

The Business of Shipping

Hong Kong

An introduction to the shipping business

The Salisbury Hotel, Kowloon

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Organised by



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PROVISIONAL

Course Programme

The Business of Shipping – Hong Kong

Monday 23 October

INTRODUCTION

Structure of the Shipping Industry

Session 1
0830-0930

This lecture will cover developments in shipping which have taken place including changes in ship size, cargoes carried, performance and general market supply-demand trends. The emergence of new ship types caused by the rapid growth of world trade and the shift in maritime markets will be considered.

The importance of shipping in the foreign trade of nations will be reviewed and the structure of world trade by various product types will be discussed. It will be divided approximately into two sections, the first of which looks at the general structure of shipping giving an introduction to some of the important terminology used in the deep-sea trades. The second takes a look at the markets in which shipowners operate and the business sectors which form part of the shipping industry.

Ship Types & their Commercial Earning Power

Session 2
0945-1045

Deep-sea cargo ships represent an enormous investment for the shipowner. Their capacity to earn spectacularly when markets are high is only matched by their ability to lose equally spectacular sums when the markets are at rock-bottom. The fleet of ships today comprises some 50 different vessel types, compared with about five types at the end of WWII. This development of specialisation has come at a price of inflexibility which is only of importance when the business for a particular vessel type is hard to come-by.

This session will provide a brief review of the types of vessels in the fleet. A number of the more common vessel types will be examined in more detail to reveal their cost structures and their commercial earning power. Volatile freight markets mean that earnings will vary significantly over short periods as well as long periods of time. An indication of where we stand in this market cycle will be given.

International Institutions & their Role in Shipping

Session 3
1100-1200

Shipping, being an international industry, has generated numerous international organisations, both industrial and governmental, that deal only with shipping; it has also attracted the attention of international organisations created for other purposes.

This session will concentrate on international institutions at the governmental level, covering those with worldwide membership:

- the United Nations and its specialised agencies especially:
 - the International Maritime Organisation (IMO)
 - the International Labour Organisation (ILO) and
 - the United Nations Conference on Trade and Development (UNCTAD)
- the World Trade Organisation
- BIMCO (Baltic & International Maritime Council)
- International Chamber of Commerce, including its specialist Fraud and Piracy division: the IMB (International Maritime Bureau)

LUNCH

1200-1300

COMMERCIAL SHIPPING LAW

Session 4
1300-1400

Legal Framework of a Single Purpose Shipping Company

Ships are often the target for arrest by cargo interests or from others involved in the maritime adventure who have a grievance against the shipowner. It need not necessarily be the particular ship that was the cause of the dispute that is the focus of attention in the arrest proceedings. Sisterships are equally useful in establishing security for many maritime claims.

Shipowners have therefore long operated a loose system of corporate structure, the intention of which is to dissociate all of an owner's assets from each other. Additionally, many private shipowners seek to put themselves in a remote relationship with "their" shipping companies, the purpose of which is to lessen their tax burden and reduce the chances of being named in a case against the vessel. The method adopted by owners to achieve this distancing from their property is known as the "single purpose company" – SPC.

This session will explain how these company structures work and who stands to gain or lose by their operation. The "corporate veil" is the term often used to describe the effect of SPCs in clouding the identity of the owner. Lifting this corporate veil is the object of the legal proceedings when the particular ship involved in a dispute cannot be isolated or has a value inadequate to fully compensate the claimant.

Session 5
1415-1515

Commercial Law: Charter Parties and Bills of Lading

The law has a significant bearing on many aspects of the shipping business. This lecture will introduce that section of commercial law dealing with the main contracts of carriage, specifically covering:

1. Charter Parties: Voyage and Time
 - A breakdown and explanation of the important clauses, both for dry cargo and tankers.
 - The division of responsibilities
 - A brief look at laytime.

Bills of Lading

- Their various functions
- Risks and complications
- Fraud

Session 6
1530-1630

Contracts of Chartering for the Bulk Trades

In following on from the previous lecture this session will highlight the main contractual obligations of shipowner, charterer and cargo owner which are a consequence of entering into charter parties and signing bills of lading. Four main topics will be considered:

1. Forms of charter party: demise, time, voyage and contract of affreightment
The principal contracts under which cargo is carried by sea: NYPE and Asbatankvoy.
Bills of lading: the Hague Rules, Hague-Visby Rules and Hamburg Rules

With respect to charter parties, three specific areas will be elaborated upon which will help to explain how they are used in the chartering operation. These are:

Voyage charter party - main clauses explained and cases discussed

- ready to load
- laydays, cancelling
- freight
- laytime
- demurrage and despatch

Time charter party - main clauses explained and cases discussed

- speed and consumption
- hire, withdrawal and anti-technicality
- delivery/redelivery
- war risk
- deductions from hire
- Safe port obligation and loss of or damage to vessel

Session 7
1645-1745

Workshop – The Tonne- Mile Concept

In order to know the true demand for shipping, it is as important to measure the distances that various commodities travel as well as the volumes flowing in each of the trades. For World Trade overall, this would be a daunting task, and given the paucity of information available for many of the minor commodity trades, a task that would likely only be achieved if many approximations were used. However, for some of the major bulk trades, the demands is more easily calculated but none-the-less an element of estimation may still be required.

Using a particular crude oil trade, we will estimate the tanker demand that the trade generates.

Tuesday 24 October

Session 8
0830-0930

Principles of Ship Finance

This lecture will outline the various types of financing available to the shipowner from governmental and private sources and explain their relevance to owners considering either newbuilding or second hand tonnage acquisitions. A detailed description will be given of the various risks considered and analysed by the commercial banker when faced with a loan application. A review of the different financial institutions prepared to lend to the shipping industry will be given as will a general understanding of public market finance including high yield debt and initial public offerings (IPOs).

The impact on shipping finance and world trade of the Basle Accords I and II will also be addressed. The Accord dictates the capital adequacy ratios of the banks in most of the World's major trading countries and lays down more severe debt/equity ratios than has been common in recent decades.

There has been considerable debate in the past regarding the size of the shipping industry's capital needs. Many factors will influence this requirement but it is not the purpose of this session to review them all. Rather, the speaker will lead the participants in a discussion that will focus on the future ability to fund the capital-intensive shipping industry from different finance markets.

Session 9
0945-1045

Sale & Purchase Markets

Every day the ship owner uses his commercial judgement to interpret market information in a way that will best profit his company. He can afford to make mistakes in some areas but, in the business of Sale and Purchase, the consequences of a wrong decision can lead to disaster. In this session the lecturer will examine the principles that must be applied when a decision is made to buy or sell.

Fortunately the ship owner need not face these questions alone and, generally, the shipping community is always ready to offer advice and opinions. In particular the ship broker can play a vital part in the process and the lecturer will examine in detail how a broker can help his owner to evaluate market information and arrive at a reasoned decision.

Session 10
1100-1200

Shipbuilding

Most people dealing in international trade are all too aware of the massive oversupply of ships, but they are not necessarily familiar with the developments in the shipbuilding market place that

have created the ability to generate this oversupply. During the 1960's and the 70's, the over-provision of shipbuilding capacity was continually masked by buoyant freight markets, and increasing demand for international trade. The collapse of the tanker market in 1974 exposed the plight of the shipyard as well as the tanker owner.

Since the mid 1970's, an enormous structural change has taken place in the shipbuilding industry with the virtual elimination of merchant shipbuilding in Western Europe in favour of Far Eastern yards - in particular Japan first, then Korea and more recently the rise of China threatening the once dominant position of Japan. Against this background of continuing change, the lecturer will deal with shipbuilding under two broad headings:

1. **Market Fundamentals:** A look at the main factors which influence the market supply/demand for newbuildings and how the price of a newbuilding is determined. The physical building process will be reviewed as an understanding of this process will help identify the capabilities of the World's yards and how they were able to respond to the upsurge in ordering following the buoyant freight markets of the post 2000 era.

Strategic Review: A review of the current state of play in the shipbuilding market examining the key elements affecting newbuildings and fleet renewals over the next few years.

LUNCH

1200-1300

SHIP MANAGEMENT: PEOPLE AND SHIPS

Session 11

The Role of Classification in Shipping

1300-1400

This session will review the development of classification societies and the work that they do in the marine field. The reason for the existence of classification dates from the days when insurance underwriters required an independent assessment of the quality of ships they were covering. Since those days the number of ship inspections has increased enormously with not only classification societies but also P & I Clubs, port inspectors, coast guards and many others "paying visits" to the ship.

The role of the International Association of Classification Societies (IACS) will be reviewed, as well as its relations to other institutional organisations.

The importance of safety management on shore and on board will also be discussed. In addition, the recent introduction of enhanced surveys for ships will be considered in the light of growing concern for older ships, in particular bulk carriers.

Session 12

Crewing

1415-1515

Selecting a crew is one of the most important tasks faced by the ship manager. There are many options. Costs vary widely, and so may the voyage profits. What are the regulatory requirements and constraints? This session will provide the background to recent manning developments, examine crew composition, numbers and functions. Typical costs and trends for crews of different nationalities will be discussed and the training and certification required by different flags will be reviewed. The 'human element' has been pinpointed as a contributory cause in major maritime casualties. What is being done and what else can be done to improve in this area? How may changes in the STCW Convention affect ship board manning and shore management? Experiences in personnel safety management will illustrate the importance of attention to this area in a fleet management strategy.

Session 13

Ship Management

1530-1630

This session examines the subject of ship management from the viewpoint of an independent ship management company. Although third party ship management is a relatively young sector of the industry, rapid growth in the 1970s and 1980s has meant that a significant proportion of the world fleet is now operated by these companies.

This session will examine seven key aspects of the ship management sector:

1. What is (independent) ship management?
2. Why, when and how did it develop?
3. What is the market size and structure?
4. Why use a ship manager?
5. How should you select a ship manager?
6. What are the current market trends?

Session 14
1645-1745

Flag of Registry

In recent years a number of island states have launched international ship registers while traditional maritime countries have opened their own "off-shore" or second registers. Ship registration is a complex area. This session will cover the economic and political considerations in initial flag selection and switching flags. This will bring together many different aspects covered in other sessions: crewing, certification, classification, surveying and Port State Control to name a few. The economic reasons why owners choose particular flags will be illustrated with an example showing the complex tangle of shell companies created to achieve the most cost effective (tax efficient) structure.

Wednesday 25 October

Session 15
0830-0930

Maintenance & Repair

The aim of any ship maintenance and repair plan should be to maximise the availability of the ship to perform her various functions within a minimum total cost. Planned and preventative maintenance systems have been developed to cover the total ship from the propulsion and auxiliary machinery in the engine room to deck machinery and cargo handling equipment, together with hull structure, coating and painting systems. The maintenance plan should be designed to ensure the following is minimised:

1. Off hire time.
Equipment or material failure.
Cost of docking.
Manpower costs.
Spare gear costs.

The most significant cost occurring through lack of firm maintenance policies is usually time off-hire or out of service periods due to breakdown, irrespective of whether ships involved are on charter or in liner trades/services.

The more widespread use of heavy fuel in diesel machinery in order to reduce fuel costs has to be considered in terms of additional maintenance cost and a compromise found to suit both the installed equipment and available resources.

More attention should be given to the reliability of main machinery and equipment at the design stage, and the design should incorporate condition monitoring systems to reduce maintenance inspections within the present climate of low manning levels.

Consideration of planned manning increases as a vessel ages. This should be considered seriously in order to reduce maintenance and repair costs.

Session 16
0945-1045

Fuel Issues

This session will cover various aspects of fuel issues in relation to merchant shipping. It will open with a brief review of the history of the marine fuel oil industry and the changing requirements of the shipowners. The refinery process will be examined which will explain what it is that shipowners are buying when they order "residual fuel". Developments in refining technology have resulted in quality reduction in residual fuels, a major concern for owners whose crews and assets can be exposed to extreme conditions should an engine fail in mid-sea.

The session will also consider how to buy bunkers and who the key players are, highlighting the price drivers in this most volatile market. What actually happens when a vessel takes bunkers and why there is scope for fraud will be discussed, together with advice on how to minimise the risk. The speaker will end with a comment on the future evolution of the market with particular focus on the latest environmental regulations.

Session 17
1100-1200

Cruise Shipping

Five key factors which will determine future prospects of the cruise sector will be considered:

1. The demand profile for cruise berths and new markets for passengers
2. The cruise ship orderbook and its impact on supply
3. Consolidation in the cruise industry and the extent to which this process may continue
4. Challenges to the future success of the cruise businesses
5. The identification and pursuit of new destination markets for the cruise product
6. Why has the cruise industry grown faster than most other industries

LUNCH

1200-1300

LINER SHIPPING

Session 18
1300-1400

Liner Shipping and the Container Trades

During this section of the course we will be considering liner shipping and the conference system, with specific reference to container transportation. The session will be deal with the following specific topics:

1. Introduction and brief history of liner shipping and the conference system.
2. Container hardware, operational logistics and terminal operation
3. Commercial aspects of container distribution
 - The Container Revolution, its causes and the effects on surface transportation.
 - The container product, covering commercial, operating and financial implications, together with their interlocking systems and organisational requirements.
 - The Container Revolution - Mark II: today's operating environment.
4. Equipment
 - Boxes
 - i. Standards v. sizes found
 - ii. Marine containers v. land / domestic swap body
 - Vessels
 - i. Size definition
 - ii. Characteristics (geared/not geared/open hatch, speed, draft)
 - Terminals (Performance Specification):
 - i. Size definition
 - ii. Quay cranes
 - iii. Straddle carriers
 - iv. RTG
 - v. Forklift trucks
 - vi. Rail / automated operations

5. Operations and Logistics
- Pendulum v. RTW
 - Strings / slings
 - Hub / feeder service
 - Implication to ports / terminals
 - Road / rail links
 - Transport regulations

Future industry trends

Session 19
1415-1515

The Offshore Market

An overview of the offshore market; with an introduction to the key sectors, the services and assets associated with them. The session will compare and contrast the key features of the offshore market with those of the wider marine industry

BULK SHIPPING MARKETS

Session 20
1530-1630

Tramp Shipping & Vessel Employment

During this session a definition of tramp shipping will be given, including the characteristic features of the trades serviced by tramp vessels. The relative complexity of the business undertaken by general dry cargo vessels as compared to tankers will be considered.

Supply and demand factors are extremely important in this relatively unregulated trade, and some factors influencing the balance between supply and demand will be reviewed. The highly volatile nature of freight rates and the complex decision processes involved in accepting or rejecting a specific voyage make tramp shipping one of the most exciting sectors of shipping.

Session 21
1645-1745

Dry Bulk Shipping

This lecture will look at what the dry-bulk market comprises, subdividing it into size, commodity and voyage trading pattern groups. The economic benefits of combining trades both from the owners and charterers view will be explained.

The operation of the market will be analysed and the costs and earnings explored. The present freight market situation will be reviewed and the possibility of an extended recession to counter the recent high level of newbuilding activity will be discussed. Finally, some thoughts regarding the likely development of demand in the future will be presented drawing particularly on the emergence of China as a world trading power.

Thursday 26 October

Session 22
0830-0930

The Tanker Market

This session will open with a brief review of the history and development of the tanker industry. This will develop into an examination of the various types and sizes of vessels, the pattern of trade and the division of ownership between oil companies and the independent owners. The lecturer will then consider how the market operates and the implications of supply and demand characteristics. The various types of charterers will be discussed and an explanation of Worldscale given. Finally, possible developments and the future prospects for the business will be presented with particular regard to market dynamics.

Session 23
0945-1045

Hedging Risks for Shipping Companies

This session will give each student an overall understanding of the theory, the terminology and the practical trading of Forward Freight Agreements (FFAs).

Ship Owners and Charterers face many different types of risk, one being the volatility of the freight market. Traditionally this risk was covered by booking physical cover for forward dates, an

efficient but not a very flexible solution. During the past two decades a number of financial instruments have been introduced to the international shipping industry, specifically FFAs and Futures. Freight Futures were traded on the Baltic International Freight Futures Exchange, but these have now been completely displaced by the FFA contracts. BIFFEX closed its doors to business in the early part of the decade.

This session will consider the freight risk exposure and elaborate on the following:

- Derivatives in general
- What are Shipping Derivatives - FFAs and Options
- Reasons for using derivatives

To help in understanding how these tools can be applied in the day-to-day running of a shipping company, several practical examples will be provided.

Session 24 **1100-1200**

Piracy

In this presentation, it is not proposed to deal with criminal law or operational issues but, instead, to look at what one might call the Civil Law liability issues arising from acts of piracy. The lecturer will break the presentation down into 3 parts and look at the position as between owners and charterers under a charterparty; the definition of "piracy" for the purpose of claims under policies of insurance; and liabilities to contribute in General Average for expenditure incurred as a result of an act of piracy.

LUNCH

1200-1300

Session 25 **1300-1400**

Post Fixture Operations & Laytime Principles

Following on from the chartering function, the post fixture activities of an owner's/operator's staff are the key to the successful completion of a voyage or other contractual commitment. Fixing a ship may be the glamorous part of the business, but without the back-room support of a good post-fixture department most owners would see little of the "meagre" earnings from the ship.

Whilst many think only of laytime and demurrage in the context of "post fixture" operations, the reality is somewhat more complicated. This session will break the subject into two main headings: mechanics and techniques.

Mechanics refers to the "who does what with whom, when and why" of the business. Specifically, mechanics relates to the relationship between the ship and shore in carrying out orders or activities associated with a voyage or cargo assignment. Voyage and time charter orders to the master, chief officer, port agent and other parties will be considered. The type of information sought and sent will be reviewed.

Techniques refers to the principles of laytime and the calculation of demurrage or despatch. In principle, it is straightforward in concept yet continues to occupy the law courts and arbitrations because of the disputes which are generated. A number of simple examples of time sheet production and laytime statements will be presented to illustrate the methodology.

MARINE INSURANCE

Session 26 **1415-1515**

Marine Hull & Machinery Insurance

For an understanding of marine insurance and its importance in the world of commerce, we need to see who is involved, for what purpose and what can be insured. As a further building block we will look at the contract of maritime insurance, how the parties come to enter into it, and the more important policy forms for ships, cargoes, freight and some other subjects of marine insurance.

We will then consider a number of marine insurance concepts and explain their meaning, including:

- Fortuity
- Non-disclosure & Misrepresentation

- Utmost Good Faith
- Perils of the Seas
- Unseaworthiness/Privity

For the risks covered we will note the basic differences between the cover provided generally in the companies' and Lloyd's market and the protection available for shipowners in the P&I Clubs. Finally, we will look at the kinds of losses which are recoverable and what they are, specifically:

- Total Loss - Actual and Constructive
- Particular Average
- Particular Charges (Sue and Labour)
- General Average
- Salvage Charges
- Liabilities

Session 27
1530-1630

Protection and Indemnity Mutual Insurance

During this session, an introduction to P & I insurance will be given and the following main topics covered:

1. The historical background - why Protecting Clubs and Indemnity Clubs were created.

The structure of a P & I Club.

- Members
- Directors
- Managers
- Correspondents
- and the function each carries out.

The mutual principle and the methods by which it is achieved. Insurance without a profit margin but with individual premium rates.

The Group Pool and Market Reinsurance. What happens if there is a catastrophic claim?

The scope of cover given

- Crew and other people
- Collisions and dock damage
- Cargo claims
- Wreck removal
- Fines
- Pollution

Services provided by the Clubs for their members.

- Preparatory advice: Documents, cargoes, safety on-board
- Help when a claim is made
- Providing security to prevent arrest

FUTURE OF THE SHIPPING INDUSTRY

Session 28
1645-1745

The Future of Shipping

The shipping market operates within the framework of a supply/demand mechanism which means that future earning levels depend as much on how the industry manages supply as on the growth of demand for ships. This concluding session looks at the various factors which determine freight market earnings and discusses the range of scenarios which could occur in the future.

Session 29
1745-1800

Conclusion