

INSTITUTE OF CHARTERED SHIPBROKERS

APRIL 2008 EXAMINATIONS

WEDNESDAY 23 APRIL – AFTERNOON

SHIP OPERATIONS & MANAGEMENT

Time allowed – Three hours

Answer any FIVE questions – All questions carry equal marks

1. Using the factors below:

- a) What cargo quantity can be loaded? (show calculations)
- b) Where would you organise bunkers and what quantities would you stem? (give your reasons)
- c) What voyage result do you estimate? (show calculations)

The vessel: mv *Steel Dream*, Liberia Flag discharging Rotterdam.

Bunkers ROB on completion cargo at Rotterdam 125MT IFO 380cst low sulphur at \$470pmt and 200MT IFO 380cst standard fuel at \$440pmt.

Summer DWAT 74,756MT on 14.02M

Winter DWAT 71,789MT on 13.728M

Cubic grain 86,763.50

LOA 225m

constants incl FW 750MT

Loaded Speed / cons 14kts on 32MT IFO 380CST

Ballast Speed / cons 14kts on 28MT IFO 380CST

Port Cons 3MT IFO 380cst pd

The Cargo: - 60,000MT grains (SF 1.42) 10% MOLOO Santos, Brazil to Kaohsiung, Taiwan.

DWAT at Load port 61,400MT, no draft restrictions at discharge/ bunkering ports

10000 SHINC load/ 6,000 SHEX discharge

Demurrage/ half dispatch \$35,000/d

Freight \$60 FIOS per metric tonne

Commission 5%

Distances:

Rotterdam to Santos –5,430 nm

Rotterdam to SW edge of North Sea Ship Emissions Control Area – 400nm

(Vessel then switches to standard fuel)

Santos to Kaohsiung – 10,384 nm

Santos to Singapore – 8,943 nm

Singapore to Kaohsiung - 1,601 nm

Bunkers prices:

Rotterdam IFO 380cst - \$450 pmt (can be taken concurrent with cargo discharge)

Santos IFO 380cst - \$495pmt

Singapore IFO 380cst \$425 pmt – calling costs \$7,500

Kaohsiung IFO 380 \$545 pmt

Port Charges: -

Load port \$65,000

Discharge port \$83,000

2. A new colleague asks you to provide an explanation of the various types of costs associated with ship-owning.

- a) Explain the difference between Fixed (or capital costs) and Daily Running (or daily operating) and Voyage costs.
- b) Detail the items included in an estimate of voyage costs.
- c) Under which headings would you allocate the following costs?
 - i. Lawyer's fees for drafting financing documentation.
 - ii. Travel costs for superintendent's periodic ship inspection.
 - iii. Deductible on a cargo claim
 - iv. Supply of Fuel Oil
 - v. Supply of Lubricating Oils and Greases
 - vi. War Risks Insurance premium
 - vii. AP for breach of IWL
 - viii. Installation of Voyage Data Recorder.

3. Potential Investors in Shipping require a briefing about ship management.

- a) Explain the key functions of ship management, naming a ship management contract commonly used in the industry.
- b) Explain the legal relationship between Owner and Manager. What protection should a management contract provide for the two parties?

4. A vessel using MGO for power generation suffers a power black out while entering a discharging port and runs aground partially blocking the main channel. The Chief Engineer reports choked fuel filters and suspects that MGO recently supplied was out of specification. The vessel is on Time Charter and Charterers arranged supply of the fuel.

Managers have full technical and commercial management of the vessel.

- a) What immediate action needs to be taken by management to ensure safety of ship, environment and to protect the Owners interests?
- b) What insurances will the vessel have in place to cover this incident?

5. What certificates must a cargo ship have for international commercial trade?
Identify the Authority responsible for issuing each certificate.

Ships over 500gt are required to comply with the International Ships and Port Facilities Security Code. What are the requirements of this code for the ship and for the managers?

6. Describe the characteristics (dimensions, tonnages, cargo gear etc) of one of the following types of cargo ship:
- a) Capesize bulk carrier
 - b) Parcel chemical tanker
 - c) 8000 TEU container ship

Illustrate your answer with longitudinal and cross sectional drawings of each vessel. Show dimensions, tonnages etc.

Give details of two trade routes on which the chosen vessel could be employed. What characteristics of the vessel make it suitable for these trades?

7. A Panamax bulk carrier is fixed to load coal at Gladstone, Australia in April for discharge at Baltimore USA. The vessel can be routed via Panama or Cape Horn. What factors would you consider when deciding which route the vessel should take?

Illustrate your answer with a map of the possible routes marking key features from your answer.

8. The Shipping Press reports a serious shortage of competent crew, particularly officers, in all sectors of the shipping market.

How has this happened?

What can be done to improve the supply of competent crew?

How are standards of competency safeguarded?

THE INSTITUTE OF CHARTERED SHIPBROKERS

SHIP OPERATIONS AND MANAGEMENT

2008

EXAMINERS REPORT

OVERALL COMMENTS

The standard this year was generally disappointing. Although there were some good scripts, there were also many low marks indicating lack of basic shipping knowledge. Some questions were popular but none was totally avoided.

As in previous years questions requiring description or calculation were generally well answered, but questions requiring analysis or discussion were less good. Questions that required knowledge of shipping geography were not answered well. Regular study of shipping periodicals would help all candidates.

As always some candidates failed to address the question(s) asked and there was much information that was irrelevant. Some candidates answered too many questions. In multi part questions candidates should keep in mind that each part, however well answered, will only be awarded a proportion of the total mark for the whole question.

QUESTION 1 – VOYAGE ESTIMATE

Part one required calculation of the cargo lift. Several candidates failed to identify the key issue of draft limitation.

Part two was about stemming bunkers. There was more than one acceptable answer. Consideration of safe margin of bunkers was vital.

The actual calculation was in some cases chaotic. Practice using a template will ensure that all issues are covered. Common mistakes included lack of knowledge of terms SHEX/ SHINC, failing to allow time to take bunkers and missing out commission.

QUESTION 2 - COSTS AND ACCOUNTING

A straight forward question that should have been answered better than it was. A common mistake was mixing up voyage costs and daily running (or daily operating costs).

The examiners are aware that there are differences in terminology and accounting practice and make due allowance when marking.

QUESTION 3 – SHIP MANAGEMENT

The first part required an understanding of the scope of ship management services and knowledge of a ship management contract. It was generally well answered.

The second part needed an understanding of the relationship between owner as principal and ship manager as agent and identification of responsibilities of each party. Reference should also be made to the Himalaya Clause and the law and arbitration provisions of the contract. This part was not well answered.

QUESTION 4 - INSURANCE / INCIDENT

Not answered well. This question was about managing an incident and the insurances likely to be in place. It was not primarily about poor quality bunkers.

Part one was about managing the incident and protecting the interests of the Owners and the master and crew. The answer needed to cover the immediate concerns of handling the situation safely and effectively, supporting the Master, medical issues etc. An understanding safety management principles was useful. Also assessment of the situation, reporting to all parties, and protection of interests should also have been covered.

The second part looked for basic knowledge about insurance cover and in particular the policies that apply it needed to mention the following insurances:

H and M - average damage to hull
P and I - Crew injury / FFO/ pollution risks
Loss of earnings /time cover

Good answers would also cover recovery from other parties - Defence cover to support a claim against Charterers and General Average for additional discharge costs etc.

QUESTION 5 – REGISTRATION AND CLASSIFICATION

Part one dealt with the range of certificates required by ships and the different roles of Flag of Registry and Classification Society in issuing them. Part two concerned the International Ships and Port Facilities Security Code (ISPS).

Part one was generally answered well though many candidates did not understand the responsibilities of each party, ie; **Flag (Registry)** – Matters of Ownership, Manning and management, Measurement and marking, Compliance with International and National regulations. **Classification** – Maintenance of Class –vessel meets rules of Society.

ISPS – Answers achieved good marks or very few. This is important legislation that ship managers should know about.

QUESTION 6 - SHIP TYPES

A number of candidates wrote about all three ship types rather than just selecting one.

Read the question!

The question was quite well answered though the standard of drawing was poor, often unlabelled and missing key dimensions.

Candidates should be cautious of describing a specific vessel well known to them unless it is typical of the type requested. The best scripts demonstrated a real knowledge of the chosen vessel type.

There is common misunderstanding about the size limitations of the Suez Canal.

The question asked for details of a trade in which the vessel could be deployed. A map could be used to advantage here.

QUESTION 7 – OPERATIONS

Not answered well. The question required a planned answer that took into account a variety of factors including;

Contracted cargo quantity and freight. Seasonal zones, draft restrictions,

Port charges, Canal dues

Bunkers prices

Voyage time

Climatology, weather, winds, currents

Potential damage to ship

Where to go for advice – the Master's view.

The question asked for a map showing potential routes. The standard of drawing was poor with several maps showing Cape Horn on the Southern tip of Africa!

QUESTION 8 – CREWING

Some answers were poorly planned comprising a series of random facts, not all of them correct or relevant. This question was about crewing, not about registries. Candidates should avoid too much historical content unless relevant and correct!

There were three parts to the question; why is there a shortage of competent crew? what can be done about it? and how standards are maintained?

The first part was answered best, candidates needed to demonstrate an understanding of how the crewing industry is organised and of the pressures placed on seafarers. Contributory factors include the increase in numbers of ships, demands of the job, unattractive salaries coupled with the weakness of the US\$, training requirements and port security.

The final part called for knowledge of STCW and efforts to train crew to common standards including knowledge of white lists identifying countries whose training standards meet required criteria. The requirement for owners and crewing managers to arrange continuation training was also recognised.