

# Anatomy of Shipping

25 August - 6 September 2024  
Madingley Hall, Cambridge

Organised by



*Cambridge Academy of Transport*

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## Cambridge Academy of Transport

### Registration Form

# ANATOMY of SHIPPING

25 AUGUST – 6 SEPTEMBER 2024

To register, please complete this form and send it by email to Tulika Singh ([enquiries@catz.co.uk](mailto:enquiries@catz.co.uk)).

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# Course Programme

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**Anatomy of Shipping**  
**25 August - 6 September 2024**  
**Madingley Hall, Cambridge**

<b>Sunday</b> <b>25 August</b>	<b>INTRODUCTION</b>	
	<b>Course Welcome &amp; Preview</b>	<b>1445-1515</b>
		<b>Session 1</b>
	<b>Introduction to the Shipping Industry</b>	<b>1515-1600</b>
	<p>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.</p> <p>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.</p>	
	<b>Group Introductions</b>	<b>Session 2</b> <b>1615-1700</b>
<b>Monday</b> <b>26 August</b>	<b>Introduction to the Shipping Industry - <i>continued</i></b>	<b>Session 3</b> <b>0830-1045</b>
	<b>Group Introductions</b>	<b>Session 4</b> <b>1100-1215</b>
	<b>Opportunity Workshop: Assignment</b>	<b>Session 5</b> <b>1315-1415</b>
	<b>International Regulation of Shipping</b>	<b>Session 6</b> <b>1430-1600</b>
	<p>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.</p> <p>This session will concentrate on international institutions at both the governmental and industrial levels, covering those with worldwide membership such as:</p> <ul style="list-style-type: none"><li>– the United Nations and its specialised agencies (notably the International Maritime Organization)</li><li>– International Labour Organization</li><li>– the World Health Organization,</li></ul> <p>and regional organisations, such as:</p>	

- the European Union
- the groups of countries exercising Port State Control.

The session will consider why shipping needs intervention by governments internationally, and the nature and role of the main international institutions that affect shipping. Content includes:

- Why do we need to regulate shipping?
- How is the shipping industry regulated?
- What areas of activity are regulated?
- Who are the regulators?
- Who are the industry stakeholders?
- Posing the question: Does regulation work?

### **Session 7 1615-1715**

#### **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, and the responsibilities of the flag state. 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.

### **Session 8 1715-1815**

#### **Opportunity Workshop: Preparation**

#### **SHIP ACQUISITIONS**

**Tuesday  
27 August**

### **Session 9 0830-1000**

#### **Sale & Purchase Negotiation**

With only a few exceptions virtually all second-hand purchases are conducted through a broker or brokers. The benefits to the buyer and seller include:

- readily available information concerning vessels available for sale
- market activity and recent sales;
- periodical market reports produced by the major broking houses as a ready guide to owners.

Unlike chartering, which is a regular activity for an owner who will therefore have in-house personnel with expertise on chartering negotiations, owners buy and sell vessels on a far less frequent basis. In fact several years may elapse between purchase and sale.

The sale and purchase broker is therefore required to offer an in-depth service and advice to the owner on the technicalities of the negotiation, contract, and preparation for delivery.

This session will look at the process of negotiating the sale (or purchase) of a second-hand vessel, concentrating on the main clauses of the most commonly used contract - the Norwegian Saleform. The "hand-over" event when money and title are exchanged will also be described.

**Session 10**  
**1015-1115****S&P – Disputes and Solutions**

Using a series of case studies to illustrate a number of problem areas associated with S&P transactions, the lecturer will lead a discussion of the issues involved in each and explore possible solutions to the disputes.

**Session 11**  
**1130-1230****Opportunity Workshop: Preparation****GROUP PHOTOGRAPH****1230****Session 12**  
**1345-1515****Financing Ship Acquisitions**

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. These will be illustrated by describing a particular case. The relationship between banker and shipowner will be considered and the various other professionals such as insurance brokers and sale and purchase brokers. A description will be given of the function of the different banks and financial institutions, primarily in the UK but also in the other major marine finance centres.

The impact on shipping finance and world trade of the Basle Accord 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 13**  
**1530-1630****Financing Ship Acquisitions *continued*****Session 14**  
**1645-1730****Group Finance Exercise**

This session will focus on the consequences of the recent shipping recession which began with the collapse of the freight markets at the end of 2008. Lenders, especially the commercial banks, were exposed to the risks of the markets as the valuations of their shipping portfolios fell in parallel with the charter markets. Traditionally, banks could enforce their mortgage and repossess the ship. But the dynamics of the banking market well outside the control of the shipping sector have had a significant impact on the action (or some would say, inaction) of the banks.

How do shipowners view the pressures exerted upon them by their lenders; what is the market practice for dealing with shipowners unable to pay as contracted; what are the signs of an owner in trouble? These and other issues will be covered during the next three sessions.

**COMMERCIAL SHIPPING LAW****Wednesday**  
**28 August****Principles of Maritime (Contract) Law****Session 15**  
**0830-0945**

The law has a significant bearing on many aspects of shipping generally and the chartering business specifically. These several lectures will discuss the legal implication of the charter parties and bills of lading. We will begin with a look at the

principles of English maritime law, a system of law regularly encountered when dealing with charter party disputes. These principles derive from the law of contract as, not surprisingly, charter parties are simply that: contracts.

## Session 16 1000-1115

### Charter Parties

Following on from the introduction provided in the first session, this presentation will consider the main forms of charter parties used in the shipping business and focus on their commercial relevance. The lecturer will then go on to examine the main clauses found in voyage and time charter parties, using a number of standard pro-forma charters for examples. Specifically, the session will cover:

- What does a Charter contain?
  - Simple financial obligations, e.g. freight/hire
  - Obligations relating to performance, e.g. safe ports, length of charter
  - Carriage of cargo
- Where do charter parties fit into the Owner's business spectrum?

## Session 17 1115-1245

### Bills of Lading

While charter parties often get the headlines, the single most important shipping document must be without question the bill of lading. The complex nature of the bill and its often challenging relationship to shipowners, charterers, cargo interests and banks makes for an interesting storey. Along the way the lecturer will cover in some detail the following topics:

- What is a bill of lading?
- What are the different types of bills of lading?
- What is contained in a bill of lading?
- Are there any other documents that can be used instead of bills of lading when the circumstances permit?
- Who is the "carrier" under the bill of lading?
- The difference between a "clean" and a "claused" bill.
- Where does the letter of indemnity fit into the commercial transaction?

## MARINE INSURANCE

## Session 18 1345-1430

### The Lloyds Insurance Market

Lloyd's, the world's leading insurance market, transacts business worth billions of pounds in premiums every year. It is the world's second largest commercial insurer and sixth largest reinsurer. Lloyd's is not an insurance company but a competitive marketplace where underwriters accept insurance and reinsurance risks on behalf of syndicates of individual and corporate members whose resources provide the security behind Lloyd's policies. Lloyd's business falls into four main areas: Marine, Non-marine, Aviation and Motor. Marine was the original class of business underwritten at Lloyd's and represents 13 per cent of the market broadly divided between hull and cargo. Lloyd's insures marine risks ranging from yachts to super tankers and their cargoes, from offshore supply boats to huge drilling rigs, and reinsures liability risks of nearly all the world's ocean going ships accounting for more than 10 per cent of total world marine premium income.

## Session 19 1445-1615

### Marine Insurance Overview

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:

- insurable interest
- fortuity
- non-disclosure & misrepresentation
- Utmost Good Faith (*uberrimae fides*)
- assignment
- subrogation
- 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.

Then, as in introduction to the following session, we will look at the kinds of losses which are recoverable :-

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

#### Session 20

1630-1730

#### Hull & Machinery Policies

An insurance policy which does not pay up promptly in the event of a claim is no use to anyone. We will therefore look first at the typical claim, from the time the casualty occurs until the claim is collected, dealing with claims for both hull and machinery and cargo.

#### Session 21

1730-1830

#### Opportunity Workshop: Preparation

#### Session 22

0830-1000

Thursday  
29 August

#### Protection & Indemnity 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.
2. The structure of a P & I Club.
  - Members
  - Directors
  - Managers
  - Correspondents
  - and the function each carries out.
3. The mutual principle and the methods by which it is achieved. Insurance without a profit margin but with individual premium rates.
4. The Group Pool and Market Reinsurance. What happens if there is a catastrophic claim?
5. The scope of cover given
  - Crew and other people
  - Collisions and dock damage
  - Cargo claims
  - Wreck removal

- Fines
- Pollution
- The "Omnibus" Rule.
- 6. 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
- 7. Other mutual clubs
  - UK Freight Demurrage & Defence Association
  - Through Transport Club
  - Transport Intermediaries Mutual
- 8. Response to claims.
  - Background to the rise in claims during the past 10 years
  - P & I clubs response
- 9. An Update on the P&I Market
  - Competition from Fixed Premium Facilities
  - P & I Club Mergers and then on to One Stop Shopping

## TECHNICAL OPERATIONS

**Session 23**  
**1000-1115**

### Why Maintenance Matters

The session will begin with a short introduction to maintenance and repair, highlighting a number of key factors, including:

- Safety/Environmental concerns
- Compulsory maintenance imposed by regulations
- Maintenance failure and reputational risk
- Cost of maintenance in a vessel's life cycle
- The dry docking process

Following this brief survey of a number of important issues, participants will form into teams to undertake a short case study where they will assess a dry-docking

**Session 24**  
**1130-1245**

### Shipowners' Bunker Purchasing Strategies

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.

**Session 25**  
**1345-1430**

### Importance of the Tonne-Mile

To understand the drivers of ship demand, it is essential to grasp the concept of the "tonne-mile". This session will examine the methods used to calculate the tonne-mile demand and the various factors which can influence its value even when the volume of trade has not changed. The session will go on to show how an estimate of vessel demand can be derived once tonne-mile demand is determined.



**Session 26**  
**1445-1615****Ships and their Operational Problems**

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.
2. Equipment or material failure.
3. Cost of docking.
4. Manpower costs.
5. 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 furl 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 27**  
**1630-1730****The Cruise Shipping Market**

This lecture will look at the following aspects of the cruise industry:

- The supply/demand outlook and whether the lines can expect to improve yields this year and next.
- Consolidation in the cruise industry and the extent to which this process may continue.
- The regulatory environment for the cruise industry
- The identification and pursuit of new source markets for the cruise product.
- Cruise capacity deployment, the potential for new regional cruise development and the implications for the ports.

**PRACTICAL CHARTERING OPERATIONS****Friday**  
**30 August****Session 28**  
**0815-0930****Post Fixture: Chartering Operations**

This session and the next will deal with some of the functions of the Post Fixture department of a ship owner, ship operator, voyage or time charterer or broker. There are often many more tasks to perform in this department than in the "shop window" department of the fixing brokers but, just as in any well run store, the back room staff perform a vital role which is often unnoticed or ignored until something goes wrong! It is only then that their skills and duties are recognized.

Whilst many think only of laytime and demurrage in the context of "post fixture" operations, the reality is somewhat more complicated. The second of these two sessions will concentrate on laytime and demurrage leaving this session to deal with the post fixture mechanics, addressing 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.

**Session 29**  
**0945-1115**

**Post Fixture: Laytime & Demurrage**

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. This is particularly so when it comes to interpretation of laytime clauses in charter parties and the calculation of any demurrage or despatch due under the contract. In principle the calculation of demurrage or despatch is straightforward in concept, yet it continues to occupy time of the law courts and arbitrations because of the disputes which are generated. In this session, following an explanation of the concepts of laytime, a number of simple examples will be given to help illustrate both the principles involved and some of the practices which have evolved over the years.

**FREIGHT DERIVATIVES**

**Session 30**  
**1130-1300**

**Freight Derivatives**

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.

**FREE WEEKEND**

**CLASSIFICATION**

**Monday**

**2 September**

**The Classification Societies**

**Session 31**  
**0830-1000**

The purpose of this session is to review the development of ship classification, with emphasis on the work the classification societies undertake today. The societies represent one important part of the global maritime safety system, but not the only part. Other stakeholders include owners/managers, flag state administrations, port state organisations, and many others

The role of the International Association of Classification Societies (IACS) will be reviewed in the context of their unifying activities

**Session 32**  
**1015-1115****Future Ship Concepts**

In recent years, many new systems have been introduced or proposed for vessels, and the design of future vessels may look radically different from vessels built during the last ten years. These changes will largely be led by the need for future ship designs to be “safer, smarter and greener”. This session will focus on a number of position papers published recently by DNV-GL with a look to the future.

**Session 33**  
**1130-1245****Group Exercise: Providing the “FR” in “CFR”**

Beginning with a brief review of Incoterms, the session will place participants in the position of a cargo trader who has an opportunity to offer on a 3 year supply contract for coal to South China (Port of Guangzhou). As a trader, you do not have any of your own ships but instead go to the freight markets to satisfy any particular need you may have.

The session will concentrate on pricing. Having identified possible vessels, how does the trader then price the coal supply contract? What are the marine and economic risks associated with various means of providing ships to service the contract?

**STRATEGIC CHALLENGES****Session 34**  
**1345-1515****China: The Elephant in the Room**

China has been the driving force behind the enormous expansion of World Trade and shipping following its arrival on the trading scene after the British Government returned Hong Kong to the Chinese State. Similar to the rapid growth in shipping as Japan expanded its manufacturing base in the 1960s, the beneficiaries of Chinese led trade expansion were the raw material exporters and the consumer goods importers. Bulk shipping companies and container lines clung to the coattails of the trading boom that followed. Over-optimism on the part of shipowners and the financial crisis of 2008 contributed to the sharp fall in freight rates and vessel values in the years following the collapse of the financial markets.

Quietly going about its business of trade, it is only recently that the World has woken-up to Chinese political objectives in the South China Sea and the Sea of Japan. The reaction of other nations in these areas and the USA will feature heavily upon how shipping will be impacted in the South East Asia and Far East trades. This session will provide a background to the position as it stands today and offer some insight into how the various trading nations may resolve the growing crisis peacefully.

**Session 35**  
**1530-1645****Greek versus Chinese Maritime Development**

Prior to the Second World War, Britain was the leading maritime nation in terms of commercial shipping. 75 years later the maritime landscape has undergone seismic change with the axis of two maritime powers being defined by the Greeks, the largest privately owned fleets of any nationality, and the Chinese who control the World's biggest state maritime assets, both vessels and shipbuilding capacity. How did each of these maritime powers rise to the positions which they now hold will be the focus of this presentation.

**Session 36**  
**1700-1745****International Law of the Sea**

The substance of this lecture will be concerned with aspects of public international law and will therefore not include domestic maritime law as such. Public international law is understood by the lecturer to be the law between states concern directly to other states, their public ships and merchant ships flying their flag.

Attention will be paid to aspects of the historical development of the law and the present law with particular reference to the delimitation of internal waters, the territorial sea, the contiguous zone and other offshore areas of the sea and of the high seas, continental shelf and deep sea now largely governed by the United Nations Convention on the Law of the Sea, 1982, and with certain more recent developments in the law.

### **Opportunity Workshop: Preparation**

**Session 37**  
**1745-1845**

**Tuesday**

### **3 September Armed Security: A Success Story**

**Session 38**  
**0830-0945**

Piracy has been a problem for shipping for hundreds if not thousands of years, but the pinnacle of a well-conceived piracy business model was only achieved when the Somali pirates began to attack vessels from around 2008 in the Red Sea, Gulf of Aden and the Indian Ocean. Their model: to seize the vessel and crew and to hold them to ransom. In an earlier session of this course, Frank Wall will have covered the growth of pirate attacks post 2008 and the position as it stands today.

Picking up from this earlier introductory lecture, this session will describe the legal and security framework established in the Indian Ocean High Risk Area since 2008. This will include an analysis of the continuing Somali piracy and Yemeni terrorist threat to shipping and an assessment of how effective the deployed military and private security forces are in countering the differing threats. A comparison with the threat to shipping in the Far East (including Sulu Sea) and the Gulf of Guinea will demonstrate how political and legal issues place different demands on the ship owner. The implications of cyber threats on shipping will also be covered.

### **LPG & LNG TRADES**

#### **Fundamental Design Principles of Gas Carriers**

**Session 39**  
**1000-1130**

It was not until the early 1960's, that the transportation of chemicals and liquefied gases began to grow significantly. Methane, or natural gas, posed great problems as the critical temperature for liquefaction is significantly lower than most of the other gases. These LNG (liquefied nature gas) ships are among the most expensive of the cargo carrying fleet, surpassed only by cruise vessels. Today LPG, LNG and chemicals moved by the sea account for a major portion of specialised trades.

The purpose of this session and the following two sessions is to ensure that participants have a good understanding of the main products moved in these trades, how these have developed, the major routes and the most significant business drivers.

#### **LNG and LPG markets and their Development**

**Session 40**  
**1145-1300**

It was not until the early 1960's that the transportation of liquefied gases began to grow significantly, and mostly it was the class of gas known as LPG – liquefied petroleum gas - which accounted for the bulk of the movements. Methane, or natural gas, posed great problems in the design of a system of transportation as the critical temperature for liquefaction is significantly lower than that for LPG.

This second of two sessions on the gases which are moved as liquids in the international deep-sea trades will examine the LPG market. Topics considered will be:

- some definitions to unravel the often confusing terminology when it comes to the natural gas liquid business

- what is LPG as encountered in its use for domestic purposes versus that which is transported at sea
- the different gases moved as liquids in the deep-sea gas trades
- design of vessels to carry these gases and their special transport features
- how the gases are used in the energy and petrochemical trades
- who are the players
- what is the state of the current market

## THE DRY BULK SHIPPING MARKETS

**Session 41**  
**1345-1515**

### 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 a concerted action to control the supply of tonnage will be discussed. Finally, some thoughts regarding the likely development of demand in the future will be presented.

**Session 42**  
**1530-1700**

### Dry-Bulk Shipping Economics

The revenue and cost structures for different charter party types will be examined and the factors which influence the returns from a charter party contract will be discussed. Which party pays for which costs will be explained along with the risks the parties assume. The session will conclude with a look at some of the myths which have influenced shipowner behaviour in the past.

**Session 43**  
**1700-1745**

### Dry-Bulk Demand Workshop

This session will have a very simple objective: to determine how much growth is required from the major bulk markets to absorb the volume of vessels currently on order at the World's shipyards.

**Session 44**  
**1745-1830**

### Opportunity Workshop: Final preparation

## LIQUID BULK SHIPPING MARKETS

**Wednesday**  
**4 September**

### The Tanker Market

**Session 45**  
**0830-1000**

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 current concerns on tanker safety and the regulatory response.

**Session 46**  
**1015-1115**

### The Tanker Market (*Continued*)

**Session 47**  
**1130-1230****Practical Applications of Worldscale**

The Worldscale system of quoting freight rates is unique to the tanker market, having developed from earlier post-war methods of presenting freight rates. One of the objectives of the system is to allow charterers the option to quote for business without being specific about the ports - for example, to describe a shipment as Middle East Gulf - West rather than Ras Tanura - Rotterdam. This built-in flexibility of the Worldscale System, however, does have some hazards for the uninitiated. This session will look at the System and reveal some of the traps awaiting the unsuspecting user.

**Session 48**  
**1330-1600****Opportunity Workshop: Presentations****Free Afternoon****CONTAINER TRANSPORTATION****Thursday****5 September****Transformation from Liner Shipping to Container Transportation****Session 49**  
**0830-0900**

The first session looks at liner shipping, its relationship with global trading, and the impact of the container revolution

- What is Liner shipping?
- Early development
- Different types of liner services
- Container revolution and its early impact
- Catalyst for development of world trade

**Development of Through Transport Systems – Hardware and Infrastructure****Session 50**  
**0900-1000**

The Container gave us door to door transport. This session looks at all the building blocks needed to make it happen:

- Ships
- Containers
- Inland Transport
- Container Terminals
- Inland Clearance Depots

**The Container Lines and their Networks – Trades, Services and Alliances****Session 51**  
**1015-1100**

This Session looks at the key container trades, as well as the container lines themselves, and how they compete and co-operate at the same time

- The important container trades – east/west vs north/south
- The container lines – who are they?
- Consolidation in the industry
- Co-operation – Conferences, VSAs and Alliances
- Types of Services – Direct vs Hub and Spoke, Pendulum, Round the World

**Container Lines and Their Customers: – Logistics and Supply Chains****Session 52**  
**1100-1130**

The 4<sup>th</sup> session identifies who are the customers, looks at containerisation from their perspective, and moves on to logistics and supply chains

- Tariff structures
- Rates of freight
- Who is the customer?

- The role of NVOCCs/3PLs
- What is logistics?
- Container shipping and the supply chain

**Session 53**  
**1145-1245**

**The Future for Container Shipping**

Finally, we look at recent developments affecting container shipping, financial, commercial and operational, and speculate what will be the main factors which will change the industry over the next 10 years – and longer!

- Financial performance, and key drivers
- Supply/demand parameters
- Bigger ships and their impact
- Infrastructure
- Safety and Security
- Environmental issues

**SHIP MANAGEMENT & CREWING**

**Session 54**  
**1345-1515**

**Ship Management Today/Tomorrow: Part I**

This session will provide definitions regarding the primary objectives of ship management, the three key components (Commercial, Technical and Crew) and three elements (the ships, the people and the systems). Two perspectives will be presented: Green and Red --with the latter illustrated by way of a case study involving the grounding of a mega container ship. Three operating models will also be defined as: Integrated ship management, outsourced and hybrid, the latter including the BOTS (Build, Operate, Transfer & Support) model. Towards the end of the session, the six core competencies of ship management will be introduced as:

1. Managing...MONEY
2. Managing...RELATIONSHIPS
3. Managing...INFORMATION
4. Managing...TECHNOLOGY
5. Managing...PEOPLE
6. Managing...RISK & REPUTATION

**Session 55**  
**1530-1645**

**Ship Management Today/Tomorrow: Part II**

Having identified the six core competencies, this session will explain each in turn. The session will conclude by focusing on emerging trends which characterise how and why the nature of ship management is changing (Managing...Into the future).

**Farewell Dinner**

**Friday**

**6 September The Shipbuilding Industry**

**Session 56**  
**0900-1000**

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.
2. **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.

### **Shipping Market Outlook**

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 session looks at the various factors which determine freight market earnings and discusses the present state of the shipping and shipbuilding markets.

**Session 57**  
**1015-1115**

### **The Future of Shipping**

In targeting "The Future of Shipping" as the ultimate objective of this session, the speaker will take aim at the broad landscape of the industry, in particular the major changes following the Industrial Revolution.

He will go on to highlight the role of technological developments in these massive changes, with many of the innovations deriving from without the shipping industry. To understand how we have arrived at where we are today, you must identify what has really changed and what were the underlying factors.

Against this backdrop, the session will speculate as to the likely future growth of trade and the impact this may have on shipping. In one scenario, the demand driven growth of the past slows significantly leaving the shipowner in a dilemma. He further posits that perhaps the only way forward is to grasp the concepts of "Smart Shipping" and embrace them with enthusiasm.

It is in this final area of Smart Shipping that the session will draw to a conclusion with three ways to change the shipping business model being offered:

1. Smart ships
2. Smart fleets
3. Smart logistics

By the time the session finishes, we will have looked at how shipbuilding has been impacted by the cyclical markets and reviewed the freight market sectors, providing an assessment of their near term future levels.

### **Conclusion**

**Session 59**  
**1215-1230**

***Programme subject to change***