areas?
26. Differences between 2 & 4 stroke engines?
27. Why does a 2 stroke have two different types of L.O?
28. Why is there different L.O's used on 2 & 4 stroke engines?
29. Where can a hotspot occur?
30. What to do if the OMD alarms?
31. Steering gear checks during STBY?
32. How are the two pump motors supplied?
33. Why are they fed from different sources?
34. What type of protection is there on the steering gear pump motors? (none)
35. Emergency steering control?
36. Safety Officer on board?
37. What should I do if I had an issue on board regarding safety?
38. Who else on board other than the safety officer could I speak to?
39. What if nothing gets done, is there a safety committee on board?
40. Who has access to the outcomes of the safety meetings? How is this info circulated to the crew members?
41. Is there anyone ashore that you could speak to regarding safety?
42. Who is your DPA?
43. Asked me about being on a H.V ship, differences?
44. Explain the switchboard arrangements you had on board?
45. Shown me my switchboard layout from my taskbook, what does this symbol mean?
(transformer)
46. How does a transformer work?
47. Is there an equation to describe how a transformer works? (he was after turns ratio)
48. Why does the transformer need power to work?
49. Explain Reactive, apparent and true power?
50. Explain the relationship between them?
51. What do we mean by power factor?
52. What is the equation for power factor?

53. What can affect your stability?
54. What is free surface affect?
55. What does it do to the stability?
56. Explain what you mean about the "Actual loss of GZ and a virtual loss of GM"?
57. What is GZ?
58. What is GM?
59. Draw and explain a diagram showing this occurs? (Standard stability diagram with vessel listed over).

This is not all of the questions but is all I can remember at the moment. He didn't actually ask as many questions as I had expected him to and he seemed to be asking questions regarding the reports and diagrams from my taskbook rather than following MGN 69 as he said he would be. Therefore I would advise anyone who is currently at sea to put as much effort into your taskbook as you can and for anyone currently ashore who is revising for your oral exam you should try and learn your reports and diagrams as best you can. (However some examiners do not even look at your TRB etc.!!)

And final good luck to anyone sitting their orals!