Masters Orals Examination
Questions and Answers As Supplied
By Australian Maritime College
Students from 2005 to 2007

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University of Tasmania Library, November 2012
What certificates are you required to carry by law?

How often does a DOC have an intermediate verification? (it only has annual verifications)

Is it a requirement to carry one?

What document accompanies the load line certificate?

What is a load line for?

What factors are considered when it is assigned?

What types of ships are there for the purposes of loadline?

What will a surveyor be inspecting for a load line survey?

What will be look for in the ER?

In an ER above DB tanks why are the tank sounding pipes fitted with self closing cocks?

How do you ascertain risk of collision?

Can you obtain a compass brg, to ascertain if risk of collision exists, by using a gyro stabilized / north up radar?

Would you still take a bearing from the bridge wing gyro repeater?

Why?

Capt Fitzpatrick clearly states before starting col regs “if risk of collision could exist you should assume that it does exist and take appropriate action. If risk of collision can not exist then it does not exist. Have you heard and understood this?

Col Regs as per attached sheets.

Flip cards for day shapes as follows:

Vessel at anchor
What sound signal in restricted visibility?

Fishing vessel at anchor with gear extending >150m
Can it be at anchor?
What sound signal in restricted visability?

Constrained by draft
What does COD mean?

NUC

Who gives way between COD & NUC?

What action will the COD take?
What buoyage system exists in Australia?

Flip cards for every buoy that exists / what is it? / what side do you pass?

While showing starboard mark / what type of light does it show? / can it be fixed?

Scenario
At 2200, while the 2nd mate is OOW, you are awoken by a huge crashing noise. On reaching the bridge you see this (model of container ship hit midships by the bow of your own ship “T”)

What do you do?

Other vessel transmits Mayday.
What is your legal obligation?

How do you get the survivors off the other ship?
Would you consider taking survivors over the bow?

Now they have launched the life boat what do you?

You now have the survivors aboard.
What are your legal obligations?

Do you have an obligation to report Derelicts?

The damage to your ship is confined to fwd of the collision bulkhead, the forepeak is flooded, but you are operational in all other respects.
Would you seek a port of refuge?

A vessel is coming to your assistance as a result of your initial urgency message.
What are your instructions to them now?

What would you do to the collision bulkhead prior to departure?

Where would you shore up a V shaped collision bulkhead?
(At the centre of pressure ½ height NOT centre of area at 2/3 height)

PASS 1st attempt / duration 50 mins

Captain Fitzpatrick was polite, and fair. But stern.

My col regs were 100%

BUT in other questions:
On several occasions I did not give the full and complete answer first up.
On one occasion I said nothing.
On one occasion I said I do not know.
On one occasion I was wrong.

But most importantly, I believe, at NO time did I say anything, unseamanlike.
It would be a serious mistake to guess any answer.

Your worst enemy in these orals is your own level of stress; it can be very difficult to bring to your mind even things you know well. Perhaps this is why we have to do them?

These notes are very close to all that was asked and in about the correct order.
Action?
Non-C常识 / Action?
Non-C常识 / Action?
How do you know when to A/C?

4 PTE ITB NOW
What action should they take?

6
Action?
Can you A/C to ITB?

6
What is ITB?
Dead Ahead

Action?
How do you determine targets HOG?

6 PTE 5TH BOS

4 PTE 5TH NOW

What is ITB?
What is significant about non-displacement U/L?

Wind is on your stern quarter / Action?
Are you sure you would cross their bows? Why?
ACTION?

NOW CLOSER? ACTION?

NOW CLOSER? ACTION?

WHAT ACTION SHOULD THEY TAKE?

Why?

DEAD ASTERN

ACTION?

WHAT IS IT?

ACTION?

6 4TS 578 40X1

DEAD AHEAD
ANCHORING AND ANCHOR HANDLING

FP As master, preparations for going to anchor for 10 days, after 10 days at sea. Which anchor will you use?
How would you select you anchorage position, which publication would you refer to?
What is the best anchoring ground? What about coral sea bed?
(Anchoring with model + wind + tide + gale etc)

FP How will you hang off your anchor and where? From where will you send the cable? (Anchor to be hanged off in the hawse pipe (does not want Duntal’s method), pass the cable through the forward centre lead, position ship close to buoy, stemming the wind, pass slip wire to barge to pass the eye of the buoy, maintain position by using engines. Pass anchor cable, once cable is fast to buoy, slack slip wire and veer cable to required length, DO NOT remove the slip wire)

FP How would you let go anchor in an emergency? (Knock off the bitter end)

FP The only manoeuvre that you will be expected to be able to do (as Master) is anchoring. After a long sea passage, how would you prepare for anchorage?
What determines an anchors holding power?
Tell me about different types of bottoms.
You are to anchor to an open moor in a depth of 35 fathoms, poor holding ground.
Situations - Open more, change of tide during open moor, dragging anchor.

FP Running moor, wind on port beam F4, tide astern, what action?
What standing orders would you leave for the bridge watch?
Would you permit the chief engineer to disable the engines? (No) Why?
Tide changes through 180°, how will you maintain your position when the tide changes? (Use engines and rudder) Why? (to prevent a foul in the hawse ensuring that the vessel stays in the clean arc of swing)

FP Proceeding to a port for anchorage, what precautions and publications would you consider? (Chart, depth of water, type of bottom, sailing directions, prove engines astern(!))
How would you calculate the cable length? (28 * SQRT(d)) or 6 * depth under
Wind is now F8, anchor is dragging, what do you do?

FP Preps for anchoring?
What determines good or bad holding ground?
How much cable will you use?
Running moor.
What instructions will you leave for your officers?
While at anchor, tide changes what action?

SHIPS BUSINESS & LAW

AX What do you understand by BRM?

C How do international conventions (incl. IMO conventions) become part of National Law?
Under what act are Marine Orders made?
Under what act is AMSA constituted?
What are the main functions of AMSA?

C Under UNCLOS III, what are (or illustrate) the maritime zones of jurisdiction?
What are the rights of the coastal state in respect to each zone?
What is innocent passage?
When does passage cease to be innocent?
Describe the right of hot pursuit?

C What are the different types of charter parties?
What are the main clauses (or terms, provisions) in each type of charter party?
What is the difference between a demise charter and a bareboat charter?
What is the difference between a port charter party and a berth charter party?
What is a safe port? A safe berth?
What is an “arrived ship”?
What are the requirements for a valid notice of readiness to load (or discharge)?
What is laytime?
What is the meaning of “working day”? “Weather working days”? “Running days”?
What is demurrage?
What is the meaning of “Once on demurrage, always on demurrage”?
What is despatch?

C What are the functions of a Bill of Lading?
What is a clean B/L?
What is a claused (unclean or dirty) B/L?
What consequence might flow if a master improperly issues a clean B/L (e.g. Under pressure from a shipper)?
What consequence might flow if cargo delivered without production of an original B/L? What is a letter of indemnity in this context?

C What are the fundamental obligations imposed by law on the carrier?
What are the common law defences?
What are the carrier’s obligations under the Hague-Visby Rules with respect to the safe carriage of cargo?
Seaworthiness? Deviation?
What is the test of Seaworthiness?
Give examples of un-seaworthiness?
What are the Hamburg Rules?
What are the carrier’s obligations under the Hamburg Rules with respect to the above?
What are the limits of liability under a) Hague-Visby Rules and b) Hamburg Rules?
What is a waybill?
In summary, what amendments have recently been made Australia’s COGSA?

C What are the requirements (elements, prerequisites) for salvage?
What sort of things are taken into consideration by an arbitrator (or court) in determining the amount (or quantum) of salvage reward?
When do salvage services cease?
What are the main provisions of the International Convention on Salvage?
What is LOF 95? What are the main terms?
What is the difference between salvage and towage?
In what circumstance can towage become salvage?
What are the requirements for General Average?
What is the difference between Particular Average and General Average?

C Where will you find the Collision Regulations?
What legal principles apply to liability in a collision?
What is the principle of vicarious liability?

C What is the role of the Master and the Pilot on board?
What is the liability of the Master and Pilot in the event of a causality?

C What is an action in personam? In Rem?
What is a maritime Lien?
In respect of what claims might be arrested?

C What is MARPOL 73/78?
Describe the Annexes?
What Australian legislation gives effect to MARPOL 73/78?

C What risks are covered by a) Hull insurance b) P&I insurance?

FN What actions are required by a vessel which loses 35 containers overboard?

FP Explain Note of Protest and Extended Note of Protest.

FP An engineer has gone ashore seriously injured, charterers are insisting that you sail, action? (don’t forget safe manning regulations)

FP What do you know of MARPOL 1? (Vessels over 400gt must have IOPP, ODME1, oily water separating equipment and filtering system. Condition of overboard discharge – none in special areas, vessel en route, not less than 12nm from nearest land, ODME in operation, Oil Record Log Book must be kept)

FP What is the attached/supplement to IOPP?
Where can you discharge oil?
Can you discharge in port? (depends on port authority)
What and where are the special areas? (where water does not flow – Black, Baltic, Red, Persian, Gulf, Mediterranean Sea, plus sensitive areas – Reef + ?)

FP Under what legislation does it come under in Australia?
MARPOL annexes.

MA What do you understand by the term ‘seaworthy’ as per the Navigation Act 1912?
Where in the Nav Act would you find seaworthy?
As a Master, how would you determine that the ship’s hull is in a fit state?
What are the safety equipment’s???

MA What is seaworthiness? (Vessel must be in fit condition as to hull, machinery, boilers, cargo stowage and ballast, number and certification of crew and officers)

MA In a collision, what is your obligation to the other vessel?

1 Overboard Discharge Monitoring Equipment.
If the master of the other vessel requests a tow, what do you do?
When does your obligation in this situation cease to exist?
MA Salvage, can the ships crew claim reward?
MA If owner says to tow and charterer says No, what is your obligation?
MA STCW conventions – night orders, pilot and other?
MO Fire in #2 hatch, fire is put out, how is damage to cargo covered? (Cargo damage by fire – Particular average, cargo damaged by water – General average, cargo damaged by fire and water – a % of both)
Who will calculate average? (Average adjusters)
MO What is demurrage? Lay days?
WT As per charter party, you are loading 20,000t of coal, charterers then inform that they can only load 19,000t now, what precautions/action should you take? (check clauses in the bill of lading. Write the exact amount loaded on bill of lading before sailing)
WT When towing another vessel, how do you protect your owner on salvage claims? (LOF, and when you engage a tug, make sure that the tug doesn’t claim salvage as well)
WT What clauses in charter party (hint – title of contracting parties, name of vessel, warranty of seaworthiness and evidence, description of vessel, loading and discharge ports (voy C/P), date of delivery and redelivery (time C/P), cargo to be carried (Voy C/P), radius of trading (time C/P), remuneration (voy), hire clause (time), lay days and how to count (voy), days of demurrage and despatch and the rate (voy), brokerage clause, lien, act of god, exemption from liability, average, arbitration, sub-letting, deviation and salvage, bunkers o/b, etc – just keep going until he tells you to stop)
WT How do you understand the York-Antwerp rules? (hint – the principle of GA it to make good the loss of a person whose property is sacrificed for the general benefit of everyone in a maritime venture. This principle was practiced by the early maritime communities with diversities, complications etc. in GA adjustment. Therefore, to establish a uniform set of rules governing GA, shipowners, underwriters, merchants and average adjusters collaborated and produced what is today known as ‘York-Antwerp Rules’. Originally drawn up in 1860 and known then as Glasgow Resolutions and followed by what was call the York Rules. Modifications to the York Rules was approved in Antwerp in 1877 and the rules became the York-Antwerp Rules, it has since undergone many more modifications and amendments in response to various changing circumstances in the shipping trade. In countries, it is given statutory force by legislation, enactment’s and in some as contractual terms in charter parties. The most recent amendment took place in Sydney in 1994.)
WT General average and particular average? (Particular Average means loss which is personal loss to the cargo owner eg. Accidental loss of cargo in heavy weather. Here the ship owners valid defense under the contract is ‘Peril of the Sea’. Grounding will count as Particular Average. Attempt by Master to refloat using vessel’s own motive power with possible further damage to vessel, deliberate jettisoning of cargo, further expenditure (eg. Towage, repairs etc will count as General Average) Don’t forget to give examples)
WT Official Logbook – what do you know?
Part 2. Load lines and deck lines; Health – restricted drugs; inspections – provisions of water, hospital accommodation (passengers), radio equipment; collision, boat and fire drills, watertight doors, valve and scuttles; distress, urgency signals; dangers to navigation, accidents or damage; stow aways.
Part 3. Change of command, report of seaman’s character, breaches of discipline, reductions and remission of fines, disrating and promotions, misconduct on the part of an officer, desertion, ??
WT Laydays and demurrage, which is greater? What are they?
Calculation of lay days – 1. Working days, days for loading/ discharge when the weather permits, lay days cease to count owing to bad weather. 2. Running days, consecutive days, counting all days Saturday, Sunday, holidays etc. 3. Working days, hours permitted for working cargo as per particular ports regulations.
WT What is Despatch money, dead freight, light dues? (dead freight is damages for space booked but not utilised, despatch money is what is due charterer (voy C/P) for completing cargo operations before the lay days expire, light dues is contribution made to the light house authority in support of the maintenance of aids to navigation)
WT Bill of lading, what is it?
WT What is vessel deemed ready to load/ discharge? General knowledge on charter parties, how to calculate lay time, despatch etc.
WT What do you understand by BRM? (Good situ awareness, obtain relevant info early, common mental models of the situation, challenge and response communication style etc)

2 Lloyd’s Open Form
3 This is not necessarily correct at time of typing
CARGO HANDLING, CARE & SAFETY

AX When would you refuse to load a container & under what condition would you load or be compelled to load?

FN Ventilation of paper between Canada and Melbourne in November.

FN Knowledge of grain form, volumetric heeling moments (and their units), the grain stability data, and the calculation of the vessel’s stability from the GZ curve.

FN Loading grain for a 2 port discharge.

Somebody in the office divided the vessel’s cubic capacity by the stowage factor and assumes that you can carry that tonnage. What do you tell him?

FN What is the difference of trimmed and untrimmed grain holds?

FP How was the pre-slung packaged timber from your last ship loaded? (loaded in a block solid stow in the holds and on deck, without broken space, otherwise chocking with square wood or wedges + laying of dunnage in a all tiers of loading.)

FP While carrying timber, what are your precautions? (As soon as loading is finished and hatches are closed, start ventilation immediately to remove any moisture from cargo as most cargo I have loaded is only stored in open shed and non kiln dried cargoes release moisture and can deplete oxygen in the cargo holds and hold passageway. Check cargo hold dew point everyday and compare from outside, if inside DP is higher than outside, then ventilation should be started immediately until it is below outside DP. Record hold dry/wet temperatures and any action carried out like opening/ closing of ventilation flaps, weather, and any sign of mould on cargo.)

FP What are your precautions for loading steel, what sort of steel products you are loading and how are they secured? (All normal hold cleaning + test bilges and integrity of hatch covers (chalk test, hose test, light test and on previous vessel had electronic sensor testing). Preparations, laying of double dunnage and lashing wires, cargo consisted of wire rods, steel pipes, cold steel rolls, angular beams and steel sheets. Dunnage is laid in every tier of loading then lashing them together to form a single solid block. Also building of shores and wedge in between broken spaces. Wire rods and cold steel rolls are lashed by strapping with specially designed pneumatic equipment like a banding machine with cargo forming like a triangle and strap together, also wedges on each side – see Thomas Stowage)

FP Is there a non-return valve in the cargo bilge? (Yes)

FP How do you test your cargo bilge suction and valve? (By injecting water through the sounding pipe or directly into bilge well and pump out. If it is emptied, suction is satisfactory and Non return v/v is OK. Also while observing the suction you can hear up and down movement of NRv/v as it empties bilge well due to the air vacuum on the pipeline.)

FP What is a Chemical tanker type 1, 2 or 3? Which documents govern this? (IBC code)

FP What are the procedures for loading chemicals including any special requirements and arrangements?

FP Bulk carrier loading – the works.

FP Grain loading – the works. (documentation, hatch prep, stability aspects and criteria).

FP Timber load lines, where are they located, why are the assigned? (mention reserve buoyancy)

FP You have full load of timber, heavy weather and vessel list 10° starboard – action?

FP What is stowage factor?

FP What is angle of repose?

FP What is moisture content?

FP What is TML (transportable moisture limit)?

FP Will you check for moisture content in coal? Why?

FP How will you load grain?

FP What is a CSC plate? (Marine Orders pt 44)

FP What info do you get from the plate?

FP What is the wracking test load and what does it mean? (draw and show)

FP What happen when a container is wracked?

FP What is ACEP? (Mentioned in MO44) What is continuous examination program?

FP What are convention containers and non-convention containers?

FP Will you load a container without a CSC plate?

FP What is the next due date of test? (every 30 months)

FP What is category A coal? (No previous history of methane emissions or liable to spontaneous combust)

FP What do you do when a coal cargo heats up? (Send PAN PN, consider port of refuge, seek expert advice, boundary cooling of deck and hatch cover, ready boats, shut vents)

FP How would you know if coal were heating up? (Take temperatures at 3 levels F & A daily)

FP Would you release CO2 if your vessel had this facility? (Yes, and proceed to port of refuge to full up CO2 bottles that were used)
**How much CO2 for each hold?** *(Common question this)*
You have released the CO2, what would you do say, 30 minutes later? *(monitor temps)*
Does CO2 cool the coal? *(No, also reduces the O2 content)*

**FP** Iron Ore, how would you load? *(normally alternate hatches)*
Why, how would you know which holds to are strengthened? Where would you find this information?
What are the effects on the vessel? Explain GM.

**FP** Loading grain, what are your preparations? *(Very thorough hold cleaning, checked for no residue of previous cargo – sides, stringer pockets and brackets. Scrape loose rust scale, check for any sign of infestations. If there is, spray with insecticide or approved smoke bomb. Test bilge suction then wrap with hurlap. Isolate electrical connections in hold and test hatch cover integrity)*

**FP** As Master when loading grain, would you sail if you have slack hatches? *(YES, as long as you meet IMO criteria after filling out GA form. Mention also ‘Document of Authorisation’)*

**FP** Can you load grain without a Document of Authorisation? *(In Australia, Canada, US and European countries – NO, in some small ports YES as long as IMO criteria are met)*

**FP** What are the IMO criteria for loading Grain?

**FP** What is your primary concern while loading of grain cargo? *(Proper trimming of cargo in all stages of loading to avoid the danger of cargo shifting) Now you are on passage with grain cargo, after 15 days at sea you develop a 3rd list – Action? *(Investigate the cause of the list, whether there is any ballast movement by 1/Mate, sound the tanks including FWIs and ask CE which side is the FO cons. Provided I have adequate stability, I will bring the vessel upright by ballasting the high side) What if you are on the angle of Loll, are you going to ballast the high tank? *(NO, I will ballast the lower side first, check that vessel has adequate stability taking into account FSE then ballast high side to bring vessel upright)*

**WT** Loading copper ore concentrate – what do you know about this? *(read Safe Practice for Solid Bulk Cargoes – remember liquefaction, moisture content, transportable moisture limit)*

**WT** Containers – different markings on containers, if DG how many labels. What is on the CSC plate and what does ACEP stand for?

**WT** Loading wheat – what do you do, what care during carriage is required?

**WT** Loading general cargo – wants to here words like “will not overstay” and will not load such cargoes as raw hide with tea etc.

**WT** What is contained on container packaging certificate? Who signs for it?

### COMPASS COMPENSATION & CONSIDERATIONS

<table>
<thead>
<tr>
<th>Question</th>
<th>Details</th>
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<tbody>
<tr>
<td>Cause of coefficient B? How do you correct?</td>
<td>Cause of heeling error?</td>
</tr>
<tr>
<td>Knowledge of compass, correctors, coefficients and precautions when adjusting.</td>
<td></td>
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<tr>
<td>When would you swing a compass?</td>
<td></td>
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<tr>
<td>Compass compensation goes wrong and deviations end up bigger than before, what should be done? <em>(check all sums etc and magnets in correct position, if still bad see previous deviation card for previous location of magnets – at least its better that current deviation)</em></td>
<td></td>
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<tr>
<td>Which force does the Flinders Bar correct? B &amp; C. Which structures onboard ship affects this? <em>Induced magnetism in unsymmetrical vertical iron F or A of compass (B), induced magnetism in unsymmetrical vertical iron F or S of compass (C).</em></td>
<td></td>
</tr>
<tr>
<td>How to correct for A, B, C, D &amp; E coefficients.</td>
<td>Know calculation format for compass compensation, ie table.</td>
</tr>
<tr>
<td>What is the cause of co-efficient B?</td>
<td>Does B change with latitude? Yes Flinders bar, how much and why?</td>
</tr>
<tr>
<td>Vessel is on long voyage from Japan to L.A, 3 days into voyage, compass starts showing 4°E error, 4th day 10°E error, 5th day 18°E error. What will you do? <em>(After usual checking as why there is an error, can only assume that pivot point has worn out – change compass bowl)</em></td>
<td>Would you swing the vessel again? <em>(No)</em> Can the Master compensate the magnetic compass? <em>(Yes, but only on his ships compass. Master is not a licensed compass adjuster for the purpose of adjusting other vessel’s compasses)</em></td>
</tr>
<tr>
<td>Can you as Master, compensate your compass?</td>
<td>How many degrees of deviation would you allow before compensating the compass?</td>
</tr>
<tr>
<td>The deviation is so bad that you have to strip the compass and start again, which order to you put the correctors back in and why? Which way would the flinders bar affect the compass?</td>
<td>Your compass is completely dismantled, how do you go about compensating it? Once compensated, heading west from Fremantle, you observe deflection – which way does it deflect?</td>
</tr>
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</table>
You are in New York heading East, where is the deflection? What about in Singapore, where do you expect the deflection to be? ??????

How many gyro onboard?

How would you go about using the magnetic compass if the gyro(s) broke down?

MA Some say that when you cross the equator, you reverse the heeling error magnets – opinion?

MG As Master, can you correct heeling error? How? (lowering or raising bucket)

Will the error you have just corrected affect the other errors? (he said Yes)

A Heeling Error, which way would the needle of a VHF point in the Southern Hemisphere? Red end up.

M Vessel sails on voyage from Christchurch to Cape Horn, the vessel’s compass is OK but on rounding the Horn the ship is rolling and the compass is unsteady – what is the cause? Heeling error.

What should be done? Adjust vertical magnets.

The vessel continues sailing north until it arrives at Rio where a subsequent swing reveals co-ef B. What is the cause? Split B – Bi & Bp haven’t been compensated for correctly. Do a swing to find the value of B, then do split B calculation to find Bi and deduce Bp. Adjust the Flinders Bar and F&A magnets accordingly.

WT What is heeling error?

### DRY DOCKING PROCEDURES

**AX**

Dry-docking procedures and plan (loss of GM).

**FP**

As 1/m how do you get vessel ready for drydocking with gas freeing and inspecting the COT’s as your main interest?

**FP**

Drydocking preparation as Master? (ensure repair list is forwarded to company in due time for company approval, ensure dry dock plan of vessel is made available to company for onward delivery to the docking personnel together with repair list and details of other jobs to be carried out in the dock)

**FP**

What information is on the dry dock plan? (recommended position for the keel and shores and indication of position of external projections from the hull and position of docking plugs to tanks)

**FP**

What stability information will you give to the dock master? (trim and draught of the vessel and ensure by carrying out appropriate calculations that the vessel has adequate stability to cope with the rise of G when the vessel takes the blocks)

**FP**

When is the critical moment? (if is the time from when the vessel takes the blocks to the time when she has fully settled on the blocks – sewed)

**FP**

How do you calculate for the virtual loss of GM? (L calculate P= MCTC * t / L. Find virtual loss of GM by either shift of G or shift of M. GM = P*KG/(W-P) or MM = P*KM/W)

**FP**

You are about to leave the docks, what would you do as Master? (thorough check of all the jobs done together with C/eng and 1/mate, go down into the dock to ensure all plugs are fitted and the propeller is well fitted etc etc)

**FP**

Preparations prior to entry to dry-dock, precautions for fire.

Dock is ‘dry’ of shore facility water; how would you go about pressurising the fire main? (Hint – use a ballast tank ?????)

**FP**

Entering and leaving dry dock with loaded ship – what considerations?

**FP**

Precautions prior to entry.

How will you know if the vessel has touched the blocks?

Where are the blocks placed, were are the side blocks kept? (under the transverse floors, as these are the parts where the vessel is strongest – transversely)

What is the critical moment?

**FP**

Name the different types of dry docks?

How does a floating dock operate?

Where are the blocks placed in the dry dock? Any side shorings? (no) Draw and show

**MA**

In dry dock, how would you inspect your anchor?

What do you look for?

What do you do before securing it?

**MG**

Your have taken the blocks at drydock, what happens next! (EARTH VESSEL, arrange safe access, pressurise fire main from shore, connect electricity)

**WT**

What considerations should be made for welfare of crew? (heating and food)

**WT**

Masters responsibilities while in dock with regard to crew’s welfare? (Heating, food, safe access to and from ship, lavatory access to all) Examiner then asked if Master should provide heating if vessel in Singapore? (If vessel in place where heating should not be provided, would provide accommodation.)

### DISTRESS, URGENCY, REQUIREMENTS & SITUATIONS

**FN**

Is a 121.5/243MHz EPIRB picked up by a satellite?

**FP**

Abandoning ship, what would you do? (take OLB, deck log, “What the hell do you want them for!!” legal
aspects, marine inquiry etc ?? ?? ?? he said that they would be of no use, except maybe crew list in agreement ?? ?? ??)

Radio equipment is fixed, how would you alert MRCC of your position? (406 EPIRB, want you to set off even though not in distress)

**FP**

On ocean passage, 3/mate on watch sites red parachute flare 2 points off stbd bow. 2182 receiver is working normally, auto alarm is OK. On radiotelegraph ship, what will you do? (Come straight to bridge, ready DF to take bearings, positively ascertain the bearing of the flare, check on RADAR for any targets/ dangers etc, proceed to area. Inform the nearest coast station, prepare to receive survivors, rig search lights, post extra lookouts, send all ships message (TTT) give info and position)

2300 – you have reached the area where you think flare originated, what action? (Inform nearest coast station of status, consult MERSAR manual and start a sector search, due to time of day (night) will keep narrow search sectors, drop a drum or similar radar conspicuous object for reference of datum position)

How long would you continue the search? (Keep searching for as long as bunkers and provisions situation permit or if somebody else takes over the search or if the MRCC advises me to give up the search)

You have been searching for 5 days, nobody is willing to take over the search, will you continue on your voyage now? (No, shall keep searching till bunker or provision situation forces me to quit or else MRCC advises me to give up. Stay in constant contact with MRCC through CRS)

How would you go about picking up survivors from the lifeboats? It is a totally enclosed lifeboat? (Establish communication using light, sound, radio, portable VHF, signalling torch, halyograph etc. Once life boat is afloat, send across a line using rocket line, distance about 100 – 150m, send across another buoyant line to attach to life boat. During approach, prepare to life survivors, rig hoists, personnel cradles, scrambling nets, prepare a liferaft to lower to be used as a transfer platform. Cook to start preparing hot drinks of all involved. While manoeuvring, use storm oil for quelling waves, could be vegetable oil, lube oil or even bunkers. Offer lee for life boat using vessel. Once survivors retrieved, inform CRS, MRCC, send out safety message informing that there is a survival craft floating in area and survivors have been rescued. Very difficult to sink a totally enclosed boat. May need to get radio medical advice for survivors.)

Can you discharge oil to save life and vessel? Does law permit it? (Yes but only for safety of life or vessel)

FP What is the urgency signal?

How do you send it?

**MA** What do you do when a distress message is received?

Must you render assistance?

**MG** You receive a 2187.5 distress call, how do you answer? (By law, not supposed to acknowledge distress message directly unless no acknowledgement by coast station)

**WT** What are the Masters obligations for vessels in distress?

---

**FIRE FIGHTING CONSIDERATIONS**

**AX** As Master, you are informed of smoke coming out from one of your holds loaded with containers, what do you do?

**FP** Where do you have fire protection bulkheads in container ships? (between control stations, corridors, accom spaces, stairways, service spaces, machinery spaces and cargo spaces – see SOLAS part C)

**FP** E/m fire, action?

**FP** How would you flood E/m with CO2?

**FP** How many fire pumps on board last vessel?

**FP** Halon flooding system and the most important point to remember when using it.

**FP** Where would you find fire protection bulkheads?

What does A60, B60 mean?

**FP** What arrangements were there to fight a fire in the cargo hold on your last ship?

**FP** Fire in accommodation – action.

What are fire dampers, what is their function?

What is a remote shut off valve in the fire control room?

How would know when fire has been extinguished?

**FP** What are the different types of fixed fire fighting systems?

What is the main difference between sprinkler systems and a gas (CO2, halon) system?

**FP** Fire in engine room – action?

You have released CO2, how would know if the fire is out? (Take temperatures around the engine casing and skylights etc until satisfied)

If you think fire is out, will you send men in? (Yes, in full fire suits and BA, rescue harness)

When would you ventilate and what precautions would you take? (Have responsible officers check to make absolutely sure no fire is likely to re ignite (fire triangle))

**FP** What fixed fire fighting systems do you have on last vessel?
CO2 – how much is required? How do you test the CO2 system and how often? How do you blow the system through? (Note air connection by Law)

FP Emergency fire pump, what type?
Are the suction and discharge valves normally open or closed?
Why is the discharge valve normally closed? (So water from fire pumps don’t go straight overboard)
Isolation of fire main.

FP How do you use the CO2 system?
How would you know how many cylinders to release?

<table>
<thead>
<tr>
<th>CARGO HANDLING EQUIPMENT</th>
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</thead>
<tbody>
<tr>
<td>AX What marks on blocks and shackles?</td>
</tr>
<tr>
<td>AX MO32</td>
</tr>
<tr>
<td>FN Tests of cranes etc</td>
</tr>
<tr>
<td>Heavy lifts – precautions and legalities.</td>
</tr>
<tr>
<td>FP What sort of lifting equipment did you have on vessel?</td>
</tr>
<tr>
<td>FP How often is gear tested and by whom?</td>
</tr>
<tr>
<td>FP What are the markings on a cargo lifting gear shackle?</td>
</tr>
<tr>
<td>FP What will you do if you find a shackle with rust all around the pin and you can’t free the pin? Will you gas cut it? <em>(can’t carry out any hot work on a tanker, would hacksaw it and replace it with a certified shackle)</em></td>
</tr>
<tr>
<td>FP Is it necessary to replace a shackle just because it has rust on it? <em>(yes, because a prudent person would not know to what extent the rust has penetrated the pin and what is its present strength – good answer)</em></td>
</tr>
<tr>
<td>FP How often is this shackle tested?</td>
</tr>
<tr>
<td>FP What is annealing?</td>
</tr>
<tr>
<td>FP What will you check on the lifeboat davits?</td>
</tr>
<tr>
<td>What about the fall, how often will you change the wire and where would find information about when the wires were last changed?</td>
</tr>
<tr>
<td>How often would you check the lifeboat winch?</td>
</tr>
<tr>
<td>If the lifeboat winch were opened, what would you check?</td>
</tr>
<tr>
<td>How many types of brakes are there and what type are they?</td>
</tr>
<tr>
<td>What is the rate of decent of the lifeboat?</td>
</tr>
<tr>
<td>FP Cargo gear on last vessel? What make, SWL etc?</td>
</tr>
<tr>
<td>Maintenance you will carry out and where do you record this?</td>
</tr>
<tr>
<td>How and when do you proof load?</td>
</tr>
<tr>
<td>How would you carry our proof loading?</td>
</tr>
<tr>
<td>FP Do you have a chain register? What is in it? <em>(Normal part 1-4 &amp; MO32 + injury report (?))</em></td>
</tr>
<tr>
<td>How do you proof load a derrick? <em>(Using moveable weight or spring balance, lift specified SWL + x at specified angle, slew slowly from port to starboard)</em></td>
</tr>
<tr>
<td>Do you proof load your life boat davits? <em>(No, only when structural changes)</em></td>
</tr>
<tr>
<td>When do you change your life boat falls? <em>(5 yearly unless have exemption as NWS have)</em></td>
</tr>
<tr>
<td>What do you do in between? <em>(End for end them 30 months)</em></td>
</tr>
<tr>
<td>How do you check the fall wires? <em>(Clamped jaw where wire goes through sheave most of the time, open up and check for broken wires, corrosion and internal lubrication)</em></td>
</tr>
<tr>
<td>How long are your boats falls? <em>(Up to 20° on high side + 10° trim at lightest draft)</em></td>
</tr>
<tr>
<td>How do you calculate this? <em>(He is talking about LCF and water level?)</em></td>
</tr>
<tr>
<td>MA How do you know how long a wire has been in use?</td>
</tr>
<tr>
<td>How do you test a wire rope?</td>
</tr>
<tr>
<td>How do you check your anchor and cable?</td>
</tr>
<tr>
<td>If you range your cable, what do you do?</td>
</tr>
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<table>
<thead>
<tr>
<th>CONSIDERATIONS FOR MASTERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FN Joining a vessel in Korea, what certificates are to be sighted? What publications?</td>
</tr>
<tr>
<td>FN Vessel is proceeding from Adelaide to Melbourne, what is the master required to do, including ETA’s, AUSREP, picking up the pilot, passage planning etc.</td>
</tr>
<tr>
<td>FP When joining as Master and checking FFA, which one will you look at first? <em>(Fireplan – gives quantity and position of FFA and location of remote control fuel shut off v/v)</em></td>
</tr>
<tr>
<td>FP What would you do on joining vessel as Master?</td>
</tr>
<tr>
<td>During your inspection of the engine room, what would you look for?</td>
</tr>
<tr>
<td>FP When taking over as master, remember to check conditions of assignment of loadline and what it contains.</td>
</tr>
<tr>
<td>FP Taking over as Master on LNG ship – what action?</td>
</tr>
<tr>
<td>FP What will you record in the OLB when you take over command?</td>
</tr>
</tbody>
</table>
What will you check when you take command?
Safety Construction Certificate expires tomorrow, will you take over command? (Yes)
Will you sail out today if it is going to expire tomorrow? (Yes?)
What will you then do? (Call up an AMSA surveyor at the next port and arrange for survey)

FP You are taking over command of a vessel with here summer loadline submerged in salt water, would you take over? (No)
You are now in command of the above vessel and the loadline is submerged, is this an offence? (It is only an offence if you take the vessel to sea)
What do you do now? (Check fuel, ballast, disposition of cargo etc and rectify problem)
Vessel is un-seaworthy.

FP What information exchange takes place between the pilot and Master?
FP What info on master / pilot exchange?
FP As master, will you interfere, or take interest in the mate’s work with regard to loading and discharge of cargo?
FP Taking over command, what will you do and check?
FP How do you go about taking command? (Primary concern is the seaworthiness of vessel, Checking validity of all certificates, disposition of cargo, draft restrictions, characteristics of vessel, FW, bunkers, LSA & FFA, cash onboard, key to safe, signing of OLB, bridge equipment, entering into ballast tanks? and inspections of every nick and corner of vessel – “he loved all the small details”)
Previous master has left, what people are you likely to encounter? (Agents, customs, immigration, providers, charterers reps, Class Society reps, port state control, union reps, onwer reps, etc etc)
Have received message to sail for next port, how do you go about this?
What information would you ask the 2nd mate to gather for the intended voyage? (standard passage planning techniques – appraisal, planning, execution, monitoring, mention all necessary publications)

MA As Master, what is your utmost priority? (safety of crew and ship)

WT How would you introduce yourself to your crew?
WT Back from shore leave, what would you expect from your officers with respect to vessel safety? (upright and correct trim, gangway and mooring effectively tended)

WT As Master, you have 2 new deck officers joining your ship, what do you check? (Joining instructions, passports, discharge books, medical documents, certificates of competency, GMDSS cert. And others.)
In their Certificate of Competency, what do you check? (refer STCW 95)

WT Next voyage order – what action? (Outward clearance, testing gear, check for stowaways, passage plan etc.)
WT As Master, what obligations do you have to owners and charterers?
WT What are the entries required in the OLB? What will be your normal/ daily entries?
WT Arrival/ departure procedures? (practique, picking up pilot, monitoring vessel track, berth info, customs, declaration, immigration etc)

WT An officer has just come onboard to relieve the 2/m, what would you be concerned about?
What documents of his will you check?
A large crew change has just been carried out, what documentation must be done and what are the considerations?
List all the things to be done prior to leaving port (in terms of documentation and operational aspects)
Vessel has departed port and will be dropping pilot off shortly, what considerations?
List all preps and considerations prior to entering port.

---

**MISCELLANEOUS**

? Picks out a dangerous good, hands you IMDG code and tells you to find all relevant info.
AX As a new Master taking over command, what will you check in regard to 2/mates passage planning, and how do you quickly determine if the charts up to date, where would you find such information?
AX As Master, what are the standing orders that you will leave regarding watchkeeping?
AX What are the requirements for? Australian (pilot) ladder? And to operating position of crane?
AX Requirements of previous vessel GMDSS equipment.
FN Pilot hoist, what is it and when are they used?
FN Pilot ladders, what is the maximum length before other arrangements have to be used?
FP AUSREP procedures, know them all.
FP Sitting of the emergency generator- why so?
FP Asked about the report of the rig ‘Key Biscane’ that went up on the beach in WA about 20 years ago and what were the recommendations that came of it.
FP Is passage planning mandatory for Australian ships? (Yes, mandatory from berth to berth)
FP What precautions will you take when entering pirate infested waters? (Refer to guidelines to masters against pirates and armed robbers)
FP What is a Panamax size vessel? (Maximum breadth & length for Panama canal)
FP How far can you see a parachute signal? (Horizon distance table, same principle as RADAR horizon distance table – vertical height of flare 300m.)

WT Arrive and departure clearance??? (don’t forget to raise country courtesy flag)

WT Fireman’s outfit?

WT Captain Whiting loves flags!

<table>
<thead>
<tr>
<th>NAVIGATION</th>
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<tbody>
<tr>
<td>AX How do you determine the presence of ice?</td>
</tr>
<tr>
<td>AX What do you understand by squat and its effects?</td>
</tr>
<tr>
<td>AX What do you estimate as sufficient underwater clearance, considering squat effect?</td>
</tr>
<tr>
<td>AX What do you understand by tactical diameter, advance, transfer – sketch these items.</td>
</tr>
<tr>
<td>AX Prior to arrival to port, what are the things that you do or check re navigation?</td>
</tr>
<tr>
<td>AX Calculate the tactical diameter of your last vessel (!!!!????)</td>
</tr>
<tr>
<td>AX Effect of interaction in narrow channel.</td>
</tr>
<tr>
<td>AX What are the contents of BA Notices to Mariners and the various issues?</td>
</tr>
<tr>
<td>AX Given plotting sheet and asked to find Course and speed of target, CPA, aspect, TCPA. From the plot differentiate who is the give way vessel and the stand on vessel.</td>
</tr>
<tr>
<td>AX What do you understand by AUSREP and which vessels are obliged to participate and any fine impose for refusing to comply.</td>
</tr>
<tr>
<td>FN How much reliance can you put on charted depths and tidal predictions?</td>
</tr>
<tr>
<td>FN Knowledge of co tidal/ co range charts? ???</td>
</tr>
<tr>
<td>FN What is LAT, HAT, MHWS. Draw MHWS, MHWN, MLWN, MLWS, LAT on a diagram. Indicate the positions of the sun and moon relative to the earth during spring and neap tides.</td>
</tr>
<tr>
<td>FP 30nm before POB – action?</td>
</tr>
<tr>
<td>When pilot onboard – action?</td>
</tr>
<tr>
<td>What is the bridge management team?</td>
</tr>
<tr>
<td>What will you tell your OOW while vessel in under pilotage?</td>
</tr>
<tr>
<td>FP 4000nm voyage, how do you ask Cli/eng for sufficient fuel oil?</td>
</tr>
<tr>
<td>FP As master, preparations for going in port.</td>
</tr>
<tr>
<td>FP How will you assign the watches?</td>
</tr>
<tr>
<td>FP You have orders from port A to port B, how will you calculate bunkers required?</td>
</tr>
<tr>
<td>On your passage, you encounter heavy ice accretion, what precautions and measures will you take? (remember stability)</td>
</tr>
<tr>
<td>FP Voyage from Singapore to England, how do you go about preparing the passage plan. (emphasis on the planning stage)</td>
</tr>
<tr>
<td>FP How would you check that RADAR is working properly?</td>
</tr>
<tr>
<td>MA GPS, what is pseudo ranging, accuracy of the system?</td>
</tr>
<tr>
<td>MA What is the accuracy of GPS?</td>
</tr>
<tr>
<td>What is differential GPS? Its uses?</td>
</tr>
<tr>
<td>MA If you receive information that there is ice, what action?</td>
</tr>
<tr>
<td>MA Which convention specifies required charts and publications? (SOLAS)</td>
</tr>
<tr>
<td>MG Great circle sailing, how would the course appear on a mercator chart (straight, curved)? (a series of straight lines going through the inner curve of the great circle (know how to calculate the course and distance))</td>
</tr>
<tr>
<td>MG All errors and corrections for a sextant.</td>
</tr>
<tr>
<td>Meridian passage – how?</td>
</tr>
<tr>
<td>MG How do you prepare your vessel for ice? (warm clothes for crew, safe speed, extra look out, drain deck main lines etc)</td>
</tr>
<tr>
<td>Then what would you do as master? (On sighting ice, will send an Ice Report giving position, temperature, wind direction etc)</td>
</tr>
<tr>
<td>Who will you report it to? (AMSA)</td>
</tr>
<tr>
<td>MG If old chart, say 20 years, &amp; is corrected to date can you still use it? (I said yes, he said no ??)</td>
</tr>
<tr>
<td>MG What is sea clutter, can it be totally removed from the PPI?</td>
</tr>
<tr>
<td>What type of vessel gives a poor radar pulse return? (vessel made of fibreglass, wood etc)</td>
</tr>
<tr>
<td>WT What do you do when navigating on ice? (spear trim, slow speed, good lookout)</td>
</tr>
<tr>
<td>WT Navigation publications onboard?</td>
</tr>
<tr>
<td>WT What navigation publications should be kept onboard? (heaps – more that you think!!)</td>
</tr>
<tr>
<td>WT AUSREP, REEFREP?</td>
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</tbody>
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<thead>
<tr>
<th>RULES OF THE ROAD</th>
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</thead>
<tbody>
<tr>
<td>? What is the audible range of horn on your last ship?</td>
</tr>
</tbody>
</table>
FP Fitzpatrick wanted to hear the work COMPASS when he asked how do you determine if risk of collision exists. Also he is very concerned that you have no doubt about the aspect of the other vessel when you make your decisions.

FP “You are at sea, speed 21 knots. I am going to give you situations, if risk of collision can exist, then it does. If it cannot, then it doesn’t. I don’t want you to tell me that you take compass bearings all the time, and I will only accept your first answer.” Fitzpatrick.

FP Rules 6, 7 & 8 – know thoroughly.

FP Can you take gyro or compass bearing (to determine risk of collision)?

FP If compass bearing has error, would you use?

FP Duration of fog signal.

FP What are the latest amendments to the ROR?

FP How do you use the RADAR to determine risk of collision?

FP To whom do colregs apply?

FP When will you proceed at a safe speed? (At ALL times as per rule!) What is the definition of a vessel, a vessel engaged in Shipping (?), vessel constrained by her draught, vessel restricted in her ability to manoeuvre?

FP When does risk of collision exist?

FP What do you mean by non-displacement craft? (Air cushion vessel, also mention that the heading of an air cushion vessel is no indication of the direction in which she is moving)

FP During situation model session, if there is no risk of collision maintain course & speed.

FP Fitzpatrick loves sailing vessels (apparently).

FP What do you understand about ASPECT? (Aspect is the angle between the course of the observed vessel and the bearing of the vessel from own ship – Fitzpatrick loves Aspect!)

FP Does the aspect of the other vessel change if own ship swings around or changes course?

FP Will aspect change if risk of collision exists? (No, it will remain steady)

FP You see a fishing vessel ahead indicating nets extended beyond 150m, how far could the nets extend? (Could be for miles!)

FP In determining if risk of collision exists, why is a compass bearing taken? (Compass bearings have no connection with the ship’s heading, so any change in heading will not cause a change in the bearing of the object. However, relative bearings will change with any alteration of course or yaw.)

FP (In situation where vessel is stand on vessel) Is it mandatory as per the rules to sound at least 5 short and rapid blasts if in doubt as to the intention of the other vessel etc. . (Yes)

FP Fitzpatrick will test your ROR especially when it comes to alterations of course to port. This is in respect to the stand on vessel altering to port in situations where R18 brings in the give way vessel to be the privileged vessel. Also note, that a vessel 4 points on the bow whom you are crossing will be doing the same speed as own ship, hence a starboard alteration alone will not help the situation because you are likely to keep going on that course indefinitely. A reduction in speed is quite important. Remember to take action in accordance with R8.

FP Know all buoys, day shapes and sound signals in restricted vis – yada yada yada.

FP What would you consider as poor visibility?

FP What is a pelorus? Can you use it to determine risk of collision? (Yes, if used in conjunction with the magnetic compass)

FP Vessel underway but stopped, is she obliged to keep clear as per rules? (Yes)

MA Define Not under command and Restricted in ability to manoeuvre?

MA Why do Mince Clearance vessel’s NOT display RAM signals?

MA NUC and RAM on head on collision, who gives way?

MA Who is give way vessel, own ship in TSS & sees vessel 4 points on port bow?

MA Crossing a TSS, action?

MO When is the overtaking vessel exempt from keeping clear of the vessel being overtaken? (Never, must keep clear at all time, even in fog)

WT Will ask for the colour of flags!

---

**SHIP-HANDLING**

? What is synchronised rolling, pitching, pooping and the dangers of these?

AX Open moor, standing moor, Mediterranean moor.

FN How would you take a tow from a sister ship, securing an anchor in the pipe? Taking up the tow, how is the towline secured, what is a catenary and what is its purpose?

FP Running moor, standing moor, open moor, Baltic moor, Mediterranean moor (DJ House)

FP With current, how do you drop a single anchor?

FP (at anchor) Wind picks up to force 6, vessel yawing with 4½ shackles in water, what action? (Let go 2nd anchor at the extremity of yaw and veer both cables so that the vessel rides comparatively quietly to her 2 anchors)
(Don'ton page 22)
FP While at open moor, tide has changed and anchors have fouled, what action? (Don'ton pg 28)
FP As Master, a pilot has boarded to sail vessel but cannot speak English, Action?, would you accept a translator??
(advice pilot station to give a pilot who can speak English, will not accept interpreter)
FP Explain towing arrangement (on piece of paper) as Chief Engineer has informed you that main engine has
broken down and cannot be used. (D.J House pg 247)
FP Anchored in coral areas, 5 shackles on port anchor, wind F6 with head to tide, vessel yawing – Action. (Drop
other anchor at the extremity of yaw, veer cable of starboard anchor until equal in length to port anchor, vessel
rides quietly at an angle on not greater than 120°) Tide changes – action. (With engine power, sheer vessel
and maintain original anchor position and observe, heave port anchor if having difficulty maintaining position
as engine maneuver will take more time to maintain without fouling, slack starboard anchor half a shackle, as
port anchor slackens, heave away, pay out stbd anchor until port anchor is aweigh. Vessel should now lie to tide
to stbd anchor) Wind increases to F8 – action. (Heave remaining anchor and leave anchorage immediately,
head for open sea.)
FP How to take a rig under tow.
FP Important things to watch whilst under tow.
Bad weather while towing.
Quick release system and how attached to winch.
FP Execute a standing moor with current right astern and a strong starboard beam breeze.
FP What do you when coming up to a pilot boarding station? (don’t forget to test engines astern)
FP Squat – how do you calculate?
FP Entering port after long sea passage, what preparations are required – for arrival PBG and all pre arrival
checks? 
Departing after loading vessel, pilot boards, what info is exchanged?
Pilot tells you nothing, what will you do? (Ships information and details – TELL HIM! Fitzpatrick wants you to
show him that you would put the pilot on the spot and tell (not just a mere formality) all the ships relevant
details as required by Master/Pilot exchange form)
How would you man the bridge for this departure?
OOW finds that the pilot is deviating from the agreed plan with informing you – action? (Ask pilot the reason
for the deviation, if not satisfied, take over nav of vessel)
What would you do after taking over from the pilot?
FP During pilot master exchange, what will you tell him and what do you expect him to tell you?
You are entering Spain and pilot does not speak English, will you accept?
MA What is squat? Describe the effect on ship in shallow water?
What will the tactical diameter be if a ship is turning in shallow water? Deep water? In loaded condition? In
ballast condition? Trimmed by head? Trimmed by stern? Speed of 5 knots? Speed of 15 knots?
MA What is bank effect?
MA As master, how would you take vessel into dock without a pilot?
MA Difference between a running moor and a standing moor?
WT Engine breaks down in middle of rough seas, engine is unrepairable, what action? (have to, lower lines,
anchors and use bow thrusters)
WT What consideration when approaching anchorage? (holding ground, shelter, weather forecast)
WT Do a running moor, berth the vessel starboard side to & unberth vessel.
WT How do you give a sheer to your vessel without the use of engines? (follow baltic moor)
WT Towing, how do you protect the owners interests on salvage? What are the considerations? (Seek owners
approval in case of additional premiums req’d, bunkers onboard – sufficient, value of the ship needing salvage
value of her cargo, deviation clause in CIP – permitted?, would you arrive at loading/ discharge port before the cancellation date, perishable cargo considerations, status of machinery, LOF etc)
WT Towing operations, how do make fast the tow? (remember precautions against chafing and parting)

QUESTIONS ABOUT LAST SHIP.

FP Size and type of tanker?
FP Did vessel have IG and where was IG supplied from?
FP What is the purpose of IG on a crude tanker
FP What sort of ballast arrangements?
FP How will you gas free an inerted tank on a crude oil tanker? (refer to ISGOTT)
FP What do you understand by COW?
FP Last vessel? (LNG)
Construction of cargo tanks, type of metal used?
How was cargo loaded, carried and discharged?
How was boil off handled?
What safety measures exist to maintain tank pressure?
Inert gas system onboard?
FP Seeks to ask about last ship a lot. (product tanker, double hull)
Why was she double hulled?
When was she built?
What sort of tank configuration, line system, pumps?
Were the double bottom ballast tanks accessible?
What grades of cargo did you carry? (basically he wanted to know sketchy details on the above to ascertain where you had bothered to get familiar with your last ship)
FP Tanker. What is the purpose of the external bonding wire?
Is it effective? (no) Why not?
What is the solution? (insulating flange)
Where is the insulating flange inserted?
FP What are the hazards associated with tankers?
What were the IG specifications of your last ship?
Before entering dry dock, what precautions would you take as mate prior to entering? (gas free tanks, etc)
You have to do hot work onboard while at sea, what do you do?
FP Last ships steering gear system.
Emergency steering gear system, ship has blacked out.
Emergency fire pump, (want to know about valve, isolation valves, location and pressure of pressure relief valves)
FP Stopping distance of last vessel (crash and inertia).
Turning circles of last vessel.
FP Vessel particulars and cargo carried of last ship?
Hazard associated with cargo?
What precautions taken during loading, discharging and carrying cargo?

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<tr>
<th>SITUATIONS</th>
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<tbody>
<tr>
<td>Vessel aground due to steering failure, what action?</td>
</tr>
<tr>
<td>Procedures for refloating?</td>
</tr>
<tr>
<td>Short round turn in narrow channel. – procedure.</td>
</tr>
<tr>
<td>No dry dock available in that port, what action? (temporary repairs – underwater welding if ok with surveyor)</td>
</tr>
<tr>
<td>FN Picking up a pilot via helicopter – what precautions?</td>
</tr>
<tr>
<td>FN Hit by container ship, vessel still wedged into own vessel.</td>
</tr>
<tr>
<td>Stabilizer on Abel Tasman style ferry hits bank and breaks off, resulting in ingress of water into engine room.</td>
</tr>
<tr>
<td>What to do in chronological order, including emergency damage control actions and legalities, (don’t forget your P&amp;I Club in a collision, also before repairs, there needs to be inspections by both parties – P&amp;I and Ships representatives.)</td>
</tr>
<tr>
<td>FN Apparently it is almost impossible to retrieve a free fall boat in a seaway. If you had to launch it in the middle of the Atlantic to pick up a man overboard, how would you secure it? (Use vessel’s deck crane to lift onto the deck and secure it there)</td>
</tr>
<tr>
<td>FP You are heading up the English Channel, expected passage time is 48 hours and dense fog is expected during the whole time. You have 3 watch officers, how would you organise the bridge team? (Master &amp; 3/m, 1/m &amp; 2/m – 6 hours on, 6 off; post lookouts, manual steering, engine control on bridge, manned engine room throughout)</td>
</tr>
<tr>
<td>What standing orders would you leave the 1/m when handing over? (call if traffic increases or on failure of any navigational equipment)</td>
</tr>
<tr>
<td>If E/Rm is manned, why do you want the engine control on bridge? (Communication breakdown, engineer not in control room, hurt etc.)</td>
</tr>
<tr>
<td>What speed would you proceed at? What is a safe speed and what factors would you consider?</td>
</tr>
<tr>
<td>FP At night while vessel at sea at 0200, 2/mate calls, says he has spotted a red flare 4 points to stbd – action.</td>
</tr>
<tr>
<td>(Assess the situation and question the lookout to confirm the sighting of the officer, with officer, plot position of own vessel – see DJ House idea for Masters) You proceed to investigate, near daylight, you see a liferaft, wind F6, swell 2m. Show on model how to execute your approach and recover survivors, headwind and swell. (Head to wind or sea and make good lee to liferaft, approach at distance of 100m. Brief all operational personnel and prepare rescue equipment – heaving lines, scrambling nets, ladder etc also prepare own 6 man liferaft. Signal liferaft, if acknowledged, fire rocket line with messenger attached. Let them attach line to raft and heave alongside. If no sign of survivors in liferaft, launch own 6 man liferaft (or rescue boat or lifeboat) with 2 crew with LSA gear onboard, steam (?) to distressed liferaft and investigate. Send urgency message to all ships in vicinity)</td>
</tr>
</tbody>
</table>
vicinity and contact nearest MRCC coastal station.) You have recovered 15 survivors, how will you go about it one of the survivors was 2/mate and said that their vessel had sunk with 25 persons on board — action. (Prepare hospital and spare rooms, treat for hypothermia, DRABC, identification documents if any, treat serious medical conditions promptly — seek radio medical advice if required. Try to ascertain where vessel sunk and how long ago (from survivors), conduct further SAR ops, contact MRCC and request assistance from vessels in vicinity) After sending PAN PAN, one vessel responded, her ETA is 6h — Action. (Act as OSC and follow procedures in MERSAR, re communications, reporting and search patterns)

FP Where can you find the manual operated fuel shut off v/v in the event of E/m fire?

FP Fire in E/m, how will you tackle fire? (Master crew, stop engine, engine room personnel will be first attack party and proceed to scene in BA and fire suits, C/eng in control of team. 3/e fire pump, 1/m, bosun and 1 IR as back up team, 2/e boundary cooling, keep communication with C/eng on progress of fire, manoeuvre vessel to keep wind on beam, check position of vessel, send PAN PAN to all ships and nearest coastal station. Have option of CO2 dump ready and ascertain nearest port of refuge. Ready lifeboats. Ready medical gear, display appropriate signals.)

FP Your container vessel is port with class 1 DG o/b, e/m is on fire — action? Where will you get the water from? After conventional methods, fire is out of control — action? Would you release CO2 if 2 men were missing in the e/m?

FP Proceeding in narrow channel, steering failure and vessel goes aground 2 hours before high water — action? After assessment, find that 30% of vessel is aground, water level in FPTK has dropped from full to sea level — action?

C/eng says that he can repair steering gear in 20 mins, tugs will arrive in 30 mins — action?
Who many tugs would you take? Where would you put them? Will you use your engine to refloat? Why?
Show me how you would free your vessel and turn around in the narrow channel.
There is no dry dock in this port — you have to go 30nm to nearest dock — action?
Discharge of cargo — why? Temporary repairs — underwater survey, interim certificate of class and why, stability — min BM and SF. Passage planning — weather condition, swell, reporting system.
Enroute — what precautions?
Preparations for dry dock (with cargo — without cargo)
With respect to virtual loss of GM, when is the critical moment?

FP At sea and main engine fails, wind F8, Ch/eng reports engine will be ready after 6 hrs — action?

FP Forecast indicates restricted visibility for next 36 hrs, as Master what would you do?
What night orders would you leave on bridge during these fog conditions?

FP You have lost engines in heavy weather, what action? (Examinee got into a tangle with this question — would you or wouldn’t you risk sending a man forward to open the FPTK valve so can ballast tank, this led them to where the valve is located and what it is for (read SOLAS for this). He told FP it was to maintain the integrity of the collision bulkhead, apparently there is another reason)

FP What would you do if you had an oil spill onboard, who would you inform and what is your action?
FP Heavy weather, wind F8-10, main engine failure, how do you heave to the sea and wind?
FP Collision is imminent and unavoidable, what action would you take? What action would you take that would minimise damage to own vessel?

FP Pilot does not speak English — what action?
Would you accept an interpreter?
Arrangement of bridge team during pilotage?
During long pilotage, you as master are forced to leave the bridge for a short time — what action?

FP Master is incapacitated while vessel at sea, loaded with 5 hatchs of grain, 2 slack hatchs. What action?
FP You are Master of a 60,000dwt tanker, major engine room breakdown, vessel on lee side of shore, 5° off — what do you do? Tanker is in ballast, which way will she lay to wind? How long till she goes aground? It is too deep to anchor.
Assistance arrives in the form of a Greek tanker, he want $50,000 for tow — will you accept? What about Lloyds form 80? Would this be better or worse in this situation? (Know about how salvage is determined)
How would you make fast the tow?
How would you organise the crew?
Would you lighten ballast or not?

FP On black oil product tanker. (4 products)
What type of segregation do you have — 2, and only 2 is required by regs.
Collision on #3 port, pollution takes place, how do you deal with it? (Distribution of product to other tanks including ballast tanks, may try to jury rig a collision mat depending on dimensions and location of hole)
Would you transfer cargo to tanks of a different grade? (Yes) You do realise that cargo will go off spec? (Stopping pollution is of prime importance)
What else will you do? (entries into OLD, ORB, inform owners, charterers, make a pollution report to Sea Safety Canberra, AUSREP giving details of location, cause, estimated quantity released, steps taken to counter spill etc MARPOL)

FP If you observe a crack on deck around the hatch coaming at sea, what would you do? (drill hole to relieve stress, stop promulgation of crack)
What caused the crack? (stresses – hogging & sagging)
What else would you do? (carry out thorough inspection of deck and hull, arrange for survey on arrival next port)
What type of surveyor would you ask for? (classification)
What would you tell the owners?

FP As chief mate, storm approaching, what precautions do you take?
As chief mate, what would you allocate the crew to do during storm?
As chief mate, what preparations on own vessel when picking up survivors?

FP You are Master on a conventional tanker, you look into the pump room and see a man lying prone on the deck – what do you do?
How would you get him out? (Use a safety line or neil robertson stretcher attached to the pump room rescue gear, permanently attached block and pulley with sufficient rope and a safety hook which can be made fast, thus enabling fast and effective rescue from the space)
Is it a requirement that all pump rooms have this gear? (yes?)
Where would you find info and procedures on entering pump rooms and enclosed spaces? (JSGOTT)

FP You are master of a container ship, you are immobilised by F8 winds, what actions? (Fitzpatrick said - trim vessel by head to avoid beam seas (?), jettison containers from forward so that the windage would swing the vessel into the seas, also lower moorings and anchor to give drogue effect)

FP Your vessel develops cracks in hull in heavy weather, what do you do? (head into wind – will want to know how you would do this?)
Will you call emergency stations?
If sending a distress message, what will message contain?
You find an island that the pilot books say have anchorage ground available, will you try to anchor?
How would organise the crew?

FP In TRS, crankcase explosion – no more engine. Action?
Onshore wind will ground vessel in 2 hours on reef? Action?
The assisting tug master hands you LOF, will you sign? (straight away, something about arbitration)
Do you make tug fast for’d or aft? (Fitzpatrick reckons forward)
Who is in charge of the towing operation? (Master in charge of own vessel but will assist in making fast the tow. Whole operation is afterwards up to tug master)
What pollution considerations would you make during this situation?

FP In port, tanker discharging, received storm warning and asked to sail immediately – Action?
How will you heave to?
In storm area – what action do you take?

MA Vessel ahead of you, what do you do? What is the best way of stopping the ship?

MA Fire in e/rm is out hand. Two engineers unaccounted for, men in BA cannot penetrate fire. Would you flood with CO2? (Yes, have to consider the lives of the rest onboard)

MA Bunker overflow while bunkering, what action?

MG Dragging anchor – action?
Another vessel is dragging anchor toward you, you decide to slip and buoy your anchor, what do you do?
(bring some slack on deck, break cable (he cut in and said that would take ages, suggested that you slip at bitter end)

MO 7 things you would do in restricted vis? (fog signal, hand steering, extra lookouts, RADAR’s ok, engines standby, nav lights ok, safe speed)

MO Vessel coming into port and touches bottom, vessel is then taken to another anchorage. What will you do? Who will you inform? (Owners, Charterers, port authority, class society, AMSA, P&I club rep, under writer, agents, arrange for diver)
No damage, what will class surveyor do? (issue certificate of class)
Why do you want a certificate of class? (without certificate of class, hull insurance is void)
Who will you inform on receiving a certificate of class? (everyone, as above)

MO As master, vessel alongside. Pilot not available, heavy off shore winds, shallow patch off berth – will you sail? (no)
Lots of pressure from owners and agent, mooring gang is on wharf & being paid overtime will you sail? (no)

WT Engine breakdown at sea – action? (NUC, heave to, alert coast station, alert shipping in area, inform owners, investigate part options for repairs, LOF contract for Salvage)
WT MOB procedure?
WT Helicopter rescue? (Dwell more on the safety aspects while discussing the procedure, eg, Fire party in attendance ready to fight fire, winch wire NOT to be touched until the discharge of static electricity etc)
WT Galley fire (fire triangle)
WT Heavy weather contingency plan?
WT Grounding, no breach of water tight integrity, oil spill on deck – action?
   Vessel is refloated and at berth – action? (remember to Note protest, entry into OLB)
WT While at sea, 2/m notices oil slick from own vessel and reports to you, as Master what would you do?
   (MARPOL, SOPEP)
WT In force 10 winds, engines break down – action? (try to ride to the weather)
   Engines regained, you are in TRS – action? (determine quadrant etc)
WT While approaching port, vessel runs aground – action?
   At same time, a crewmember has fallen overboard – action?
   After rescue, crewmember is badly hurt, requires heli rescue – action?
   Vessel requires to be dry-docked. List down the requirements prior to docking and once at dock what are your duties as Master?
WT At sea, a crewmember has been missing for about 3 hours, what action?
WT Midnight, 2/m calls you up and tells the barometer is falling and wind if picking up, action?
   Weather worsens, engines have failed – what action?
   Same time a crewmember falls overboard – what action?

SHIP STABILITY

AX What is the purpose of FWA, how do you determine FWA?
AX What is the stability criterion for a passenger vessel.
FP What is the purpose of the FPTK manual valve? (To maintain the integrity of the fore peak collision bulkhead in the event of a collision)
FP Special stability criteria and why??
FP Angle of loll, what is it and how to correct?
   Would you overload your vessel to correct an angle of loll? If not, why not?
FP Is vessel seaworthy at angle of loll? If not, why not?
FP What is LCF?
   With what draft will you enter into tables?
   How will you find out the hydrostatic draft?
   What is the use of draft masks?
   About which point does the ship roll?
FP Bulk carrier, heavy density cargoes. Why do you load in alternate hatches?
   What happens to the metacentric height?
   What stresses involved?
   Draw and show the transverse section of a bulk carrier under the tank tops.
   How would your alternate hold be strengthened?
FP You are loading in a summer zone and proceeding to a winter zone. Steaming time from load port to winter zone limiting latitude is 2 days. What freeboard will you load to? (Winter zone minus 2 days consumption of fuel, water etc.) (He wants freeboard, not drafts)
   How will you calculate this freeboard to load to? By what method? (Limiting factor method)
FP Will you vessel sink if engine room floods?
   How do you know this? (?)
WT Man overboard for 10 hours, what do you do? (go back 10hrs and PAN PAN)
WT Ensure you know how to calculate BS and SF.

SURVEY REQUIREMENTS

? Fore peak tank pressure test – how?
AX What are the trading certificates validity periods, types and survey requirements for each?
FN Equipment to be carried onboard a 30,000dwt ship (nav equipment).
FN Load line, draw and point out fresh water allowance.
   Which line to load to when on the border of 2 load line zones?
   Which line to load to when loading in Singapore and discharging in Alaska in May? (bearing in mind seasonal zones and consumption of fuel, FW and stores etc.)
FN LSA required by a cargo vessel.
   Extra LSA required by a vessel with a free fall lifeboat.
Classification surveyor wants to inspect #2 DB tank, what actions and precautions?
How many immersion suits are required and what are they? What are TPA’s?
What is Port State Control? (The policing of various conventions by states other than the flag state when a vessel is in their state)
Which vessel’s are required to carry ARPA’s and rate or turn indicators?
A life boat may also be a rescue boat if it meets what requirement?
Explain all you know on how to prepare for and what will the surveyor be looking for in a cargo ship safety construction survey? (surveyor will check cabling/wiring, ventilation ducting and ventilator flaps)
How long in CSSC⁴ certificate valid for and who issues the certificate?
What are the statutory certificates to be carried on Australian Ships? (CSSC, CSSE⁵, CSSR⁶ are the statutory certificates – Loadline, IOPP, derating, certificate of registry. ISM and others are all trading certificates)
CSSC, CSSE, CSSR – What is their validity? (All 5 years)
Which certificates are subject to intermediate surveys? (Loadline, CSSC, IOPP)
If CSSC survey is to be carried out, what preparation would you do as Master? (ready stability information, former construction cert.; check anchors, mooring arrangements, watertight bulkheads, operation of watertight doors, structural fire protection equipment, operation of fire doors, machinery and electrical installations such propulsion systems, steering arrangements, bilge pumping systems, boilers, emergency sources of power, communications between engine room and bridge, means of escape from E/Rm clearly marked and free from obstruction, double bottom tanks, wing tanks, peak tanks and bottom plating checked by pressurising the tank to a head, in addition to machinery records, the official log book will be examined to establish that the steering gear has been tested in accordance to MO 29 at least every 3 months.)
Port state inspector onboard – what action?
What is the Safe Manning Certificate? Under which convention is it?
What are the statutory certificates?
Your safety construction certificate expired yesterday, would you sail?
How do you prepare for the above survey?
How is freeboard assigned to a vessel, what factors does it depend on?
Load line marks – distance between TF/F, T/S/W and where the value of 1/48 came from??
What do you mean by weather tight and water tight and what is meant to be weather tight and water tight?
Which way to water doors open?
Vessel is preparing for loadline survey, what will you check, what do you expect the surveyor to check?
Passenger vessels carry what certificates? (Passenger ship safety certificate + …)
Where will you find water tight doors?
What certificate controls the pollution of the sea? (IOPP)
What will the surveyor check that the vessel has? (overboard discharge monitoring system)
What are the requirements for discharge?
What is an A class bulkhead? Where would you find them? What does A60 mean and where would you look for the packing? (inside or outside of the bulkhead?)
All statutory certificates and their duration.
Is it compulsory to have a certificate of class? (No)
How many classes of watertight doors?
What is weather tight and watertight?
How many fire pumps are needed? (2 + emergency fire pump)
Would you sail if 2 charts onboard have been superceded and cannot get new ones before ETD?
You are standing on the tank tops looking for cracks etc, how do you go about it? (use binoculars and aldis lamp)
With respect to SAFCON certificate, how would you determine the state of the hull?
Name the safety equipment?
If a vessel has not got a sextant, can she proceed to sea?
How will you prepare your vessel for a loadline survey? (check water tight integrity from the keel to freeboard deck, check hatch covers, gaskets ok, the scuppers are clean, drains not blocked, hosing hatch covers etc. Have to hand – former loadline cert, stability info, assignment of freeboard cert.)
What is an enhanced survey in bulk and tankers?
What is a quadrennial survey and how is it different from an annual survey? (4 year survey carried out by classification society surveyor or AMSA, proof load test required)
What is proof load test of derrick?

⁴ Cargo Ship Safety Construction
⁵ Cargo Ship Safety Equipment
⁶ Cargo Ship Safety Radio
How would you check the goose neck on the derrick?

MO In Australia, who is port state control surveyors? (AMSA)

### SURVEYS — INTERNATIONAL SAFETY MANAGEMENT (ISM)

**AX** As Master, how do you implement ISM requirements onboard?

**FP** ISM code, what does it mean to you? (It is a series of instructions and procedures essential for achieving and maintaining high standards of maritime safety and environmental protection. This encompasses proper lines of authority and communication, effective implementation of instructions and procedures, reporting and analysis, internal audits and management reviews.)

**FP** How would you encourage your company as Master, to appreciate the ISM code? (by explaining to the company the safety awareness of the crew and improve the output of labour)

**FP** When does the ISM code come into effect? (1/7/98 for all passenger ships, fast ferries, bulk carriers and tankers above 500grt. For all other ships (cargo and container) deadline is 7/2002)

**FP** Date of coming into force and contents.

**MG** When does ISM come into force? (1/7/98 for passenger vessels, tankers, chemical tankers etc, 1/7/2002 for other cargo ships over 500grt)

**WT** As per ISM, what damage control procedures do you have on your ship, explain some of these procedures.

**WT** What are the ISM certificates onboard? (DOC and SMC? (valid 5 yrs each), then explained each of the certificates)

Master’s responsibilities in respect to the these certificates? (implementing the safety and environmental protection policy of the company, motivating the crew in the observation of this policy, issuing appropriate orders in a clear and simple manner) How do you motivate the crew? (Explaining procedures to crew, regular meetings to discuss procedures, praising them, feed back in case of deficiencies etc) ISM designated person – who is it and what are his responsibilities? (Usually the superintendent, has access to the highest level of management, he is the link between ship and shore, monitors safer operation of ship, protection of the environment, ensures adequate resources and shoreside support are accorded to ship) ISM procedures (grounding, collision, fire etc)

### TROPICAL REVOLVING STORMS

**MA** Navigable and dangerous quadrants.

**MA** You receive a weather forecast indicating that there is a TRS, what do you do?

What would be your action you found yourself in the dangerous quadrant of a TRS? In the navigable quadrant? (southern hemisphere)

**MG** Wind direction in the southern hemisphere?

You are in the dangerous semi-circle, how is the wind blowing and how can you get out? (backing, turn you bow into the wind and the wind on your port bow)

At what latitudes and what is the TRS season for Australia?

Draw the track of a TRS.

Signs of a TRS in the area. (sudden swell, barometre drop, increasing wind speed etc.)

**WT** TRS is approaching port, port is closed, what action would the port be undertaking (mooring lines, fenders, reduce windage, secure deck, all informed)

**WT** Evasive action (southern hemisphere)

**WT** TRS while in port – action? (inform all departments, batten down hatches, stow cranes and derricks, fenders, more mooring lines, drop the offshore anchor, no shore leave.)

### SOURCE OF QUESTIONS

**AX** Captain Alexander, Port Adelaide

**WT** Captain Whiting

**FP** Captain Fitzpatrick, Launceston

**C** College Reader

**MG** Captain Malcolm Goodfellow

**MA** Captain MacAllister

**FN** Captain Fernandes

**MO** Captain Morrison
Masters Orals
13 Dec 2006
CAPT Fitzpatrick

Fitzy started off by discussing my background and once I told him that I served in Submarines he was off.

He asked about:
- Submarine indicator buoys (O Boats and Collins Class)
- Where to find out about them ie annual summary of notices to mariners,
- What would indicate a submarine in distress (sighting of indicator buoy, sighting of a red grenade, sighting of a submarine involved in a collision)
- What to do if you saw an indication of a submarine in distress (turn on echo sounder, remain up stream in case the submariners are attempting to escape, advise RCC AUST, standby to rescue submariners, advise other vessels to stay clear)

We then moved onto Port State Controls:
- The rationale behind the PSC concept
- The paper work that you as the master would have ready for a surveyor,
- The length of validity of any certificates inspected during a PSC,

Next up was ISM:
- Again, the rationale for the ISM system and the aims of the system,
- He asked about the onboard safety management system and the publications that are held on board
- Wanted to know if a hard copy of the SMS was required to be held on board
- Also wanted to know about the authority of the master and I made sure to note that the ISM code was the only code that specifically mentioned the authority of the master

He then pulled out his light board and after explaining all the rules (if a risk of collision exists etc and so forth) we started on ROTR. The situations were as follows:
- Crossing trawler
- Crossing sailing
- Head on power
- Restricted vis and he wanted to know that even if the other vessel alters course you are also required to alter course to avoid collision
- You have a vessel one point on your STBD bow at 6nm and it is going to have a CPA of 4 cables on your STBD bow; action! I said one short blast with a supplementary sound signal and a course alteration to STBD to pass the other vessel safe on my PORT side. He then asked why I’d sound a sound signal if the other vessel is at 6nm. My reply was that the rules for vessels insight of one another require a sound signal; he agreed. Next he asked why I went to STBD? He said that he’s have been satisfied with an alteration of course to PORT as in real life that’s what you’d do.
- He gave me a head on with a shoal on my STBD side and wanted to see what I’d do
Next up were the flip cards covering day shapes and buoyage.

After ROTR he went into halon fire systems in some depth. He told me that he was in the UK doing a survey on an Incat and the person showing him around inadvertently activated the halon and dumped it into the compartment that they were in. He asked:
- Where are the bottles located
- Some of the technical specs of halon
- The process of activating the system for an engine room fire
- What you’d do if you couldn’t account for two personnel in the engine room but there was a possibility of losing the vessel if the system wasn’t activated
- What you’d do if the fire in the engine room got out of control and blew a hole in the side of the ship. He was keen to know if from a stability point of view if the vessel would survive. He asked me the age of my last ship and said that the fact that she’s 23 years old means that she wouldn’t survive and that you’d be off to the lifeboats.

Next up we talked about the loading process and he asked me how I’d go about loading for a cargo of iron ore in a port that I’d never visited discharging at a port I’d also never visited. I talked about:
- Arrival and departure drafts at the load and discharge ports
- Changes in load line zones
- Calculation of amount to be loaded taking into account fuel consumed on route

That was it. After he told me I’d passed he revisited some of the issues such as halon and why people always got to STBD when in some cases altering to PORT is fine.
28/JUNE/2007

Masters Oral Exam Questions

Examiner – Capt Fitzpatrick

Candidate – Rishiraj Ramchandran

Result – Pass 1st Attempt - Duration 70 Minutes

Last Ship – Seismic Research

1 – He asked me all about seismic vessel operation

2 – Joining as master, how will I go about taking over the vessel

3 – What are the different types of certificates I will find on board

4 – How often the master of a vessel must review the safety management certificate
   Answer – 12 months

5 – Steps to takeover con from the duty officer, - remember duty officer has to enter in the log book

6 – Everything about special purpose ship certificate and cargo ship safety certificate

7 – How will I take over watch from a duty officer in a restricted visibility situation

8 – Where will I place the look out if it’s raining heavily. –- Answer always outside on the wings

9 – What checks will u do in the engine room with regards to Marpol
   Answer – Oily water separator, check for oil in bilges, check for overboard discharge valves that there are no by pass or hidden lines to secretly pump out
OIL.... HE TOLD ME ABOUT SOME INCIDENT THAT A SHIP HAD PUMPED OUT OIL DESPITE LOCKING THE VALVES.

10- ARPA RADAR WHAT INSTRUCTION WILL YOU GIVE YOUR DUTY OFFICER, ---- ANSWER - RETUNE AND RECHECK CONTROLS EVERY WATCH

11- WHICH RADAR WILL YOU USE FOR LONG RANGE SCANING ANSWER - 3CM

12- WHAT IS A RISK OF COLLISION

13- SOUND SIGNALS FOR RESTRICTED VISIBILITY

14- IN WHAT CONDITIONS WILL I USE THE ONLOAD RELEASE GEAR IN A ENCLOSED LIFEBOAT

15- WHAT CHECKS WILL YOU EXPECT THE CHIEFMATE TO DO IN A LIFEBOAT, ... HE WANTS TO KNOW ABOUT FALLS AND DAVITS

16- HOW WILL I RECOVER A ENCLOSED LIFEBOAT

17- PLEASE REFER TO ALL THE ROR SITUATIONS IN THE NEXT PAGE

18- IF YOU HAVE GOT A FOREIGN OFFICER ONBOARD A AUS FLAG VESSEL, WHAT DOCUMENT WOULD YOU CHECK TO SEE HIS QUALIFICATION..... ANSWER - CERTIFICATE OF RECOGNISATION BY AMSA

19- BUOYAGE SYSTEM, FLAGS, AND WHAT REGION IS AUSTRALIA ----- REGION A,

20- ON A SPECIAL PURPOSE SHIP WHAT TRAINING SHOULD THE SPECIAL PURPOSE PERSONNEL HAVE WITH RESPECT TO LSA AND FFA AND VESSEL FAMILIARISATION SAFETY CHECKS... ANSWER ---- REFER MARINE ORDER 50
21- MASTER PILOT INFORMATION EXCHANGE ---- HE WANTS TO HEAR THAT YOU WILL SHOW THE SHIPS MANOEUVERING AND TACTICAL DIAMETER CARD TO THE PILOT AND THE PILOT CARD

22- PREAPREATION FOR ANCHORING ---- HE WANT TO HEAR THAT YOU WILL TEST STEERING, ENGINES AND WINDLASS AND PLEASE FILL UP CHECKLIST

23- HOW MANY YEARS WILL YOU KEEP THE CHECKLIST ONBOARD ---- 2 YEARS

THAT'S ALL THE QUESTIONS I CAN REMEMBER......

GOOD LUCK
will Compass bearing help in this case
Answer is - NO

Only Radar plotting

All possibilities of target VII action

Restricted V. I.