1. Take over command the ship.
Answer: Go to company office and meet the technical superintendents, discuss about :

.. Ship particular
.. Trading areas
.. Company and charterer instructions
.. Voyage instruction, type of voyage
.. Special instruction for maintenance and survey

. Complete change in command form marine 40 in duplicate
. Obtain authorization slip issued by MPA which to be attached to cert of registry and letter of memorandum
. A prudent Master , on arriving at his ship, he should have a checklist of “thing to do on joining”
. On the way to the master accommodation, from an initial impression of the ship condition and maintenance by
observing exterior condition such as draft marks, load line marks, condition of hull, deck superstructure,
rigging off accommodation ladder, safety net, LSA & FFA arrangements.
. Meeting outgoing master and hand over the letter of appointment and authorizations slip.
. Go through the hand over note, ship conditions report, manning level, company and chaterer instructions.
. Sight all the statutory certificate as per MSC-14/2005, any survey due, maintenance/ preparation for survey.
. Go through the filling system and all type of the log books.
. Article of Agreement & last port clearance
. Crew welfare and watch arrangement, any crew change/ repatriation in this port/ next port.
. Watch arrangements
. Take over all stores, ROB of FO/DO/GO/FW, provisions, medical stores as per scale and control drug under the
master’s control.
. Cash balance on board, ship accounts and any other account which deal with dollar and cents.
Get the combination number of the ship safe, any keys, and any password to the computer email system or security system.
. Ask about port rotation, trading areas, general condition of the ports, present cargo work, ship stability,
estimate time of completion, cargo plan, departure draft, trim, GM etc.
. Details of cargo gears, anchors, deck machinery, hatches and their conditions, maintenance condition and
schedule.
. Crew familiarization process, basic trainings, onboard training programs, drills etc.

. Go to bridge with master, familiar with bridge and navigation equipments, their operational conditions and deficiencies maneuvering characteristic of the vessel in various conditions, passage plans, charts and publications, GMDSS equipments familiarization and their operations
. Latest weather reports, weather expected in voyage.
. Enter new master name in OLB. Also the change over the command including the list of documents onboard in
OLB, signed by both masters.
. Enter new Master's particular, sign off/on in AOA, attached change of command form Marine-40 in certificate of registry.
. Ensure approved copy of stability booklet is available.
. Before sailing, the new master should:
.. Received familiarizations training as per Safety Management System, 6 hours/ 24 hours/ 7days accordingly.
.. Sight his own life jackets
.. Inspect Muster list and ensure that is up dated.
.. Read the relevant clause of the charter party or bill of lading
.. Note any charterer's voyage instructions and or side letter (try to spend some time on the in coming and out going message/ email, more or less will get the pictures of what is going on)
.. Consult the chief engineer on condition of the machinery and the bunker fuel and lub oil situation, ensuring
there are "safety margins / surplus" as per SMS.
.. Consult the chief officer on the situation with cargo, stability, ballast, fresh water, stores, maintenance of
ship, etc.
.. Examine the voyage plan, berth to berth, and the plan have made according to the company SMS.
.. The required charts and publications on board.
.. Check all the crew on boards as required by the Safe manning Documents.
.. Check the ISM documents, for any outstanding non-conformities (which may have time limit for action)
.. Read, and if necessary write Master bridge, port and security Standing Order.
.. Satisfy himself that he has personally exercised due diligence in ensuring that the vessel is seaworthy at the
start of the voyag.
.. Make the full inspection of the ship as soon as possible. Before taking the ship to the ship.

2. while taking over, you found the ship safety certificate is expiring and your route are from port A, B then C. Port A
is the port you taking over, Port b has no survey facility, cert exp. B4 Port B. what is your action? How long is the
max validity of the extension?

Answer: If a ship at the time when a certificate expires is not in a port in which it is to be surveyed, the
Administration may extend the period of validity of the certificate but this extension shall be granted only for the
purpose of allowing the ship to complete its voyage to the port in which it is to be surveyed, and then only in cases
where it appears proper and reasonable to do so. No certificate shall be extended for a period longer than three months,
and a ship to which an extension is granted shall not, on its arrival in the port in which it is to be surveyed, be entitled by
virtue of such extension to leave that port without having a new certificate. (Validity : first port of availability of survey
but not more than exceeding 3 months)

3. You served small company, advise owner if vessel can load grain in remote port in cold region which is above 75N lat, how are you going to advise him?

Answer:

4. How you would instruct your navigating officer regarding Passage planning?

Answer:

5. At 0200 hrs, your vessel run aground, state your immediate action. What is your LEGAL AND COMMERCIAL
ACTION? What is the main concerns (he want details in stability, breaking up, explosion, fire, etc) Partial
grounding stability in details?

Answer:

Actions will specifically depend on the type of accident or damage. Following are the main steps in
common:

Immediate Actions:

. Take the con

Follow emergency procedures as per company emergency procedures manual, which should include:

o Sound the emergency alarm
o Stop engine
o Announce by PA

o Head count, look for casualty and establish communication
o Close water tight doors.

. Activate SOPEP and take preventive actions in case of any oil pollution
. Order chief officer & Chief engineer for damage assessment on deck and engine room, which shall include :
o Water tight integrity of hull and subsequent breaches of same.
o Access rate of flooding if any.
o Condition of machinery space & status of engine and aux. machinery.
o Check hull for damage
o Visually inspection compartments where possible.
o Sounding the bottom tanks first, then further by the whole sets of tanks on board.
o Check the water depth around the ship, try to figure which side got more water and what is the rate of
grounding and how she take the ground.
o With hand lead line, determine the natural of sea bed.

. Obtaining following info's from emergency teams:
o Details casualties if any
o Any fire risk
o Any information regarding associates problem.

. On the bridge, the command team will do the followings:
• Maintain VHF watch (Ch16 & 13)
• Exhibit lights/ shapes and appropriate sound signals.
• Switch on deck light at night.
• Determine the vessel position
• Broadcast distress message if in grave and imminent danger and immediate assistance is required,
else broadcast urgency message as required.
• Report the incident with position and time to the following parties:
.. Local authorities
.. Owner and charterer (if any)
.. P&I club correspondents
.. Make accident report to MPA within 24 hours

. Try to minimize the immediate danger and the risk of fire, pollution and etc.
. Determine possibility of refloating the ship and take appropriate actions:

• Calculate height of tide, range and timing for high and low water, direction of the currents.
• Reduce the ship draft by:
.. De- ballasting
.. Jettison cargoes
.. Trim the ship by ballast or de-ballast if ship is only partially ground.

• Use on power to maneuver the ship
• Obtain assistance from port authorities, coast guard, salvage tugs.

Subsequent legal and commercial actions:

. Try to communicate with the Owners as soon as practicable after vessel running aground.
o the following should reported to owner:
.. exact position ship run aground
.. Part of the vessel run aground
.. Conditions of weather, wind, wave height, swell and weather forecast.

.. Extend the vessel aground (30%), the degree of stress on hull and machinery
.. Details of visible damage, including leakage from tank
.. Ship engines status
.. State the tide when vessel running ground.
.. Quantity and disposition of cargo on board
.. Master assessment of possibilities of refloating prior next high water
.. Details of any salvage tugs in the vicinity

. If circumstances permit, the master should always consult the owner, or the leading underwriter before agreeing
with any salvage contract.
. If it is impossible to contact the owner or the lead underwriter, master should consider Tug's tariff rate plus 50%to
100%. If the signing of contract is demanded by the salvage vessel, always ask for LOF 2000, no cure no pay.
. During re-floating operation, the following should be record in the deck log book, use annex page if necessary:
o The times of all events during salvage operation
o The progress of the operations.
o State of the tide, wind and weather.
o The nature of any special risk face by the salvors;
o Any damage or harm suffer by salvors;
o Nature and extend the assistance provided by the ship's crew and the equipments.
o Details of any damage sustained by the ship during the salvage operation.

. A detailed report of the operation together with relevant log abstract shall be send to the owner (shall consult the
Mariner role in collective evidence).
. Shall note a protest at first opportunity, stated the fact only, reserves right "will extend in time and place of
convenience."
. A statement shall been drawn up by master and sent to owner, showing vessel expenditures and consumption in
excess of the daily norm during the refloating operation, including:
.. Crew's overtime (itemized on the separate sheets)
.. fuel oil
.. diesel oil
.. lubricating oil
.. various engine spare parts, stores, wires, shackles and etc.. (shall itemized in separated sheet)

. Expenditure in refloating following the accidental grounding may qualify as general average.
. Master should discuss with owner regarding the port of refuge, port of discharging, port of repairs and declaration of
G.A.
. If the situation allows, the owner normally will make recommend (in consultation with their leading underwriters)
making for an effective port of refuge. i.e.: one with several repair yard capable of making temporary or permanent
repairs. (the procedure making for and arrival at P.O.R should be follow.
. M.S A Ch 179 section 107, required the report to MPA within 24 hours (fines up to $10,000 if failed to do so)
. Cause an entry to OLB.

. Stability concern when grounding:
o Virtue loss of GM (MM1)= P x KM / W or GG1=P x KG/ W – P
.. P= MCTC x t(cm) / Length of COF from AP(m)
.. P= Old displacement – New displacement
.. P= TPC x reducing of mean draft (cm)

o Ship may tipping off or capsize if spot grounding, just like the dry dock critical period.
o Shall consider to increase or improved the stability buy ballast or de-ballast and remove any free
surface effect.

Question: Following a grounding incident your tanker vessel has received bottom and side damage to the outer hull.
Pollution is evident from the damaged tanks. What action would you expect to take as Master of the vessel?

Answer: Assuming that no risk to life is present the Master's priority would be to direct his attentions to reducing the
pollution effects to the environment. This could be carried out in many ways and the following methods are suggested:

a. Order the upper deck scuppers to be sealed and prevent access overside for any oil from damaged tanks being
pressured upwards through air pipes or sounding pipes.
b. Transfer oil from damaged tanks internally, into known structurally sound tanks.
c. Request shuttle tankers or oil barges to attend, to transfer oil externally.
d. Make use of anti-pollution chemicals and order more supplies to be flown in to the area to combat on board
pollution, only with the approval from the coastal state administration.
e. Order barrier/boom apparatus to be deployed if available (alternative improvisation – use mooring ropes to
encompass the spillage area), by rescue boat if weather permit.
f. Commence clean up operations soonest, to include oil recovery vessels, skimmers, and the like.
g. Instigate repairs (or temporary repairs) to damaged areas as soon as practical, without causing any additional
fire risk. Proper procedures to follow such as gas freeing, enclosed space entry, hot work permits and risk of
assessment shall be follow.
h. Contact the Marine Pollution Control Unit (MPCU) and seek advice as to improving anti-pollution
methods.
i. Cause an entry to be made into the Oil Record Book to reflect the incident and what actions have been taken.
j. Establish a fire patrol in the area, from the onset of the incident. Prepared the FFA for any emergency.
k. Complete an incident report to the MAIB.

Communications

. It must be assumed that communications following the grounding incident have included contact with
owners/underwriters/charter party, etc.
. Local Coastguards via the Coast Radio Station should have received an 'urgency' call. A position report being made
and a weather forecast obtained.
. Requests for tugs, skimmers, barges and specialist vessels may be appropriate, together with oil pollution effective
chemicals and barrier equipment.

6. Question: What is the different between LOF and towage contract ?

Answer: There are two main types of salvage agreement:

.. on the basis of ordinary tariff, fixed lump sum or daily rate; and

.. on the basis that remuneration will be settled later, whether by agreement, court judgement or arbitration.

- Salvage services arranged on basis of ordinary tariff, lump sum, etc. is usually cheaper and should always be
obtained if time allows, e.g. where the vessel is “soft aground” in a sheltered, non-tidal harbour and not in imminent
danger. In these cases assistance will normally be arranged by the owner through negotiation with tug companies, etc.
Salvage on this basis may also be used when a sunken or capsized vessel is raised.
- Salvage on the basis that remuneration will be settled later includes services rendered in times of imminent
danger to the ship or environment.
- The agreement most often used in such cases is Lloyd’s Standard Form of Salvage Agreement, commonly known
as “Lloyd’s Open Form” or “LOF”.

- Various “national” forms of salvage agreement, such as the Japanese Form, the Beijing Form, the Moscow Form and
the Turkish Form, are in local use around the world. The law and jurisdiction in any arbitration or litigation under
these contracts will generally be the local law in the country of origin of the form.

7. Question: He put himself in position as salvor and ask what is his benefit from LOF ?

Answer:

Advantages of using LOF may be summarised as:

a. agreement can be reached via radio (if witnessed) or other telecoms methods; there is no need for the form to be
signed until the salvage services have been completed;
b. the agreement is not likely to be disputed;
c. LOF is basically a “no-cure, no-pay” agreement;
d. English law applies to claims;
e. the salvor has a maritime lien in the property salved, even after its sale to another party (e.g. where a salved ship
or cargo is sold to try to avoid having to pay salvage charges);
f. salved property can be quickly released on payment of security to the salvor;
g. the salvor gets an interim award;
h. disputes are referred to arbitration in London, saving legal costs;
i. underwriters’ liability cannot be increased beyond that for total loss (i.e. underwriters will not be liable for “sue
and labour” costs where a total loss occurs); and
j. excessive claims by salvors are avoided.

8. Question: Assessment after grounding, if you found out there is no more imminent danger what you do?
Answer: In this situation, normally owner will arrange the tug on towage contracts on fix tariff. Which is much
cheaper compared to towage under LOF.

9. Question: While waiting for tug hired by company, you received weather message that a low pressure is forming in
the vicinity. State what is your action?
Answer: First have to predict how bad will be the weather before the arrival of the tug hired by the company. If the
forecast stated gale force from offshore will arrive well before the hired tug arrival. I have no choice to request for
the towage or salvage by all means, this is to prevent the ship from getting further to the shore side, or if the storm is
from the side, there is the possibility to capsize the ship.

- If no one is around for help, I will choose to ballast the ship with idea of having more weight hopefully the ship
will not move by the heavy swell to further in towards shore side.
- Necessary to improve the ship stability by removed all the free surface effects.
- Prepared the ship for heavy weather.
o Bad weather precautions (At Sea):
o The vessel must be made as seaworthy as possible before the onset of bad weather, paying particular
attention to the following:
a. Must follow the company SMS of bad weather procedure & filled up checklist.
b. Think safety of the crews and safety of the ship and safety of the cargoes, they are all inter related.
c. Divide the crew members into 3 groups.
d. Check all deck lashings, doubling if require.
e. Tighten the boat grips.
f. Batten down all the cargo hold, close all the openings.
g. All openings on deck such as sky lights, booby hatch, ventilation flaps, all must make weather tight.
h. Prepare lifelines through out the weather deck
i. Remove all loose gears from deck.
j. Try to improve the stability; by pressing up the tanks or transfer the liquid to full another tanks, this

is to reduce the free surface effects.
k. Make sure all watertight doors at the superstructure are closed.
l. Extra lashing for anchors.
m. All LSA & FFA should be check for the accidental loss.
n. All departments head are to take necessary precautions, E/R personnel are to check all the items,
spares, and tools are properly stowed and secured. Catering departments shall do the same and no
soups.
o. Make formal safety assessment.

o At anchorage:
o Shall carry out the same precautions for vessel at sea. Master shall take consideration whether to bring
the ship to sea. Considerations shall base on how much sea room is available at the anchorage, the
traffic density, number of vessel in anchorage, the distance within the ship in anchorage, fuel rob, ship
type, any deck cargoes and etc.
o If master decide to stay in the anchorage, the may engine shall be on stand by for immediate
maneuvers. Pay out more cable or drop another anchor if necessary, open moor may be a good option
provide the ship already having idea the direction approach of the storm.
o The master will run the engine to ease the stress on the cable if necessary.

o Ship aground:
o If the storm approach will be the 50 years storms. Safety evacuation by helicopter may be one of
the options.

10. Question: While waiting for the tugs, suddenly high tide and the ship re-float, state your action?
Answer:

Master shall inform the owners or the leading underwriter for them to:

- Cancel the towage contract with tug company
- Discuss with owners, leading under writers, class surveyor about the port of refuge, port of discharging and
port of repairs. Have to get permission from the underwriter and class surveyor, most likely the underwater
survey have to carry out for the ship to remain in class and under cover.
- Inform the coastal station, inform the ship in the vicinity.
- Discuss with the owner about the declaration of the general average. May necessary to secure bond from the
charterer and cargo owner before delivery of the cargoes.

11. Question: What is the consideration when choosing port of refuge?

Answer:

Practical aspects of choice of a 'port of refuge' would be determined by:

- The size of the port.
- The available depth of water inside the port and the respective underkeel clearance for the vessel to be able to
enter and berth.
- Shelter afforded to the effected vessel
- Whether the port had repair facilities capable of rectifying any defects to the ship, this shall including the survey
facilities.
- Distance to go
- The situation of the port, is the place peace or not, the local authority friendly or not

- Best is get the recommendation from the leading underwriter (if the vessel is going to make the claims), under
the notice of claims and tender clause, they have the right of veto, if failed to complied, may subjected to 15%
deduction from the claims.

Port of refuge procedure

Procedure at any particular port or place of refuge will obviously vary with the circumstances surrounding the event
necessitating the ship's arrival, but in general, the following basic steps should be followed.

. As soon as the decision is taken to discontinue the voyage and make for a port or place of refuge, (whether under tow or
otherwise) inform the owner and charterer (if any), stating the reason for the deviation. Give relevant details to duty
superintendent; he will probably call the company's insurance manager, who will contact appropriate insurers' staff. In
case of hull or machinery damage, the owner's staff will contact the classification society, who will inform their local
surveyor.
. Record the ship's position. Get R.O.B at point of deviate until departure from the port or place of refuge; keep accurate
records of events and expenditure, etc., for eventual delivery to the owner and average adjuster.
. Owner to appoint agent for the port of refuge to handle the vessel's visit.
. If the cause of the deviation is an "accident" as defined in the MSA section 107, prepared an made report.
. Call the agent once confirmed. Pass ETA and information necessary for making preparations for the vessel's arrival,
including tonnage, length, flag, P&I club, classification society, etc. Request the agent to notify:
o port State Administration if vessel is damaged or seaworthiness is affected;
o harbour master or port authority. Inform port authority of the full facts, as the authority may want to keep vessel
outside port until cargo discharged, etc. Give details of the nature and severity of damage, mentioning any
disabled navaids, steering gear, machinery, etc. State any pollution hazard.

o pilot station, linesmen, boatman, customs, port health, immigration, etc.
o local correspondent of the owner's P&I club. (See club handbook for name and address, or ask owners.) A representative from the correspondent firm, or a surveyor appointed by the correspondent, should attend on arrival.

• On arrival at the port or place of refuge, the salvor (if any) will require salvage security, which should be arranged by the owner and cargo owners. Failing this, the salvor may have vessel arrested pending satisfaction of his claim.
• Obtain health clearance in accordance with local regulations (as advised by the agent).
• Enter vessel in with customs "under average".
• Inform the owner (and charterer, if any) of vessel's safe arrival.
• Owners will declare general average. (Any of the parties involved may declare general average, but the owners will normally do this since they are closest to "the action".)
• Note protest as soon as possible but in any case within 24 hours, in compliance with local custom (ask the agent about this), reserving the right "to extend at a time and place convenient".
• Where there is hull or machinery damage, the owner will notify his insurance broker if the port of refuge is in the UK.
Abroad, the agent should be requested to notify local Lloyd's Agent (a requirement of the Notice of Claim and Tenders Clause in Institute Time Clauses - Hulls 1.10.83).
• Hull and machinery underwriters normally instruct a surveyor, in major cases from the Salvage Association.
• Where there is hull or machinery damage, a class surveyor, if available at the port, will inspect and report on the damage, stipulating repairs necessary for the vessel to maintain class. Temporary repairs may be acceptable.
• If no class surveyor is available, the class society should be contacted, and will advise the appropriate steps to take in order for class to be maintained until a port can be reached for survey. (Thanks to the ease of modern communications, the old practice of requesting two independent masters or engineers to inspect temporary repairs and issue a Certificate of Seaworthiness should no longer be necessary. Even where a class surveyor cannot reach a damaged ship, the classification society can usually be notified of the damage and asked for instructions.)

• If cargo damage is probable, or cargo discharge is necessary before repairs can be made, call a hatch survey before
commencing discharge. Employ only registered and unbiased surveyors recommended by the P&I club correspondent.
Cargo interests should be notified so that they can appoint their own surveyors. Remember that cargo surveyors are
appointed by cargo interests and may criticise the master's actions or allege that the vessel was unseaworthy. Be guided
by the P&I club correspondent as to who to allow on board and about making statements which may adversely affect the
owner's legal position (see I05g.1).
• If the voyage is being terminated and cargo owners are taking delivery of their consignments, General Average Bond
and General Average Guarantee forms will first have to be signed (see I02i.3a and I02i.3b). The owner's lien on cargo
should be exercised if necessary; this should be discussed with the owner and agent.
• Arrange cargo discharge (under survey) and either trans-shipment or warehousing of cargo during the repairs, if
necessary. (This will depend on the length of time in port, nature of cargo, etc.)
• On receipt of class surveyor's report re- hull/machinery damage, the owner will advertise for tenders. (Superintendents
and the Salvage Association surveyor will jointly attend to this, bearing in mind the Notice of Claim and Tenders Clause
and underwriters' power of veto. Tenders should only be accepted with guidance from Salvage Association surveyor and
Lloyd's or IUA Agent.)
• Carry out repairs under class and Salvage Association surveyors' guidance.
• On completion of repairs, class surveyor will carry out another survey. If, in his opinion, the vessel is seaworthy he will
issue an Interim Certificate of Class, and will send his report to the classification society. If acceptable to the society's
committee, the vessel will retain class. If the class surveyor is employed by an authorised society, he may also issue
provisional statutory certificates on behalf of MCA (or other flag State Administration) to enable the vessel to continue
her voyage.
• Reload cargo (under survey) if voyage being continued.
• Extend Protest to include all details of the damage and repairs. Obtain copies for owners.
• Port agent will pay repairers. (If unpaid, repairers will have a maritime lien on the vessel.) Allow general average and
Salvage Association surveyors (representing H&M insurers) to see the agent's account before paying.
• Send all relevant documents to the owner for onwards delivery to the average adjuster.
• Enter vessel outwards with Customs (in accordance with local regulations, as advised by the agent). Obtain outwards

clearance/ port clearance.
• Continue the voyage.

Evidence required at port of refuge

. In most general average cases the main evidence required for the adjustment comes from the various survey reports,
supported by statements by witnesses and ship’s records, as listed below.
. Full and accurate records should be kept of the general average incident and the call at the port of refuge, including details
of all the various parties involved and their actions.
. Photographs and video footage may be useful; the general average statement may take more than a year to produce.
. Where salvage services are engaged, a full record should be kept of the salvor’s actions and of the equipment used by
both parties.
. In order to assess the various contributory values, the average adjuster will require the following documents:
o all general average security documents including signed average bonds, average guarantees, counterfoils of
average deposit receipts and cancelled deposit receipts;
o casualty reports from the master;
o certified extracts from deck and engine room logs;
o copies of extended protests;
o survey reports on hull and machinery damage;
o survey reports on cargo lost or damaged by general average sacrifice;
o account sales of any cargo sold;
o copies of any shipping invoices;

o copies of telexes;
o accounts for disbursements incurred together with all supporting vouchers;
o cargo valuation forms;
o manifest of cargo onboard at time of the general average act;
o copies of bills of lading;
o portage account for the voyage, and an account of stores consumed;
o any other evidence relating to the casualty.

Personnel likely to visit the ship in connection with a general average act

- will usually include:

. owners' representatives (e.g. marine or engineer superintendents);
. port agent;
. a surveyor on behalf of combined general average interests (who may be referred to as the "general average
surveyor");
. a surveyor on behalf of the hull and machinery underwriters;
. a surveyor on behalf of loss-of-hire underwriters;
. an independent surveyor on behalf of cargo interests;
. a salvage master (who is owners' consultant);
. a class surveyor (from ship's classification society);
. various contractors' representatives (from firms involved throughout the salvage, etc.);
. various other local officials (marine Administration, port State control, customs, immigration, port health, etc.).

- One or more of the surveyors instructed are likely to be from the Salvage Association (see G02b.2), although each surveyor
so instructed will usually be representing a different principal.

12. Question: The ship needs to be dry docked and there is the cargo on board, state your actions.
Answer:

• If cargo discharge is necessary before repairs can be made, call a hatch survey before commencing discharge.
Employ only registered and unbiased surveyors recommended by the P&I club correspondent. Cargo interests should
be notified so that they can appoint their own surveyors. Remember that cargo surveyors are appointed by cargo
interests and may criticise the master's actions or allege that the vessel was unseaworthy. Be guided by the P&I club
correspondent as to who to allow on board and about making statements which may adversely affect the owner's
legal position.

• Arrange cargo discharge (under survey) and either trans-shipment or warehousing of cargo during the repairs, if
necessary. (This will depend on the length of time in port, nature of cargo, etc.)

13. Question: who will pay for all this?
Answer: Transfer cargo to effect repaired will pay under GA.

14. Question: While doing so you found out two reefer container will not make it to the destination, what is your action?
• Answer:

First is try to establish contact with the cargo owner to inform about the situation and his actions; if cannot get the cargo
owner, the Master will act as agent of necessity.

- As an agent of necessity, the master of a vessel in peril:

o will have implied powers to act in best interests of all owners of property in his care;
o may take special emergency measures to preserve the property in peril or minimise any loss due to
damage already suffered;
o may make a General Average sacrifice or expenditure, e.g. have goods landed, transshipped,

reconditioned or even sold, without liability for misappropriation;

o may deviate from the contract route (although he would have to show very good reason for doing so);
o may enter into a salvage agreement which may oblige the property owner to contribute to the salvor's
award.

- Where property is owned by more than one owner (e.g. as in the case of a loaded general cargo ship), the master is
the agent of necessity in respect of each of property owner.
- Examples of maritime situations where agency of necessity may arise are:
o where a salvage agreement must be urgently made by a master (on behalf of the owners of cargo, cargo
containers and freight at risk, as well as the shipowners) but there is insufficient time to contact the
respective owners for their instructions;
o where a carrier, who has goods in his possession which are starting to deteriorate, and who is unable to
contact the owner, takes action to preserve the goods or even sell the goods on auctions, and
o (perhaps) where a shipmaster of a vessel loading in a port which comes under military or terrorist attack,
makes an emergency departure from the port to preserve cargo from destruction or capture.

15. You received a distress call 50 miles. What will be your actions?

Answer: (See COMSAR circ 25 flow diagram on correct procedures to react to the distress alert)

- In no case should a ship transmit a DSC distress relay call on receipt of a DSC distress alert on either VHF DSC or
MF DSC channels.
- Distress relay calls on HF channels should be initiated manually

My actions will be:

- Check distress position and own ship position.
- If able to provide assistance without endangering own ship and crew's
. Consult COMSAR. Circ 25 flow diagram on receipt of distress alert:
o Listen on VHF ch16 or 2182khz for 5 mins
o If CS or RCC does not acknowledge the call, acknowledge the alert by radiotelephony (ch.16/
2182 khz)
o Inform CS or RCC
o Enter details into the log
o Reset the system.

. Consult IAMSAR volume III for SAR operation.
. Establish communication as soon as possible and obtain details of distressed vessel; such as:
o The Ship identity, ship name, call sign and etc.
o Position
o Course
o Speed
o Nature of distress
o Type of assistance required

. Provide vessel in distress my own ship info such as:
o Own ship identity
o Ship current position
o Ship course and speed
o ETA to the scenes
o Distress vessel bearing and distance

. I will try contact the RCC/ SMC via coast radio station, try to obtain as much information from the SMC such
as the SAR action plan, the identity and the contact of the OSC.
. I will carry out the on board preparation for SAR.
. If I cannot find any survivor after going to the scene, I will report to RCC and Conduct the expanding square

search.

.. On board preparations for proceeding for search and rescue:
o Post extra look out (if good visibility, put them high up from the horizon; if visibility is bad, put them
near to the sea surface at fwd station)
o Ship proceed at full speed but inform C/E to standby the engine for maneuvering.
o Inform owner / charterer about the deviation
o Note down the point of deviation and R.O.B
o Assign duties to Officers.
.. Instruct C/O to prepare:
• Prepared the hospital for receive any casualties, stretchers, blankets, food, medicines.
• Prepare rescue boat for immediate launching
• Prepared rescue crew s and check communication.
• Get all the LSA ready for immediate use: lifebuoy, LTA, buoyant life lines and etc.
• Rig guest wrap, accommodation ladder, scrambling nets and lifelines running from bow to astern at the water edge at both side.
• Prepare cranes and derricks with cargo nets for recovery of survivors.
• Test search light, signaling lamp, torches

.. Instruct 2nd officer to:
• Plot both vessels' positions and establish course to rendezvous at maximum speed and update ETA
• Plot other vessels within the search vicinity together with their respective movements.
• Change over to manual steering.
• Plot search pattern.
• Keep continuous radar watch.
• Track all vessels in the vicinity.

.. Instruct 3rd officer to:
• Contact RCC via CRS
• Maintain communication radio watch and update distress information.
• Monitor weather report.

16. Suppose you not proceed for rescue, in what circumstances you can do that? What is your actions?

Answer:

SOLAS regulation V/33.1 provides that if the ship receiving the distress alert is unable or, in the special circumstances of the
case, considers it unreasonable or unnecessary to proceed to their assistance, the master must enter in the log book the
reason for failing to proceed to the assistance of the persons in distress, taking into account the IMO recommendation18 to
inform the appropriate SAR service accordingly.

Masters of ships will be released from the obligation imposed by on V/33.1 on learning that:

1. Their ships have not been requisitioned; and

2. One or more other ships have been requisitioned and are complying with the requisition.

The regulation further provides that this decision must, if possible, be communicated to the other requisitioned

ships and to the SAR service.

SOLAS regulation V/33.4 provides that the master of a ship will be released from the obligation imposed by

regulation V/33.1 and, if his ship has been requisitioned, from the obligation imposed by regulation V/33.2 on being

informed by:

.. the persons in distress; or by

.. the SAR service (OSC/SMC); or by

.. the master of another ship which has reached the persons in distress,

- that assistance is no longer necessary.

- If the ship receiving the distress alert is unable to do so (e.g. because it s disabled with an engine breakdown)
- In the special circumstances of the case, considers it unreasonable or unnecessary to do so. (The master of a loaded gas
carrier might consider the obligation to assist a tanker on fire unreasonable)
- The master of a ship in a busy shipping area might consider the obligation to assist a ship 100 miles away unnecessary,
where he knew that many other ships would be closer to the distress position.
- If the ship is unable, or in the special circumstances of the case considers it unreasonable or unnecessary to proceed to
assist, the master must personally enter in the Official Log Book the reason for failing to proceed. The entry must be
witnessed by a crew member.

17. Bosun comes and complaint about the foods, what is your actions?

Answer:

.. If three or more seamen employed in a Singapore ship consider that the provisions or water provided for the seamen are
not in accordance with safety regulations containing requirements as to the provisions and water to be provided on ships

(whether because of bad quality, unfitness for use or deficiency in quantity) they may complain to the master, who
must investigate the complaint
.. If the seamen are dissatisfied with the actions taken by the master as a result of his investigation or by his failure to take
any action, they may state their dissatisfaction to him and may claim to complain to Director of marine or a proper
officer.
.. The DOM or proper officer must investigate the complaint, and may examine the provisions and water, or cause them
to be examined.
.. If the master is notified in writing by the authority or proper officer that any provisions or water are unfit for use or not
of regulation quality, he must replace them within a reasonable time.

MASTER'S ACTION IN RESPONSE TO COMPLAINTS

.. When three or more seamen complain about provisions or water, the master should, as soon as possible, make an
entry in the Official Log Book (narrative section) of the names of the seamen making the complaint, and the nature of
and reason(s) for their complaint.
.. In compliance with section 71 of the Merchant Shipping Act, the master should, as soon as reasonable and practicable,
investigate the complaint and take appropriate action, if necessary, to remedy it. (Complaints are more likely to be
made in the evening than at other times, and it may not be practicable to take immediate action.)
.. Chapter 14 of the Code of Safe Working Practices relates to food preparation and handling; there is no chapter
specific to domestic fresh water.
.. A further entry should be made in the Official Log Book detailing the master's response to the complaint.
.. If the seamen are dissatisfied with the master's action in response to their complaint, a further entry should be
made in the Official Log Book and arrangements made to facilitate the seamen's complaining to director or proper
officer (e.g. a Singapore consul) as soon as practicable.
.. Where a complaint is made about some other matter, consideration should be given as to whether to record it in
the Official Log Book, even though no legislation requires this. It may be prudent to record any complaint that is not

of an obviously frivolous or vexatious nature, especially where it relates to the safety of the ship or the safety or
social well-being of any person on board. Where a complaint is of a matter included in paragraphs 9 or 11 of the
Merchant Navy Code of Conduct, or any other code or rules of conduct applicable on board, the complaint should be
recorded in the Official Log Book and the matter investigated according to the procedure outlined in E10b.
.. Food committee should be in place to handle this kind of problem, which always seems effective.

18. Crew complained to director of marine, investigations carried out and found food got no problems? What is the
owner or master protection to such complains should not be misused?

Answer: Fine will be imposed on crew if found guilty.

19. Small ship in distress, stating engine problem, and request you to tow her to nearest port, what will you do?

Answer:

.. It should be noted that there is no statutory obligation to save maritime property in danger of being lost. Any
attempt by the master of a merchant vessel to save property is a commercial venture and not a statutory obligation.
.. A vessel requiring a tow (e.g. a disabled, drifting vessel) is not necessarily in distress. The master of a vessel
offering a towage service should, therefore, carefully consider the following points before contracting to perform a
salvage service:
o Does the contract of carriage (as contained in the charter party or bill of lading) give the vessel the liberty
to tow?
o Are there sufficient bunkers and/or fresh water on board for the tow, and will sufficient reserves be

maintained, throughout and after the tow, to meet the stipulations of the owner or charterers?
o Is there a possibility of missing any cancelling date under a charter party? (See F05b.1.)
o Does the nature of the cargo permit a lengthening of the voyage? (This is relevant especially in reefers.)
o Is the vessel's machinery of adequate power and in good enough condition for towing?
o Is the value of the vessel requesting the tow, plus her cargo, of sufficient value to merit a salvage service?
o Has an agreement to salvage on Lloyd's Open Form terms been made? (See below.)
o Has a port of destination or place of safety been agreed? (Where the casualty is near the UK it is preferable
to tow the vessel here rather than to a Continental port.)
o Have the owner or manager and any time charterer been notified, so that additional hull insurance can be
arranged if necessary?
o Are proper records of all events and circumstances to date being kept? (See H05e.4.)

.. Lloyd's Open Form 2000 (LOF 2000) is the most appropriate contract to be offered to the vessel requiring
assistance. An offer of salvage services on LOF 2000 terms may be agreed to by sending a message as follows:
"OFFER SALVAGE SERVICES ON BASIS LLOYD'S OPEN FORM 2000 LOF 2000 NO CURE NO
PAY.MASTER (SHIP'S NAME)".

20. You received a weather warning on fax, tlx, and navtex, confirming a bad weather in vicinity, state your actions?
(break it in to bridge, deck, reporting, logbook entries, hourly monitoring and logging, pratical actions to stay away
from the storm centre. (while notifying whom all to inform?)

Answer:

Formation condition:

. A large sea area (warm ocean water) with surface temperatures of >27 deg Celsius. Throughout a depth 46m.
. Away from equator, northern hemisphere latitude 5 deg to 25 deg north, southern hemisphere latitude 5 deg to 18

deg south. Storms do not form within 5 deg latitude of equator, because of lack of Coriolis force, the force that
causes the cyclone to spin.
. A region of small vertical wind sheer (less than 20 knots) between the surface and the upper troposphere.
o Vertical wind shear: change in the wind speed with height.

. A pre-existing depression (near surface disturbance)

. Relatively moist air near the mid level of troposphere. (troposphere : near equator about 16km & near poles about
8km)

NB: Coriolis Force

an artifact of the earth's rotation

Once air has been set in motion by the pressure gradient force, it undergoes an apparent deflection from its path, as seen by an observer on
the earth. This apparent deflection is called the "Coriolis force" and is a result of the earth's rotation.

As air moves from high to low pressure in the northern hemisphere, it is deflected to the right by the Coriolis force. In the southern
hemisphere, air moving from high to low pressure is deflected to the left by the Coriolis force.

The amount of deflection the air makes is directly related to both the speed at which the air is moving and its latitude. Therefore, slowly
blowing winds will be deflected only a small amount, while stronger winds will be deflected more. Likewise, winds blowing closer to the
poles will be deflected more than winds at the same speed closer to the equator. The Coriolis force is zero right at the equator.

Formation region:

North Pacific and North Atlantic Ocean: seasons: April to December; peak: July to Nov

North Indian Ocean: seasons: April to December; double peak: April to June & Sept to Nov

South pacific and south Indian Ocean: season: Nov to May; peak: Jan to March

Caused when:

. Latent heat release by the air moisture , when air moves up, available in tropic.

. Unstable condition of atmosphere, extreme surface heating.
. Evolution/ Developing is only possible where wind shear has a small value- away from the jets stream.
. Eye initially appears in upper troposphere (a pre-existing depression)- air descends – warms.
. Causes a decrease in surface pressure - the TRS develops
. Continues to develop under favorable atmospheric and sea surface condition.
. Normally decay over land due to lack of moisture, and in high lat due to decrease in surface temperature.

Growing process:

1. Pre existing disturbance (depression or low pressure) forms.
2. Disturbance moves or stay over the warm ocean water (>27deg), and upper level winds remain weak,
the disturbance can become more organized , forming a tropical depression. (20 to 34 knots)

. Remember!!! Warm water power the storms:
1. Water vapor (gases state) rises, it cools.
2. The cooling cause the water vapor to condense in to a liquid (we see as cloud)
3. In process of condensation, heat released.
4. The heat warms the atmosphere, making the air lighter still which continue to rise into the atmosphere.
5. As it does, more air moves in near the surface to take its place which is strong wind we feel from these storm.
3. Once the tropical depression intensified to max wind between 35 to 64 knots, its become tropical storm.
This is the time assigned name. The storms at this stage become more organized and more circular in
shape. (the problem of the storms start from heavy rainfall)
4. When the surface pressure continues to drop, sustained wind reach 64knots, tropical storms become
hurricane.

The weather signs/ typical warning signs of TRS?

. Radio storm warning
. Whether the ship in the TRS moving area, said 5 to 35 deg latitude.
. Long swell from direction of the storm
. Corrected barometer reading – 3mb below mean of that area : expect; 5mb below the mean of that area: confirmed
. Barometric reading: slow fall (5mb below mean) – 500 to 120 nm, wind force: 6 to 8
. Barometric reading: marked fall (10mb below mean)– 60 to 120 nm, wind force >8
. Barometric reading: rapid fall (20mb below mean) – 60 to 10 nm, wind force about 12
. Appreciable change in strength and direction of the wind
. Clear sky- preceding day
. Clouds pattern : cirrus - altostratus – then cumulus clouds
. Rain squalls of increasing frequency and violence
. Change in the appearance of the sky.

Master Action following TRS is evidence

. Ascertain own ship details in relation to storm position:
1. Bearing of storm centre, by buy ballots laws
2. Semi circle in which the ship situation
3. Path of the storms

. Ship security
1. Order the respective department to make secure their area.
2. Secure the deck, cargo, anchor, accommodation
3. Improve stability
4. Secure engine room
5. Report position to owners and agents
6. obtain latest weather reports

. Legal requirements
1. Reports to nearer coast station and ship in the vicinity if no warning received.
2. Log reports if any re- routing/ deviation.

. Ship handling
1. Heave to, while ascertaining the storm position.
2. avoid passing within 75nm of storm centre

3. Prefer to stay outside 200nm.
4. Adopt course to take ship out of storm centre
5. Make frequent checks to ensure that any action taken is having the desired effect.

TRS – avoiding action in TRS

o Vessel secure alongside
1. Batten down and secure all hatches, lower all derricks and or cranes. If ship cannot make for the open sea or
storms shelter anchorage, set extra moorings fore and aft, rig fender and lay out anchor with tug assistance
if possible.
2. Place engine room on stand by and maintain the vessel on alert status for passing storms.

2. Vessel at anchor
1. Have both anchor down with increase scope of cable, engine should be employed to ease the weight on the
cable.

3. Vessel at the roadstead
1. Probably better to run the ship to open sea for more sea room for maneuver.
2. Decision to run to open sea shall make early.

3. Storm surge is likely to happen in the shallow sea area.

4. Vessel in the open sea conditions
1. Any action taken by the master will be depending on the ships positions relative to the storms position and
movements.
2. The option will be outrunning the storms storm if the vessel has sufficient power/ speed.
3. Or “heave to” and then let the storms pass by, to open distance storm and the vessel

Plotting the TRS – Method of plotting the storms

1. Plot the storm centre on the chart
2. Construct a 75nm circle around the position(this represent the absolute “no go area”
3. Draw the predicted path of the storm, in the direction of the movements
4. Draw tangent to the 75nm circle, at 40 deg angles. On either side of the predicted path (these represent the
extreme limits of probable paths of the storms.)
5. From the storm position draw arc, equal to predicted movement of the storms in next 24 hours and 48 hours.
6. fan are sector trace by 24 hours arc will be consider as “imminent area of danger”, while the sector cover by 24
to 48 hours may be considered as the “ area of the probable danger”
o the position and the area of the fan shall be updated at every new forecast, at least every 12 hours, and the
situation and ship course shall be review.

How to avoid storm centre?

Buys ballots law:-

. In northern hemisphere, if the observer face the wind, the low pressure (storm centre) will lies to right:
- 12 points (135 deg), when the barometer begins to fall.
- 10 points (112 deg), when the barometer has fallen 10 mb
- 6 points (68 deg), when the barometer has fallen 20 mb

. in southern hemisphere, if the observer face to the wind, the low pressure(storm centre) will lies to left:
- 12 points (135 deg), when the barometer begins to fall
- 10 points (112 deg), when the barometer has fallen 10mb
- 6 points (68 deg), when the barometer has fallen 20 mb

TRS – Establishing Ship Location:-

. The location of vessel in the proximity of a tropical storms is determined by observation of the true wind shift and of
any pressure change:

Wind
direction

Northern hemisphere

Southern hemisphere

Veer

RHSC (DSC)

(if pressure fall ship in advance quadrant)

RHSC (NSC)

(if pressure fall ship in advance quadrant)

Back

LHSC (NSC)

(if pressure fall ship in advance quadrant)

LHSC (DSC)

(if pressure fall ship in advance quadrant)

Steady and
pressure
falling

On path

On path

TRS—Action to avoid storm centre

Northern hemisphere

DSC

Keep wind 3 points on the stbd bow at ship maximum speed

NSC

Keep wind 4 points on stbd quarter at ship max speed

On PATH

Keep wind 4 points on stbd quarter at ship max speed

Southern Hemisphere

DSC

Keep wind 3 points on the port bow at ship max speed

NSC

Keep wind 4 points at the port quarter at ship max speed

On Path

Keep wind 4 points at the port quarter at ship max speed

All the above maneuvering shall maintain the wind direction on the bow or quarter as necessary until the pressure
increase and the wind intensity decrease. OOW should maintain the records, for the whole process on every 30 minutes
or hourly basis, the wind direction, force, swell direction and forces, sea state, barometer pressure and which deems
necessary (shall use the layout in the deck log book as reference).

Heavy weather precautions

Inform chief Officer to secure the deck:

.. follow the heavy weather contingency plan
.. Divide the crew into groups
.. Deck Securing party, Cargo securing party and LSA, FFA and accommodation securing party

.. Deck securing party jobs including but not limited to:
o Rigging life lines along the deck (25-30mm fiber rope)
o Complete weather tightness of the hatch cover by; side cleats, drainage, hatch sealing tape if required.
o Close all ventilator, sounding pipes, goose neck
o Securing deck cranes, gangway with extra lashing
o Cargo winches, mooring winches to be cover by the tarpaulins
o Clear scupper and freeing port
o Secure all loose gear on deck
o Secure all booby hatch
o Sounding all tanks and bilges
o Extra lashing for anchor
o Spurling pipe to be properly cover by the cover or cemented
o Storm plates to be in plates and secured
o All ropes on deck to stow in to rope lockers

.. Cargo lashing party jobs shall include but not limited to the following:
o Cargo lashing team normally is just to check and confirmed all the lashing in the tight position, extra
lashing may be needed but only the ship supplied with extra lashing.
o Lashing must keep all tight is because one loose the rest will start to follow.
o Both side lashing must be balance
o Chains normally should not mixed with wire during the lashing.

.. LSA FFA and accommodation lashing team will have to ensure:
o Lashing for lifeboat and life rafts is sound
o Other LSA and in readiness status
o Dead lights, port holes, accommodation doors to be shut properly
o All items in the stores, office, TV room, gymnasium shall be fast

.. Stability matter.
o Tried to improve ship stability by ballast the ship, if the ship is fitted with cargo hold as ballast tank,

ballasting shall be commence as soon as possible, do not wait until the ship start to roll then you start to

ballast, the free surface effect in side the hold will worsen the situation.
o Remove all the free surface effect, including pump out the swimming pool.
o Arrange for heavy weather routine, such as no more deck works, more focus in side accommodation.
o Inform chief cook, no more soups.

.. Bridge matter/ navigation safety
1. Consult an advise Master regarding the aspects of re-routing.
2. Verify vessels position.
3. Update weather reports.
4. Plot storm position.
5. Update vessels position and inform shore-side authorities.
6. Engage manual steering.
7. Revise Estimated Time of Arrival (ETA).
8. Secure Bridge against heavy rolling.
9. Reduce speed in ample time to prevent 'pounding'.
10. Organize watch to suit three man watch principle
.. Note all the preparations in the log books.

.. Engine room matter
1. Inform ch. Engr the same
2. May need to delay any heavy maintenance jobs
3. Secure the E/R for heavy seas, especially that heavy spare part lying on deck must be securely fasten.
4. Instruct him to work closely with C/O regarding the stability.

21. While avoiding the storms, your chartrer say that you cannot go beyond a certain distance, they are losing money,
why they should hire you?
Answer:

SOLAS Regulation 34-1 Master's discretion

The owner, the charterer, the company operating the ship as defined in regulation IX/1, or any other
person shall not prevent or restrict the master of the ship from taking or executing any decision which, in
the master's professional judgement, is necessary for safety of life at sea and protection of the marine
environment.

Masters Authority as per Safety Management Manual (ISM code)

.. The master is ultimately responsible for the safb operation of the ship and the prevention of pollution
from the vessel. The master is empowered in all situations with overriding authority to act decisively
and according to his best judgement in order to prevent injury to Personnel, protect the vessel and
other vessels or property from damage, and prevent pollution from his vessel.
.. The master may request the Company's assistance at any time in order for him to fulfil his
responsibilities

22. Stowaway found on board prior arrival port, state your actions?

Answer:

Arrival with stowaways on board

The IMO Guidelines on the Allocation of Responsibilities to seek the Successful Resolution of Stowaway Cases.

- state (in paragraph 3) that the resolution of stowaway cases is difficult because of different national legislation in each of the
potentially several countries involved: the country of embarkation, the country of disembarkation, the flag State of the vessel,
the country of apparent, claimed or actual nationality/citizenship of the stowaway, and countries of transit during repatriation.

- contain (in paragraph 4) certain basic principles which can be applied generally. The first of these is that there is a
recognition that stowaways arriving at or entering a country without the required documents are, in general, illegal entrants.

- Decisions on dealing with such situations are the prerogative (special right) of the countries where such arrival or entry
occurs. The third is that the shipowner and his representatives on the spot, the master, as well as the port authorities and
national Administrations, should co-operate as far as possible in dealing with stowaway cases.

o In every case the agent should be notified of the presence of stowaways in advance of arrival.
o Under the U.S. Refugee Act 1980 a stowaway who arrives in the USA can request political asylum. The
Immigration and Naturalization Service (INS) has taken the position that shipowners are required to provide 24-hour
armed guards during the entire asylum process which can take months. There have been cases where the owner has
incurred costs in excess of $1m for such detention.
o Many countries impose very heavy penalties (in some cases of over US$200,000) on masters who fail to ensure that
stowaways are kept securely on board in port.

Liability for illegal immigration

o In the USA, the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 provides that “the person
providing transportation (defined as the owner, master or agent) of a vessel bringing an illegal immigrant to the United
States, is responsible for transporting that person to the country to which he or she is expelled”. A fine of$3,000 is
imposed on the owner and his agent who “fails in their duty to prevent the landing of unauthorised aliens”.

Stowaways discovered at sea

o An international convention relating to stowaways was adopted in Brussels in 1957, but because of a lack of signatories
has not entered into force and is not likely to do so. IMO has since introduced various guidelines, the latest being in
Resolution A.871(20), adopted on 27 November 1997, and its Annex, “Guidelines on the Allocation of Responsibilities
to seek the Successful Resolution of Stowaway Cases”. While the UK follows the IMO Guidelines, in many countries
they are not followed since they conflict with national legislation.
o IMO’s Facilitation Committee agreed in 2000 to introduce procedures for dealing with stowaways into the FAL
Convention (see A03c.4). Amendments to incorporate standards and recommended practices were adopted in January
2002 and are expected to come into force on 1 May 2003.
o Current MCA guidance on stowaway cases is in MGN 70, which superseded M.1660 and contains the text of
Resolution A.871(20) and its Annex, referred to above. The IMO Guidelines - define a “stowaway” (in paragraph 2) as
“a person who is secreted on a ship, or in a cargo which is subsequently loaded on the ship, without the consent of
the shipowner or the master or any other responsible person, and who is detected on board after the ship has
departed from a port and is reported as a stowaway by the master to the appropriate authorities”.
o contain (in paragraph 4) nine basic principles which can be applied generally. The second of these is that

stowaway/asylum-seekers should be treated in compliance with international protection principles as set out in
international instruments and relevant national legislation. The ninth is that stowaway incidents should be dealt with
humanely by all parties involved. Due consideration should always be given to the operational safety of the ship and to
the well-being of the stowaway.
o contain (in paragraph 5.1) a list of responsibilities of the master, as listed below.
o Paragraph 5.1 of the IMO Guidelines lists the following responsibilities of the master in stowaway cases:
1. to make every effort to determine immediately the port of embarkation of the stowaway;

2. to make every effort to establish the identity, including the nationality/citizenship of the stowaway;
3. to prepare a statement containing all information relevant to the stowaway, in accordance with information
specified in the standard document annexed to these Guidelines, for presentation to the appropriate authorities;
4. to notify the existence of a stowaway and any relevant details to his shipowner and appropriate authorities at
the port of embarkation, the next port of call and the flag State;
5. not to depart from his planned voyage to seek the disembarkation of a stowaway to any country unless
repatriation has been arranged with sufficient documentation and permission for disembarkation, or unless there
are extenuating security or compassionate reasons;
6. to ensure that the stowaway is presented to appropriate authorities at the next port of call in accordance with
their requirements;
7. to take appropriate measures to ensure the security, general health, welfare and safety of the stowaway until
disembarkation.

o On the discovery at sea of stowaways, the following procedure should, in general, be adopted.
1. The owner or manager, as appropriate, should be contacted. The owner will normally contact the P&I club's
managers to decide on a course of action. The P&I club's correspondent serving the next port of call will normally
be contacted by the club managers. The correspondent should be able to advise what information will be required by
port State and other officials.
2. An entry should be made in the Official Log Book recording the discovery of the stowaways.
3. The compartment or area in which the stowaways were found should be searched. Any documents or articles of
clothing, etc. may give an indication of their place of origin. (Most countries only allow a stowaway to be landed if he
has the necessary travel documents to return to his own country. Stowaways rarely have any documentation, however,
and some will try to destroy all clues as to their identity.)
4. The clothing of the stowaways should be searched for indications as to their origin.

5. The agent at the next port of call should be contacted and instructed to advise the appropriate authorities of the port
State of the presence of stowaways on board.
6. Each stowaway found should be individually interviewed in order to establish the following details:
a. name of stowaway;
b. stowaway's date and place of birth;
c. nationality of stowaway;
d. name, date and place of birth of either or both of the stowaway's parents;
e. postal and residential address of the stowaway and either parent;
f. stowaway's passport or seaman's book number, together with date and place of issue; and
g. stowaway's next of kin, if different from above.

7. The Stowaway Details Form in MGN 70 should be completed. The completed form should be copied by fax or
e-mail to the agent and the P&I club correspondent at the next port of call.
8. Photographs of each stowaway should be taken and, where digital camera facilities are available, transmitted to the
P&I club correspondent; these may enable travel documents to be obtained more quickly on the ship's arrival.
9. All stowaways should be housed in some part of the crew accommodation which can be locked when necessary.
10. The stowaways should not be locked in their accommodation when the vessel is at sea and well clear of land unless
they are considered a threat to the safety of the ship or personnel on board. Consideration should be given, however,
to the possibility of unguarded stowaways launching a liferaft or boat in an attempt to reach land.
11. The stowaways should be locked securely in their accommodation when the vessel approaches any port or nears
any land. (Consideration should be given to the possibility of the stowaways' escape through open scuttles.)
12. The stowaways should be provided with adequate food, water, sanitary facilities, etc.
13. The stowaways should be treated in a humane manner.
14. The stowaways should not be made to work for their keep.

15. The stowaways should not be signed on the Crew Agreement and should not be entered on any List of Crew. A
“Stowaway List” should be made recording any known particulars, ready for production to port officials.
16. Evidence of costs relating to the stowaway case, such as fuel, insurance, wages, stores, provisions and port charges,
should be gathered to support the owner’s claim on his P&I policy. (The owner’s costs associated with the landing of
stowaways are usually recoverable from his P&I club.)
17. Full details of all events and particulars relating to the stowaway incident should be recorded in the Official Log
Book, if necessary in an annexed document. (This may be used as part of any report required by owners, the club,
etc.)

o If stowaways are heard inside a cargo container which cannot be opened in its present stowage position:
a. Urgent efforts should be made to communicate with the stowaways, primarily in order to ascertain their
state of health. If people are trapped inside a container that cannot be opened in its present stowage position,
urgent consideration should be given to diverting to the nearest port able to handle containers. (Amongst the
considerations should be the time elapsed since departure from the last port of call, time to the next
scheduled port, time to a possible emergency port of call.)
b. Attempts should be made to ascertain the number, ages and nationalities of the stowaways, and whether
they need air, food and water (which is likely). It may be possible to drill holes in the container in order to
supply air, food and water by hosepipe.
c. The container number and stowage position should be passed to the owner or manager, as appropriate,
with all other relevant information, as above.

23. What do you know about STCW 95 with respect to work and rest hours, what are the requirements and how you
ensure that they are being complied on board your ship?
Answer:

o Evidence of compliance (see records in file of : Hours of Work Records)
.. STCW95 code A, chapter VIII: Standard regarding watch keeping, fitness for duty.
.. Watch officer or watch rating: 10 hours of rest in any 24 hours
.. 10 hours may divided to not more than 2 periods, one of it must be minimum 6 hours.
.. Requirement for 10 hrs a day & minimum 6 hours per period need not be maintained in the case of
emergency or drill or in the overriding operational conditions.
.. The minimum period per day may reduced to not less than 6 continue hours, provided any such reduction
shall not be more than 2 days, and not less than 70 hours of rest are provided each seven day period.
.. Watch schedules shall be posted whey there are easily accessible.

24. What is the master responsibility as per ISM?

Answer: Master Responsibilities under ISM:

.. Implementing the Safety and Environment Protection policy of the company
.. Motivating the crew's member to comply with the policy
.. Issued appropriate instruction or order in simple and clear manner
.. Verifying the special requirement has been complied
.. Review the safety management system and report its deficiency to shore base management.

25. List all the documents necessary to carried on board.

Answer:

MSC 14-2005

CERTIFICATES, DOCUMENTS AND PUBLICATIONS REQUIRED TO BE CARRIED ON BOARD
DIFFERENT TYPES OF SINGAPORE SHIPS

(Note: All certificates to be carried on board must be originals)

FOR ALL SHIPS ON INTERNATIONAL VOYAGES

.. CERTIFICATES:
1. Certificate of Registry;
2. International Tonnage Certificate (for ships of 24 m in length and above)
3. Singapore Tonnage Certificate (for ships of less than 24 m in length registered on or after
6 Sep 85)
4. International Load Line Certificate or Singapore Load Line Certificate, as appropriate
5. International Load Line Exemption Certificate or Singapore Load Line Exemption Certificate as appropriate (when an exemption has been granted)
6. International Oil Pollution Prevention Certificate or Singapore Oil Pollution Prevention
Certificate, as appropriate.
7. International Sewage Pollution Prevention Certificate (w.e.f. 1 August 2005);
8. International Air Pollution Prevention Certificate, or Singapore Air Pollution Prevention
Certificate, as appropriate;
9. Engine International Air Pollution Prevention Certificate;
10. International Ship Security Certificate (ISSC) or Interim International Ship Security Certificate;
11. Certificates for Master, Officers or Ratings;
12. Certificates of Endorsement;
13. Document of Compliance;
14. Safety Management Certificate;
15. Crew Accommodation Certificate;
16. Crew Accommodation Exemption Certificate;
17. Deratting or Deratting Exemption Certificate;
18. Certificates of Class if the ship is classed;
19. Dispensation Certificate from the technical requirements of the International Regulations
for Preventing Collisions at Sea, 1972 (when a dispensation has been granted); and
20. Order of Druggist (Medical Supplies Certificate);

.. DOCUMENTS AND DRAWINGS:
1. Minimum Safe Manning Document;
2. Intact Stability Booklet;
3. Damage Control Plans and Booklet;
4. Fire safety training manual;
5. Fire Control plan/booklet, and also Duplicates of Plans or Booklets on either side of ship
outside deckhouse in prominently marked weathertight containers;
6. On board training and drills record;
7. Fire safety operational booklet;

8. 8 Cargo Securing Manual;
9. Oil Record Book

Every oil tanker of 150 gross tonnage and above and every ship other than an oil tanker of 400 gross tonnage and
above shall be provided with an Oil Record Book, Part I (Machinery space operations). Every oil tanker of 150
gross tonnage and above shall also be provided with an Oil Record Book, Part II (Cargo/ballast operations).

10. Shipboard Oil Pollution Emergency Plan (SOPEP);
11. Garbage Management Plan;
12. Garbage Record Book (plan and record book >400GT or >15pax
13. Bunker Delivery Note (to comply with annex 6, 3 years retention)
14. Voyage data recorder system – Certificate of Compliance; (VDR, also annual test cert)
15. Ship Security Plan and associated records;

16. Continuous Synopsis Record (CSR);
17. Manoeuvring Information;
18. Approved Loading and Ballasting Information;
19. Articles of Agreement, consisting of Forms Marine 68A, 68B 68C and 68D;
20. Statement of Account of Wages of Seaman/Allotment Note;
21. Account of Changes in the Crew of a Singapore Ship (Form Eng 2A);
22. Return of Births and Deaths

A return of a birth or of a death required to be made under regulation 3, 4 or 5—

(a) shall be in writing;

(b) shall be signed by the master of the ship as informant; and

(c) shall contain —

(i) in the case of a birth, the particulars specified in the First Schedule; and

(ii) in the case of a death, the particulars specified in the Second Schedule.

23. Official Log Book;
24. Deck Log Book;
25. Engine Log Book;
26. Radio Records;
27. Ship's Station Licence
28. Certificates of the ship station operator or operators;
29. GMDSS certificates of the operator or operators (if a GMDSS installation is required)
30. Illustrated Table of Life-Saving Signals;
31. Muster Lists;
32. Emergency Instructions for each person on board (stick on door)
33. Training Manuals for Life-Saving Appliances;
34. Instructions for On-Board Maintenance of Life-Saving Appliances;
35. Documentary Evidence of Fitness of Ship to Operate with Periodically Unattended Machinery Spaces;
36. Table or Curve of Residual Deviations of each Standard and Steering Magnetic Compass;
37. Certificates of Approval for Life-Saving Appliances (life raft cert)
38. Certificates of Approval for Fire-Fighting Appliances (Fire extinguisher Cert)
39. Certificates of Approval for Navigational Aids;
40. Certificates of Approval for Navigational Lights;
41. Drawings, Plans and Instruction manuals (for Machinery Equipment and Navigational Aids including Oxygen Analysis and Gas Detection Equipment, as appropriate) necessary for the safe operation of the ship concerned; and

42. Reports and Records of Periodical Surveys of Hull, Machinery, Boilers and Safety Valves
and Equipment.
43. As-built construction drawings:
I. Main plans –

.1 General arrangement;

.2 Capacity plan;

.3 Hydrostatic curves; and

.4 Loading Manual, where required.

II. Steel plans –

.1 Midship section;

.2 Scantling plan;

.3 Decks;

.4 Shell expansion;

.5 Transverse bulkheads;

.6 Rudder and rudder stock; and

.7 Cargo hatch covers, where applicable.

III. Bilge, ballast and cargo piping diagrams.

Shipowners should maintain on board, and also ashore, a set of the as-built construction drawings and other plans showing subsequent structural alterations.

44. Documents and publications specified in the ship's Safety Management Manual (SMM);

.. PUBLICATIONS:
1. Nautical charts and publications:
2. Adequate and up-to-date charts (for the intended voyage);
3. Chart Catalogue;
4. Sailing Directions;
5. List of Lights;
6. Notices to mariners;
7. Tide Tables;
8. Mariner's Handbook;
9. Nautical Almanac;
10. Navigational Tables;
11. List of radio signals;
12. Tidal Stream Atlases; and
13. Ocean Passages of the World.
14. International Code of Signals;
15. IAMSAR Manual Volume III;
16. Relevant Sections of the International Maritime Dangerous Goods Code when carrying
dangerous goods in packaged form;
17. The Merchant Shipping Act, Chapter 179, and its subsidiary legislation (SL), as amended;
18. Prevention of Pollution of the Sea Act, Chapter 243 and its subsidiary legislation (SL), as
amended; and
19. International Management Code for the Safe Operation of Ships and for Pollution Prevention (ISM Code);

20. International Life-saving Appliance Code (LSA Code);
21. International Code for Fire Safety Systems (FSS Code); and
22. International Ship and Port Facility Security Code (ISPS Code).

.. PUBLICATIONS REQUIRED BY THE RADIO REGULATIONS OF THE INTERNATIONAL
TELECOMMUNICATION CONVENTION

1. Ship stations for which a Morse radiotelegraph installation is required by international agreement — These stations shall be provided with:

.. a log in which the following are recorded as they occur, together with the time of the occurrence, OR other arrangements for recording all information which the log should contain:

1. all communications relating to distress traffic in full;
2. urgency and safety communications;
3. observance of watch on the international distress frequency during silence periods;
4. communications exchanged between the ship station and land or mobile stations;
5. service incidents of all kinds;

6. if the ship’s rules permit, the position of the ship at least once a day;
7. the opening and closing of each period of service;

2. the Alphabetical List of Call Signs of Stations used in the Maritime mobile service
3. the List of Coast Stations;
4. the List of Ship Stations (the carriage of the supplement is optional);
5. the List of Radiodetermination and Special Service Stations;
6. the Manual for Use by the Maritime Mobile and Maritime Mobile-Satellite Services;
7. telegraph tariffs of the countries for which the station most frequently accepts radiotelegrams.

.. PUBLICATIONS RECOMMENDED FOR CARRIAGE ON BOARD
.1 SOLAS Convention;

.2 MARPOL Convention;

.3 Load Lines Convention;

.4 COLREG Convention;

.5 STCW Convention and Code;

.6 Tonnage Measurement Convention;

.7 IMO Standard Marine Communication Phrases (SMCP); and

.8 Guide to Helicopter/Ship operations (ICF)

FOR CARGO SHIPS

(In addition to the Certificates, Documents and Publications in 1)

CERTIFICATES:

1. Cargo Ship Safety Construction Certificate 3 (for ships of 500 GT and above);
2. Cargo Ship Safety Equipment Certificate 4 (for ships of 500 GT and above and the certificate
to be supplemented by its Record of Equipment);
3. Cargo Ship Safety Radio Certificate 5 (for ships of 300 GT and above and the certificate to be
supplemented by its Record of Equipment);
4. Cargo Ship Safety Certificate, as an alternative to .1 to .3 above; and
5. Exemption Certificate or Letter of Dispensation (when an exemption or dispensation has been
granted under the provisions of SOLAS 74 as amended).

DOCUMENTS:

1. Intact Stability Booklet (>24m)
2. Damage Control Plans and Booklet;
3. Bulk Carrier Booklet;
4. Document of Authorization for the Carriage of Grain and Grain Loading Stability Booklet
(for ships carrying grain), incorporated into grain loading manual.
5. Enhanced survey report file (for bulk carriers and tanker);
6. Cargo Information;
7. Cargo Information and appropriate Shipping Documents including a Certificate or Declaration on the Carriage of Cargoes or for ships carrying Dangerous Goods in Packaged
Form or in Solid Form in Bulk or carrying Harmful Substances in Packaged Form;
8. Document of Compliance with the Special Requirements for Ships Carrying Dangerous
Goods (for ships carrying dangerous goods in packaged form or in solid form in bulk) (also
applicable to ships of less than 500 gross tons constructed on or after 1 Feb 92)

9. Dangerous Goods Manifest or Stowage Plan (for ships carrying dangerous goods in packaged
form or in solid form in bulk or harmful substances in bulk);

PUBLICATIONS

1. International Grain Code (for ships carrying grain);
2. Code of Safe Practice for Cargo Stowage and Securing;
3. Code of Safe Practice for Ships Carrying Timber Deck Cargo;
4. Code of Safe Practice for Solid Bulk Cargoes (BC Code);
5. Code of Practice for the Safe Loading and Unloading of Bulk Cargoes (BLU Code) (for ships
carrying bulk cargoes);
6. International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and
High-Level Radioactive Wastes on Board Ships (INF Code) (for ships carrying INF cargoes);
7. International Maritime Dangerous Goods (IMDG) Code (IMDG Code) (for ships carrying
dangerous goods); and
8. Medical First Aid Guide (MFAG) (for ships carrying dangerous cargoes).

4. FOR OIL TANKERS

(In addition to the Certificates, Documents and Publications in 1 and 3 (except 3.2.3–3.2.9 and 3.3).

CERTIFICATES:

Certificate of insurance or other financial security in respect of civil liability for oil pollution damage.

DOCUMENTS:

1. Oil Record Book, Part II (cargo/ballast operations) (for oil tankers of 150 GT and above);
2. Subdivision and stability information;
3. Oil Discharge Monitoring and Control (ODMC) Operational Manual;
4. Record of oil discharge monitoring and control system for the last ballast voyage;
5. Dedicated Clean Ballast Tank Operation Manual;
6. Crude Oil Washing Operations and Equipment Manual (COW Manual);
7. Condition Assessment Scheme (CAS) Statement of Compliance, CAS Final Report and Review
Record;
8. Hydrostatically Balanced Loading (HBL) Operational Manual;
9. Enhanced survey report file (for oil tankers);
10. Approved Operational Procedures for Existing Tankers having Special Ballast Arrangements on
board;
11. Instruction Manual for Inert Gas System with plans and data of the installation (20,000 DWT and
above);
12. Instructions for the Operations of the Part Flow System (if not included in the loading and
ballasting information).

5. FOR SHIPS CARRYING NOXIOUS LIQUID CHEMICAL SUBSTANCES IN BULK

(In addition to the Certificates, Documents and Publications in 1 and 3 (except 3.2.3–3.2.9 and 3.3).

CERTIFICATES:

1. International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in
Bulk (this certificate is not required for chemical tankers issued with the Certificate of Fitness for
the Carriage of Dangerous Chemicals in Bulk or the International Certificate of Fitness for the
Carriage of Dangerous Chemicals in Bulk).

DOCUMENTS:

1. Cargo Record Book;
2. Procedures and Arrangements Manual (P & A Manual);
3. Shipboard Marine Pollution Emergency Plan for Noxious Liquid Substances; and
4. Pollution Incident Emergency Plan for Hazardous and Noxious Substances (HNS).

FOR CHEMICAL TANKERS

(In addition to the Certificates, Documents and Publications in 1 and 3 (except 3.2.3–3.2.9 and 3.3).

CERTIFICATES:

1. Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk (for ships which comply
with the Bulk Chemical Code); or
2. International Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk (for ships
which comply with the International Bulk Chemical Code).

DOCUMENTS:

1. Cargo Record Book (same book as in 5.2.1);
2. Approved Procedures and Arrangements Manual (P&A manual)
3. Information on Limitations of Cargo, Fuel or Ballast Loaded in Connection with Damage
Assumptions (for chemical tankers complying with the Bulk Chemical Code);
4. Information relating to the Chemical and Physical Properties of the Products carried and Measures
to be taken in an accident;
5. Manual covering Procedures for Cargo Transfer, Tank Cleaning, Gas Freeing, Ballasting, etc.;
6. Document certifying that the Oil Discharge Monitor is suitable for oil-like substances as may be
listed in the IOPP Certificates; and
7. Instruction Manual for Inert Gas System, as applicable.

PUBLICATIONS:

1. Bulk Chemical Code (for chemical tankers constructed before 1 Jul 86); and
2. International Bulk Chemical Code (for chemical tankers constructed on or after 1 Jul 86).

7. FOR GAS CARRIERS

(In addition to the Certificates, Documents and Publications in 1 and 3, except 3.2 and 3.3).

CERTIFICATES:

Certificate of Fitness for the Carriage of Liquefied Gases in Bulk (for ships which comply with the Gas
Carrier Code); or

International Certificate of Fitness for the Carriage of Liquefied Gases in Bulk (for ships which comply
with the International Gas Carrier Code).

DOCUMENTS:

1. Intact Stability Booklet; and
2. Damage Control Plans and Booklet.

PUBLICATIONS:

1. International Gas Carrier Code (IGC Code) (for gas carriers constructed on or after 1 Jul 86);
2. Gas Carrier Code (GC Code) (for gas carriers constructed before 1 Jul 86); and

3. Code for Existing Ships Carrying Liquefied Gases in Bulk (for gas carriers constructed before 31
Oct 76).

26. IMDG containers are being loaded, what are your concerns as a master?

Answer:

. Classifications of IMDG cargo:
1. Class 1 – Explosive
2. Class 2 – Flammable gas
3. Class 3 – Flammable liquid
4. Class 4 – Flammable solid
5. Class4.1 – substances liable to spontaneous combustion
6. Class4.2 – Substances in contact with water liable to emit toxic gas
7. Class 5.1 – Oxidizing substances
8. Class 5.2 – Organic Peroxide
9. Class 6.1 – Poisonous substance
10. Class 6.2 – Infectious substances
11. Class 7 – Radio active materials
12. Class 8 – Corrosive
13. Class 9 – Miscellaneous

. Documents

- The correct technical name and description of the goods shall be used (trade name alone shall not be used)
- A signed certificate or declaration that the shipment offered for carriage is properly packaged and marked,
labeled or placarded, and in proper condition for carriage.
- Shall have special list or manifest setting forth, in accordance with the classification set out in the regulation,
the dangerous goods on board and the location thereof.
- A detailed stowage plan which identifies by class and set out the location of all dangerous goods on board may
be used in place of such special list or manifest.
o No dangerous goods shall be loaded unless the shipper has provided dangerous goods declaration. In
addition to this shipper must supply the following written information where necessary :-
.. The number and types of packages
.. The gross weight of the consignment
.. Net weight of the explosive content of class 1 cargo.
.. The flash point if 60 deg C or below
.. Packing certificate of container or vehicles.

o On the basis of the above, stowage plan shall be drawn and indicate the location where a DG cargoes
are stowed (details cargo plan) and DG cargo manifest.

- The below documents also required before loading:
o Documents of compliance or letter of compliance issued by ship administration.
o A Dangerous Goods declaration issued by shipper

General precautions during loading and unloading of class 1 (explosive) cargoes

. FFA shall be ready for instant use
. Unauthorized personnel clear of the area
. Warning sign to be posted, enforced prohibition of smoking
. Fire detection system to be tested
. If possible carried out the operation only at day time, hoist B flag.
. Bilges to be clean and dry prior the operations.

. Inspect the ventilation fan that there are safe to be use (no defect)
. Check the lightning conductors
. Only approval type of electrical appliances to be used.
. No wireless transmission to be permitted.
. Radar to be switched off.
. Funnel spark arrester to be in good condition
. No bunkering or repair work while loading
. Damage/ defective packaging should be accepted for shipment
. Operation should be suspended in rain.
. All explosive to be tallied
. Any magazine should be kept locked when not in used
. Operation must be supervised by a responsible person.

General stowage precaution for class 1 cargoes

. Do not stow in same compartment with goods liable to give of flammable vapors
. Stow in cool places, way from engines room and away from ship side if sailing tropical areas.
. Stow away from living quarter
. The space should be dry and well ventilated
. When possible stow close o hatch square
. Check the fire fighting system is suitable for the cargoes to be carried
. All ventilators should have sparks arrestors.
. If possible, the electrical cable should not pass through the compartment
. Detonators must be segregated From all other explosive

General Guidelines for FIRE

. Think of safety first
. Avoid any contact with dangerous substances
. Keep away from fire, smoke, fumes and vapors (alter course as necessary)
. Sound the fire alarm and start fire fighting procedures
. Keep the bridge and living quarter up winds if possible
. Locate the stowage position of cargo that is burning or evolving smoke
. Identify cargo
. Obtain UN numbers and the EmS fire schedule of the dangerous goods involved
. Consider which measure of the EmS fire schedule are applicable and should be followed.

. Check if other dangerous goods may be potentially be involved in the fire and identify the relevant EmS Fire
Schedule.
. Wear suitable protective clothing and SCBA
. Be prepared to be used the medical first Aid Guide (MFAG)
. Contact the designated persons of the company responsible for the operation of ship or a rescue co-ordination
centre to obtain expert advice on dangerous goods emergency response measures.

General precaution for loading IMDG containers

1. Check DG note, DG manifest are provided
2. Vessel to be given proposed stowage plan.
3. Check if segregation requirements are met.
4. Check if marking, labeling and placarding of the container are in good condition. Damaged or leaked container
shall not accepted for shipment. Keep combustible materials away from sources of ignition/ heat.
5. Stow in places not liable to damage or heating.

6. Stow in position so that the contents may be moved/ jettisoned in case emergency.
7. Naked lights or smoking is prohibited in or near DG areas.
8. FFA shall keep ready to deal with possible fire
9. Protective clothing and SCBA sets to be available. Bunkering, hotwork, wireless transmission and used of radar
shall be discontinued (especially the cargo is class 1)
10. if possible, only loading in day times, B flag should be hoist
11. At night, adequate lighting to be provided, ambient temperature in relation to the flash points to be taken into
account.
12. Any spillage to be carefully dealt with, taking into consideration the nature of the substance.
13. Consult EmS and MFAG in case of any accident involving DG.
14. Once containers are loaded, the location of that DG container to be counter checked with the bay plan.

Documents of Compliances

. The Committee, at the session, agreed that the period of validity of the DOC shall not exceeds 5 years
and should not be extended beyond the expire date of the validity Cargo Ship Safety Construction
certificate issued to the ship concerned under the provision of SOLAS reg. 1/12
. This DOC is to certify:
i. That the construction and the equipments of the above mention ship were found to comply
with the provisions of SOLAS reg. II-2/19.
ii. That the ship is suitable for the carriage of those classes of DG as specific in the appendix
hereto, subject to any provisions in the IMDG code and the BC code for individual substances ,
material or articles also being complied with.

. DOC to carry packaged dangerous goods.
i. No packaged DG shall be taken on board any ship which keel was laid or which was at the
similar stage of construction on or after 1st September 1984 unless it has on board the DOC .

General guideline for fire fighting involving explosive

. In the event of a fire, everything should be done to prevent the spread of fire to container which contained class 1
cargoes. If it is not possible to prevent the spread of the fire, all personnel should be withdrawn from that area
immediately.
. Many explosive will be burn to the point of an explosion, the Master main concern will be whether or not there is
likely to be a mass explosion. Such an explosion could damage the ship.
. If the goods of class 1.1 or 1.5 are involved, this likelihood will be existing. The time reaching the explosive and the
subsequent mass explosion will be of the order of seconds to minutes. The master shall ascertain how large a
quantity of such explosive involved. A few kilograms are unlikely to sink the ship, but above this clear risk to the
safety of the crews and the stability of the ship should be considered. Sudden or short term event may endanger the
safety of the ship.
. Explosive of divisions 1.2, 1.3, 1.4 and 1.6 are unlikely to explode en masse. Irrespective division of the explosives,
any fire fighting should take place from behind substantial cover. If the of the fire fighter is too high, hoses should
lash to the rail or other fixed structure and left unmanned.
. Neither absence of air or nor the use of smothering material is likely to be effective against a fire involving
explosives. The use of largest quantity of water in the shortest period of time is the only means to prevent the rise of
temperature that could effect the chemical stability of the explosives.
. Some DG of this class have been wetted or immersed in water. As they dry, they become unstable, the master
should seek advice from the experts.

Segregation

Away from: effectively segregated so that the incompatible goods not interact dangerously in the event of an accident
but may be transported in the same compartment or on deck provided a minimum horizontal separation projected
vertically is obtained.

Separated from: in different compartments when stowed under deck a vertical separation may be accepted provided the
intervening deck is resistant to the fire and liquid. For on deck stowage, this segregation means a separation by a
distance of at least 6m horizontally.

Separated by a complete compartment: Either vertical or horizontal separation if the intervening decks are not
resistance to fire and liquid, then only the a longitudinal separation i.e by intervening complete compartment is accepted.
For on deck stowage this segregation means a separation by a distance of at least 12m horizontally.

Separated longitudinally by an intervening complete compartment: vertical separation alone does not meet these
requirements between a package under deck and the one on deck. A minimum distance of 24m including a complete
compartment must be maintained longitudinally. For on deck stowage, this segregation means a separation means by a
distances at least 24 m horizontally.

27. Supposed your are in port and your lifeboat is damaged, what will you do and what port state can do?

Answer:

- Report to owner, owner will report to flag administration, underwriter & Class to inform on this matter;

and get advices from them about how to handle this in most efficient way.
- Report to port authority or coast guard, coast guard will take note on this. Normally the ship will not
allowed sailing unless certain criteria can be made to fulfill the requirement of the administration.
- Option as follows:
1. Fixed the damage before the ship sails (depend much on the port stay and whether there is the
repair facilities in place)
2. Sail without lifeboat but supplement with extra liferafts with the exemption from the administrator.

28. What is the port state control? What is their power?

Answer:

. “Port State control” is the inspection of foreign ships present in a nation’s ports for the purpose of:
o Verifying that the condition of the ships and their equipment comply with the provisions of international
conventions and codes; and
o That the ships are manned (safe manning) and operated (ISM) in compliance with those provisions.

. The primary responsibility for maintaining ships’ standards rests with their flag States, as well as their owners and
masters. However, many flag States do not, for various reasons, fulfil their obligations under international maritime
conventions, and port State control provides a useful “safety net” to catch substandard ships. Port State control
effectively does what flag State control should, but in many cases fails, to do.
. A “Port State Control regime”, where set up under a “memorandum of understanding” (“MOU”) or similar accord
between neighbouring port States, is a system of harmonised inspection procedures designed to target substandards ships
with the main objective being their eventual elimination from the region covered by the MOU’s participating States.

. Several of the most important IMO technical conventions such as SOLAS and MARPOL, as well as ILO Convention 147
(the “Minimum Standards Convention”) contain provisions for ships to be inspected when they visit foreign ports to
ensure that they meet IMO and ILO requirements. IMO has encouraged the establishment of regional port State control
organisations and agreements on port State control.
. A good explanation of how Port State Control works in practice is in the section “PSC at work” in the Paris MOU website:
www.parismou.org

Port State Control regimes

. Eight international PSC agreements are currently in force world-wide, as follows:
o Paris MOU
o Latin-American Agreement
o Tokyo MOU
o Caribbean MOU
o Mediterranean MOU
o Indian Ocean MOU
o Abuja MOU
o Black Sea MOU

. The US Coast Guard operates a national Port State Control Initiative

Inspection procedure

. Under regulation 6(1), the inspector will as a minimum:
o check the certificates and documents; and
o satisfy himself of the overall condition of the ship, including the engine room and accommodation and
including hygienic conditions.

. The inspector may, under regulation 6(2), examine all relevant certificates and documents, other than those listed in
Annex II of MSN 1725, as amended by MSN 1753, which are required to be carried on board in accordance with the
Convention requirements.
. Whenever there are clear grounds for believing, after the inspection referred to above, that the condition of the ship or
its equipment or crew does not substantially meet the relevant requirements of a Convention enactment, a more

detailed inspection may be carried out under regulation 6(3), including further checking of compliance with onboard
operational requirements. The inspector will also observe the relevant procedures and guidelines for the control of ships
specified in Annex IV of MSN 1725 (regulation 6(4)).
. “Clear grounds” means evidence which in the professional judgement of an inspector warrants a more detailed
inspection of a ship, its equipment or its crew. Examples of clear grounds are listed in Annex III to MSN 1725.
. “More detailed inspection” means an inspection where the ship, its equipment and crew as a whole or, as appropriate,
parts thereof are subjected, in the circumstances specified in regulation 6(3), to an in-depth inspection covering the ship’s
construction, equipment, manning, living and working conditions and compliance with on-board operational procedures.

Expanded inspection of certain ships

. Where there are clear grounds for a more detailed inspection of a ship belonging to the categories listed in Annex V of
MSN 1725, an expanded inspection will be carried out under regulation 7, taking into account the guidelines in Annex V,
section B of MSN 1725.
. The ships listed in Annex V of MSN 1725 will be subject to an expanded inspection by any of the competent authorities
of the Member States only once during a period of 12 months. However, these ships may be subject to the inspection
provided for in regulation 6(1) and (2) (see I02c.3a).
. Subject to the provisions of the last paragraph, in the case of a passenger ship operating on a regular schedule in or out of
port in the UK, an expanded inspection of the ship will be carried out before taking up service and every 12 months
thereafter by the MCA subject to consultation with the competent authority of a Member State if the ship operates to ports
in that Member State.
. Regulation 7 will not apply to a vessel which to the MCA’s satisfaction has in the last 12 months been subject to an
initial survey in accordance with Article 6 of Council Directive 1999/35/EC on a system of mandatory surveys for the
safe operation of regular ro-ro ferry and high-speed passenger craft services or a specific survey in accordance with

Article 8 of that directive. (The Directive is implemented by the MS (Mandatory Surveys for Ro- Ro Ferry and High
Speed Passenger Craft) Regulations 2001 (SI 2001/152) (see D04f.4).

Applicable conventions

. The conventions which will be enforced are listed in regulation 2 and are: Load Lines, 1966; SOLAS 74; MARPOL
73/78; STCW 78; COLREG 72; TONNAGE 69; and ILO 147, together with Protocols and Amendments to these
Conventions and related Codes of mandatory status (e.g. the IGC and IBC Codes), in force at the time of adoption of the
EC Directive.

Ships to be considered for priority inspection

. Annex I of MSN 1725 contains a list of ships to be considered for priority inspection, as referred to in regulation 5(2).
That list has been replaced by the list in Annex 1 of MSN 1753, which is as follows:
a. Overriding factors -- Regardless of the value of the target factor, the following ships shall be considered as an
overriding priority for inspection.
1. Ships which have been reported by pilots or port authorities as having deficiencies which may prejudice
their safe navigation (pursuant to Council Directive 93/75/EEC and regulation 15 of the Regulations).
2. Ships which have failed to comply with the obligations laid down in Council Directive 93/75/EEC (see
MSN1741).
3. Ships which have been the subject of a report or notification by another Member State.
4. Ships which have been the subject of a report or complaint by the master, a crew member, or any
person or organisation with a legitimate interest in the safe operation of the ship, shipboard living and
working conditions or the prevention of pollution, unless the Member State concerned deems the report or

complaint to be manifestly unfounded. The identity of the person lodging the report or complaint must not
be revealed to the master or the shipowner of the ship concerned.
5. Ships which have been –
.. involved in a collision, grounding or stranding on their way to the port,
.. accused of an alleged violation of the provisions on discharge of harmful substances or effluents,
.. manoeuvred in an erratic or unsafe manner whereby routing measures, adopted by the IMO, or safe
navigation practices and procedures have not been followed, or
.. otherwise operated in such a manner as to pose a danger to persons, property or the environment.

6. Ships which have been suspended or withdrawn from their class for safety reasons in the course of the
preceding six months.

b. Overall targeting factor --The following ships shall be considered as priority for inspection.
I. Ships visiting a port in the MOU region for the first time or after an absence of 12 months or
more from a port in the MOU region. The MCA shall rely upon available SIRENAC data and
inspect those ships which have not been recorded in the SIRENAC database following the entry
into force of that database on 1 January 1993.
II. Ships not inspected by any Member State within the previous six months.
III. Ships whose statutory certificates on the ship's construction and equipment, issued in accordance
with the Conventions, and the classification certificates, have been issued by an organisation
which is not recognized under the terms of Council Directive 94/57/EC of 22 November 1994 on
common rules and standards for ship inspection and survey organisations and for the relevant
activities of maritime administrations.
IV. Ships flying the flag of a State appearing in the 3 year rolling average table of above average
detentions and delays published in the annual report of the MOU.
V. Ships which have been permitted to leave the port of a Member State on certain conditions, such
as –
. deficiencies to be rectified before departure;

. deficiencies to be rectified at the next port;
. deficiencies to be rectified within 14 days;
. deficiencies for which other conditions have been specified.

* If all deficiencies have been rectified this is taken into account.
VI. Ships for which deficiencies have been recorded during a previous inspection, according to the
number of deficiencies.
VII. Ships which have been detained in a previous port.
VIII. Ships flying the flag of a country which has not ratified all relevant international conventions
referred to in regulation 2 of the Regulations.
IX. Ships flying the flag of a country with a deficiency ratio above average.
X. Ships with class deficiency ratio above average.
XI. Ships which are in a category for which an expanded inspection is required by regulation 7 of the
Regulations.
XII. Other ships above 13 years old.

In determining the order of priority for inspection of the ships listed above, the competent authority shall take into account the
order indicated by the overall target factor shown on the SIRENAC database. A higher target factor is indicative of a higher
priority. The target factor is the sum of the applicable target factor values as defined within the framework of the MOU. Items
5, 6 and 7 shall only apply to inspections carried out in the last 12 months. The overall target factor shall not be less than the
sum of the values of items 3, 4, 8, 9, 10, 11 and 12.

Certificates and documents inspected

The certificates and documents referred to in regulation 6(1) are listed in Annex II to MSN 1753, and include:

1. International Tonnage Certificate (1969).
2. Passenger Ship Safety Certificate.
3. Cargo Ship Safety Construction Certificate.
4. Cargo Ship Safety Equipment Certificate.
5. Cargo Ship Safety Radiotelegraphy Certificate.
6. Cargo Ship Safety Radiotelephony Certificate.
7. Cargo Ship Safety Radio Certificate.
8. Exemption Certificate, including, where appropriate, the list of cargoes.
9. Cargo Ship Safety Certificate.
10. International Certificate of Fitness for Carriage of Liquefied Gases in Bulk.
11. Certificate of Fitness for the Carriage of Liquefied Gases in Bulk.
12. International Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk.
13. Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk.
14. International Oil Pollution Prevention Certificate. (IOPP)
15. International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substance in Bulk. (NLS)
16. International Load Line Certificate (1966). (ILL)
17. International Load Line Exemption Certificate.
18. Oil Record Book, parts I and II.
19. Cargo Record Book.
20. Minimum Safe Manning Document.
21. Certificates of Competency including Dangerous Goods Endorsement.
22. Medical Fitness Certificates.
23. Stability information including grain loading information and Document of Authorisation.
24. Document of Compliance and Safety Management Certificate issued in accordance with the ISM Code. (DOC & SMC)
25. ISSC – international ship security certificate

26. Certificates as to the ship’s hull strength and the machinery installations issued by the classification society in question
(only to be required if the ship maintains its class with a classification society)
27. Document of Compliance with the Special Requirements for Ships Carrying Dangerous Goods.
28. High Speed Craft Safety Certificate and Permit To Operate High Speed Craft.
29. Dangerous goods special list or manifest, or detailed stowage plan.
30. Ship’s log book (OLB) with respect to the records of tests and drills and the log for records of inspection and maintenance
of lifesaving appliances and arrangements.
31. Special Purpose Ship Safety Certificate.
32. Mobile Offshore Drilling Unit (MODU) Safety Certificate.
33. For oil tankers, the record of oil discharge monitoring and control system for the last ballast voyage.
34. Muster list, fire control plan, and for passenger ships, a damage control plan.
35. Shipboard Oil Pollution Emergency Plan (SOPEP).
36. Survey report files (in case of bulk carriers and oil tankers).
37. Reports of previous port State control inspections.
38. For ro-ro passenger ships, information on the A/A maximum ratio (A/Amax Certificate).
39. Document of authorisation for the carriage of grain.
40. Cargo Securing Manual.
41. Garbage Management Plan and Garbage Record Book.
42. Decision Support System for masters of passenger ships.
43. SAR Cooperation Plan for passenger ships trading on fixed routes.
44. List of operational limitations for passenger ships.
45. Bulk carrier booklet.
46. Loading and unloading plan for bulk carriers.

Report of inspection

. On completion of an inspection, a more detailed inspection, or an expanded inspection, the master of the ship
will, under regulation 8(1), be provided by the inspector with a report document giving the results of the
inspection and details of any decisions taken by the inspector, and of corrective action to be taken by the master,
owner or operator.
. In the case of deficiencies warranting detention of a ship, the document to be given to the master must include

information about the future publication of the detention in accordance with regulation 15 (regulation 8(2)).

Rectification and detention

. The owner must, under regulation 9(1), satisfy the MCA that any deficiencies confirmed or revealed by an inspection are
or will be rectified in accordance with the Conventions.
. In the case of deficiencies which are clearly hazardous to safety, health or the environment, the inspector must detain
the ship, or require the stoppage of the operation in the course of which the deficiencies have been revealed (regulation
9(2)). Powers of detention in the Merchant Shipping Acts, or in an SI which is a Convention enactment will be applied as
appropriate. In the case of a stoppage of an operation the power to issue a Prohibition Notice will be applied. A
Detention Order may include a direction that the ship must remain in a particular place or must move to a particular
anchorage or berth. A Detention Order may specify circumstances when the master of the ship may move his ship from a
specified place for reasons of safety or prevention of pollution.
. The Detention Order or stoppage of an operation will not be lifted until the hazard is removed or until the MCA
establishes that the ship can, subject to the necessary conditions, proceed to sea or the operation be resumed without risk
to the safety and health of the passengers or crew, or risk to other ships, or without there being an unreasonable threat of
harm to the marine environment.
. When exercising his professional judgement as to whether or not a ship should be detained, the inspector will apply the
criteria set out in Annex VI to MSN 1725 (regulation 9(3)).

. In exceptional circumstances, where the overall condition of a ship is obviously substandard, the inspector may, in
addition to detaining the ship, suspend the inspection of the ship until the responsible parties have taken the steps
necessary to ensure that it complies with the relevant requirements of the Conventions (regulation 9(4)).
. Regulation 10 provides for an owner's right of appeal against detention of a ship.

29. What is Sea or advection fog?

Answer:

.. Advection Fog forms when wind moves the warm, moist air over a cooler surface. The cold surface cools the
warmer air and lowers it to its dew point. Condensation occurs, resulting in the formation of a layer of fog.
o The layer of fog will deepen as wind speed increases up to about 15 knots.
o With winds stronger than 15 kts the fog will lift as stratus cloud.

.. This type of fog persists (will last) unless there is a change in the air mass or the wind direction.
.. In temperate and high lat., sea fog common at spring and early summer when sea temp at lowest. It's common
when the prevailing air move the warm moist air over major cold ocean currents.
.. Common area for advection fog:
o Polar regions in summer
o Grand bank of Newfoundland (Labrador Current)
o NW pacific Ocean American coast (Kamchatka current)
o California, Chile, Peru, SW of Africa and morocco
o British isle, SW approach to English channel

30. What is Marpol Annex 1?
Answer: MARPOL Annex I,

.. designates (in regulation 10) the following nine areas as Annex I special areas: the Mediterranean Sea area, the
Baltic Sea area, the Black Sea area, the Red Sea area, the “Gulfs area”, the Gulf of Aden area, the Antarctic
area and the North-West European waters and Oman area of Arabian sea.

.. Comparison of special within other annex.

Annex I

Annex V

Annex VI

Mediterranean Sea

Mediterranean sea

Baltic Sea

Baltic Sea

Baltic sea

North Sea

Black sea

Black sea

Red sea

Red sea

Gulfs Area

Gulf Area

Gulf of Aden

North west European
water

North sea

Oman Area of the
Arabian sea

Widen Caribbean
(GOM + Caribbean)

Antarctic area

Antarctic (> 60S)

.. Discharges outside special Area ship 400 gt or more (effluent from machinery space)
o Ship must be en-route
o Oily mixture must process through oil filtering equipments meeting requirements of reg. 14
o Oil content of the effluent without dilution does not exceed 15ppm.
o The oily mixture does not origin from pump room

o Not mixed with cargo mixture.

.. Discharge in special areas ship 400gt and above (effluent from machinery space)
o Ship proceeding en-route
o Oily mixture must process through the oil filter equipment meeting reg. 14.7
o Oil content of the effluent shall not exceed 15ppm
o The oily mixture does not origin from pump room in case of tanker
o Do not mixed with cargoes residues

.. Nothing shall be discharge in Antarctic area
.. Ship <400gt in all area except Antarctic area (Effluent from machinery space)
o En-route
o Must operate equipment which ensures the oil content of the effluent without dilution does not exceed
15ppm.
o Oily mixture does not origin from pump room bilges on tanker
o No cargo residues

.. Oil record book part 1, tanker >=150gt and other >=400gt, shall be in the specified form in appendix III
.. The records must be on each occasion, on tank to tank basis, whenever the following operation take place:
1. ballasting or cleaning fuel oil tank
2. discharge of dirty ballast or clean ballast from fuel oil tank
3. collection and disposal of residues of oil (sludge and other oil residues)
4. Discharge over board or disposal otherwise bilge water which has accumulated in engine room space.
5. Bunkering fuel oil or any lubrication oil in bulk.
6. Any failure of OWS.
7. Any accident discharge or purposely discharge to save life shall be record with state the circumstances and the
reason.

.. all ship >=400gt must have sludge tanks
.. ship of >=400 gt to 10000gt shall fitted with OWS as per reg 14.6
.. Ship of >=10000gt shall fitted with OWS as per reg 14.7

.. Discharge outside the special area (oily mixture from cargo tank area of an oil tanker)
1. the tanker must not in special area
2. tanker must be 50 nm from the nearest land
3. the tanker is proceeding en-route
4. rate of discharge of oil content does not exceeds 30 liters per nautical miles
5. total quantity discharge into the sea shall not exceed 1/15000 of the total quantities of the particular cargo of
which the residual from apart for ship deliver before 1980; total quantity discharge into the sea shall not exceed
1/30000 of the total quantity of particular cargo of which the residual from apart for ship delivery on and after
1980.
6. the tanker shall have its oil discharge monitoring and control system (ODMC) in operations and a slop tank.
7. this not apply to discharge clean and segregated ballast.

1. Any discharge of oily mixture from cargo area prohibited in special area.
2. Requirement for oil tanker of less 150gt
o The requirement of slop tank, ODMC and oil/water interface detector shall not apply to the oil tanker <150gt,
hence the discharge of oily water mixture origin from cargo area is prohibited, she shall retain on board and
discharge to the shore reception facilities.

o She can discharge the oily water unless he own the equipments the able to make sure and monitor the
discharging of the effluent.

Oil record book part II – cargo and ballast operation

1. Every oil tanker of 150gt and above shall be provided with an oil record book part II. The oil record book Part II shall
be in the form of appendix III of this annex.
2. Recording items
.. Loading of oil cargo
.. Internal transfer oil cargo
.. Unloading oil cargo
.. Ballasting of cargo tanks and dedicated clean ballast tanks
.. Cleaning of cargo tank including the crude oil washing
.. Discharge of ballast except from segregated ballast tanks
.. Discharge of water from slop tank
.. Closing all applicable valves after discharging slop water.
.. Closing of valves necessary for isolation of dedicated clean ballast tanks from cargo and stripping lines after
slop tank discharge operations.
.. Disposal residues.
.. Quantity of oil and water used for washing and returned to storage tank shall be recorded in the oil record
book part II.
.. Any failure of ODME shall be record in the oil record book part II.

31. What is MARPOL annex IV?

Answer: Regulations for the prevention of pollution by sewage.

.. Application to ship 400 gt and above and/or ship certified to carry more than 15 persons
.. Sewage systems : Treatment plant, comminuting and disinfecting system and holding tank
.. Discharge of sewage:
o with treatment plant: No visible floating solids nor cause discoloration of the surrounding water.
o With comminuting and disinfecting system: 3 nm from the nearest land, ship must en route speed >4
knots.
o Holding tanks : 12 nm from the nearest land, ship en route speed >4knots

32. What is MARPOL annex V?
Answer:

.. Disposal of garbage outside the special area:
1. no plastics
2. dunnage, packing material and lining material which float >25nm
3. food waste, paper, rags, glass, metal, bottle, crockery; >12nm
4. disposal of garbage specific in the paragraph 3 s permitted when it pass trough comminuter or grinder and the
capable of passing through a screen of <25mm; 3 nm.

.. Disposal of garbage in side the special area.
.. For the purpose of this annex, the special area will be Mediterranean sea, Baltic Sea, North sea, Black sea,
Red sea, Gulf area, Antarctic area and wider Caribbean area.
.. Disposal of garbage in this area is prohibited except:
.. food waste, ground or not ground >12nm from the nearest land
.. except in widen Caribbean region, not ground > 12 nm, ground food waste; >3 nm.

.. Placards, garbage management plans and garbage record keeping
.. Placards shall be display in ship >=12m in length
.. Every ship of 400gt and above and every ship which is certified to carry >=15persons shall carry the
garbage management plan and garbage record books.
.. Garbage record book shall record all the discharging operation of the garbage whether ashore or to
sea, and also every incineration of garbage.
.. The record shall including what, how much, time, position; the record book shall be retained on
board for two years.

33. What is annex VI?
.. Answer: Annex VI, regulation for the prevention of air pollution from ship.
.. Special area : SECA: north sea and Baltic sea
.. Sulphur content world wide shall not exceeds 4.5% m/m
.. Sulphur content for Baltic and north sea shall not exceed 1.5% m/m
.. The bunker supply slip shall be retain on board for inspection by the PSC, regarding the sulphur content.

34. Your vessel has been designated to be taken under tow to a repair yard for main engine repairs. The ship will retain a
skeleton crew for the passage. What preparatory actions would you take, prior to engaging in being towed?

Answer: Prior to engaging the tow it would be necessary to make up a safe passage plan(very much depend on the ship
draft for making the passage plan) for the proposed operation. I would also order a full stability check to ensure that the
vessel had an adequate metacentric height (GM) throughout the voyage, assuming that the vessel would be light and in

ballast, making sure that any free surface effects were kept to a minimum. It would also be prudent to carry out all, or as
many of the following actions:

Communication with owner:

a. Shall inform the owner, get the approval from the leading underwriter for this post casualty towage.
b. The towing worthiness should be ascertained for remain cover, if not owner shall get the SOL (ship owner
liability) cover.

Passage planning:

I. UKC through out the voyage
II. Navigation light and shapes
III. Coastal state where ship may pass shall be inform for issue the navigational warning in
advance.
IV. Obtain the weather forecast in advance

Stability

I. Improved stability, by press up the tank and reduce any free surface effect
II. Seal the upper most deck, except the freeing port and deck scupper
III. Provide the vessel with stern trim

Pre tow preparation

I. Ensure the effective communication establish between the tug and towed
II. Reduce the oil on board to the minimum
III. Lock the steering/ rudder to amidship, if the ship is not steering
IV. Disengaged the propeller shaft to free rotate, this will reduce the drag effect
V. Close all watertight door
VI. Get second anchor ready for emergency (most of the case the another anchor are use for
towing)

VII. Ensure the LSA and FFA are in readiness stage
VIII. Have the secondary towline arrangement available
IX. Inspect the towing arrangement with the tug master to ensure strength and securing

35. How will you lower lifeboat in heavy weather condition?

Lower lifeboat in heavy weather condition

Preparation

.. Some steadying method to be used so that the lifeboat does not land hard against the ship side.
.. Prevent the fall blocks to hit ship to heat the ship side, the crew and the boat itself.
.. Boat crew shall wearing the lifejackets, helmet, immersion suit in cold climate for rescuing operation.
.. Sea quelling oil may be used to reduce the seas
.. Vessel to create a good lee, wind to be on the opposite bow.
.. Ship plugs
.. Lower the lifeboat in the trough of the wave
.. On the next rising crest, release the hooks immediately and simultaneously.
.. Cast off painter once clear
.. Bear off the ship side with tiller, oars or boat hook.
.. Engine is to started before the release of block and keep neutral
.. Once lifeboat is underway, tiller put against the ship's side and with full clear off the ship

Precautions

.. Rig fenders, mattresses or mooring rope or mooring ropes to prevent the boat from being staved during
adverse roll.
.. A cargo net, slung between davits and trailing in the water for crew to hang on in case the boat capsize
alongside. It should not hamper the operation of the lifeboat.
.. The painter is rigged and kept tight throughout so as to keep the boat in position between the falls

.. The falls are loosely tied with a line, led to the deck and manned, when the boat is unhooked, the line will
steady the falls and prevent accident contact with the boat crews.
.. Once unhooked, the blocks should be taken up to avoid injuring the crews in lifeboat.

36. In the event that you would have to beach your vessel, in order to prevent a total constructive loss,
what ideal conditions would you prefer?

.. The ideal conditions for a beaching operation should include all or as many of the following conditions:
o A daylight operation.
o A gentle slope to the beach at the point of taking the ground.
o A rock-free ground area.
o Sheltered from prevailing weather.
o Current-free and/or non-tidal situation.
o Surf free.
o Communications into and out of the beach area.

BEACHING PROCEDURE

Beaching is defined as taking the ground intentionally, as opposed to accidental stranding. It is normally carried
out for either or both the following reasons:

1. to prevent imminent collision;
2. to prevent loss of the vessel when damaged and in danger of sinking, damage having occurred below
the waterline causing loss of watertight integrity. The intention is to carry out repairs in order to refloat
at a later time.

Should time and choice be available, the mariner should attempt to beach the vessel on a gentle sloping beach,
which is rock free and ideally with little or no current. If possible it should be sheltered from the weather, free of
surf action and any scouring effects.

.. Advantages and Disadvantages for ‘Bow’ or ‘Stern’Approach
.. When approaching bow-on, the obvious advantage is that a clear observation of the approach can be made
and the vessel will probably have a favourable trim.
.. The propeller and rudder will favour the deeper water at the stern.
.. While the strengthened bow would cushion any pounding effects.
.. The disadvantages of this approach are that the vessel is more likely to slew and the need for anti-slew
wires used in conjunction with anchors, may become necessary.Also it is difficult to lay ground tackle from
this position, to assist with the refloating.
.. In the majority of cases stern power would be used for refloating the ship and the average vessel normally
operates with only 60 per cent of the ahead power, when navigating stern first.

Actions Prior to Beaching

.. Provided that time and circumstances allow, the vessel to be beached should take on full ballast. This will
make the operation of re-floating that much easier.
.. The general alarm should be sounded before grounding or beaching, generally is to warn all on board about
what will happen and take necessary caution.
.. Both anchors should be cleared away and made ready to let go. Care should be taken to lay anchors and
cables clear of the position that the vessel is expected to come to rest, so minimizing the bottom damage, if
this is possible.
.. Additional use of a stern anchor, if the ship is so equipped, would become extremely beneficial on the
approach, with the view to refloating later.
.. Seal the main deck with scupper, this is to prevent during the beaching process the F.O force up from air
pipe or sounding no escape over board.
.. Check the vessel stability criteria, try to improve the stability by press up the tank and reduce free surface.

On Taking the Ground

.. Drive the vessel further on and reduce the possibility of pounding. Take on additional ballast and secure
the hull against movement from weather and sea/tide.
.. Take precautions to prevent oil pollution. This can be achieved by discharge into oil barges, or transfer
within the vessel into oil-tight tanks.
.. Another alternative would be encircling the vessel with an oil pollution barrier, if one can be obtained
quickly enough and positioned effectively.
.. Damage reports should be made to the Marine Accident Investigation Branch (MAIB), together with a
‘general declaration’, the Mercantile Marine Office being informed and entries made into the Official Log
Book.

GROUNDING/BEACHING – SUMMARY

.. Carry out a damage assessment following the action of the ship taking the ground.
.. Damage assessment should initially cover:
o Watertight Integrity of the Hull.
o Engine Room check, as to Wet or Dry.
o Casualty Report for injuries.
o Pollution assessment.
o The initial damage assessment would expect to include examination of the collision bulkhead and
the condition of tank tops.

.. Subsequent actions:
o Sound round all internal ships tanks.
o Take full external soundings with particular attention to the forward and after end regions.
o Display aground signals as appropriate.
o Seal the uppermost continuous deck.
o Maintain a deck patrol for fire and security.
o Calculate the next High Water/Low Water times and heights.
o Check the depth available around the propeller.
o Inspect the lower hull area around the ship at the low water, by the boat in order to better
assessment around the ship.
o Investigate stability and refloating details following the instigation of repairs.
o Prior to attempting to refloating, call in ‘Stand-By Vessel’.
o Ensure log book accounts are entered of all events.

.. Masters Advice:
o Order a position to be placed on the chart.
o Following damage assessment results open up communications with relevant authorities inclusive
of coastguard, owner, P&I club Representative.
o Engage tug assistance if appropriate.
o Investigate damage and stability criteria as soon as practical.
o Make a report to the Marine Accident and Investigation Branch.
o Investigate the local Dry Dock capacity/availability/facilities with owners assistance and/or
instigate diver inspection.

DECK DEPARTMENT CHECKLIST FOR WATERTIGHT INTEGRITY OF HULL

FOLLOWING GROUNDING OR BEACHING

1. Check for casualties.
2. Assess internal damage by visual inspection where possible. (Special attention being given to the
collision bulkhead and the tank tops.)
3. Look for signs of pollution from possible fractured oil tanks.
4. Make internal sounding of all double bottom and lower tanks,followed by a complete set of tank
soundings at the earliest possible time.
5. Sound for available depth of water about the vessel, especially around stern and propeller area.
6. Check position of grounding on chart. Determine the nature of the bottom and expected depth of
water.
7. Obtain damage reports from all departments.
8. Determine state of tide on grounding, together with heights and times of the immediate high and low
waters.
9. Order communications officer to stand by.

10. Check condition of stability if the vessel has suffered an ingress of water.
11. Instigate temporary repairs to reduce the intake of any water, and order pumps to be activated on any
affected areas.
12. Cause a statement to be entered into the deck log book, with a more detailed account to follow.

ENGINE ROOM DEPARTMENT CHECKLIST FOR MACHINERY SPACES

FOLLOWING GROUNDING OR BEACHING

1. Check for casualties.
2. Assess damage inside the engine room and pump room and report to the Master.
3. Make ready fire-fighting equipment in case of fire outbreak.
4. Prepare pumps to pump out water from engine room spaces.
5. Inspect all fuel and steam pipes for signs of fracture. A build-up of oil represents a fire hazard and must
be located and corrected as soon as possible. Regular checks on bilge bays must be continued for a
minimum period of three days after taking ground.
6. Inspect all piping, valves and auxiliary equipment, before reporting to the Master on conditions.
7. Should water be entering the engine room, instigate immediate temporary repairs to reduce the ingress
of water, and start the pumps on the affected areas.

37. How to turning the ship in heavy weather?

Answer:

.. Preparation
o Ship stability shall be improve

o All hands should be informed about the turn in heavy weather
o Secure the ship

.. Condition for turning
o Turning circle is smaller when carried out at slow speed, so don’t turn the ship at full speed.
o Waves tend to travel at variable frequency or consist of about 8 waves in a group.
o There is a lull period of about 1-2 waves among the wave group.
o The turn should be executed in such manner the vessel is beam on the weather only during relatively
calm periods during the waves.
o Careful observation should be made to determine the lull period.

.. Turning the ship
o Start turning the ship with extreme caution at slow rate for first half of turn, when critical period (when
swell at the beam) is passed turn the vessel completely and steady on the next course.
o Storm oil may be use to improve the conditions.