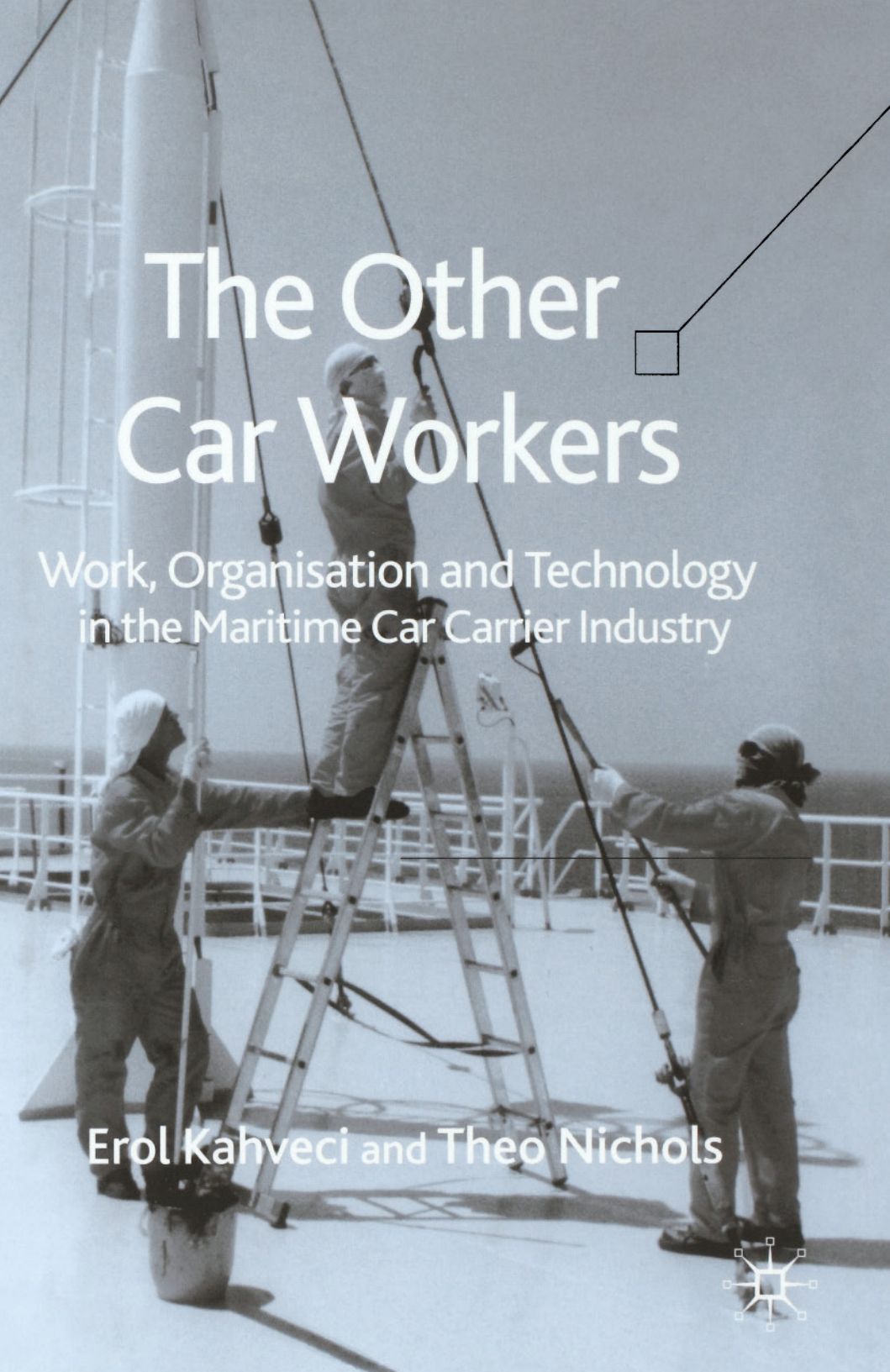


The Other Car Workers

Work, Organisation and Technology in the Maritime Car Carrier Industry

Erol Kahveci and Theo Nichols

The Other Car Workers

Other books by Erol Kahveci

WORK AND OCCUPATION IN MODERN TURKEY (with Theo Nichols and Nadir Sugur)

THE GLOBAL SEAFARER: LIVING AND WORKING CONDITIONS IN A GLOBALISED INDUSTRY (with Tony Alderton and others)

Other books by Theo Nichols

OWNERSHIP, CONTROL AND IDEOLOGY

WORKERS DIVIDED: A STUDY OF SHOPFLOOR POLITICS (with Peter Armstrong)

LIVING WITH CAPITALISM: CLASS RELATIONS IN THE MODERN FACTORY (with Huw Beynon)

CAPITAL AND LABOUR: STUDIES IN THE CAPITALIST LABOUR PROCESS WHITE COLLAR WORKERS, TRADE UNIONS AND CLASS (with Peter Armstrong, Bob Carter and Chris Smith)

THE BRITISH WORKER QUESTION: A NEW LOOK AT WORKERS AND PRODUCTIVITY IN MANUFACTURING

WORK AND OCCUPATION IN MODERN TURKEY (with Erol Kahveci and Nadir Sugur)

THE SOCIOLOGY OF INDUSTRIAL INJURY

GLOBAL MANAGEMENT, LOCAL LABOUR: TURKISH WORKERS AND MODERN INDUSTRY (with Nadir Sugur)

LABOUR IN A GLOBAL WORLD: CASE STUDIES FROM THE WHITE GOODS INDUSTRY IN AFRICA, SOUTH AMERICA, EAST ASIA AND EUROPE (with Surhan Cam)

THE FORDISM OF FORD AND MODERN MANAGEMENT: FORDISM AND POST-FORDISM, 2 VOLS. (with Huw Beynon)

The Other Car Workers

Work, Organisation and Technology in the Maritime Car Carrier Industry

Erol Kahveci
Senior Research Associate, Seafarers International Research Centre, Cardiff University

Theo Nichols
Distinguished Research Professor, School of Social Sciences, Cardiff University

palgrave
macmillan

ISBN 978-1-349-52110-4 ISBN 978-0-230-20938-1 (eBook)
DOI 10.1057/9780230209381

Softcover reprint of the hardcover 1st edition 2006 978-1-4039-4191-6

First published 2006 by
PALGRAVE MACMILLAN
Houndmills, Basingstoke, Hampshire RG21 6XS and
175 Fifth Avenue, New York, N.Y. 10010
Companies and representatives throughout the world

PALGRAVE MACMILLAN is the global academic imprint of the Palgrave Macmillan division of St. Martin's Press, LLC and of Palgrave Macmillan Ltd. Macmillan® is a registered trademark in the United States, United Kingdom and other countries. Palgrave is a registered trademark in the European Union and other countries.

This book is printed on paper suitable for recycling and made from fully managed and sustained forest sources.

A catalogue record for this book is available from the British Library.

Library of Congress Cataloging-in-Publication Data

Kahveci, Erol.
The other car workers: work, organisation, and technology in the maritime car carrier industry/Erol Kahveci and Theo Nichols.

p.cm.
Includes bibliographical references and index.

1. Sailors. 2. Merchant marine. 3. Quality of work life.
4. Automobiles—Transportation. 5. Shipping. I. Nichols. Theo. II. Title.

HD8039.S4K34 2006
331.7'613875448—dc22

2006043164

10 9 8 7 6 5 4 3 2 1
15 14 13 12 11 10 09 08 07 06

Transferred to Digital Printing 2011

Contents

List of Figures *vii*

List of Tables *viii*

List of Boxes *x*

List of Photographs *xi*

Acknowledgements *xii*

Glossary *xiii*

1. Introduction: Beyond the Assembly-Line **1**

Part I The Structure and Dynamics of a Globalised Industry **13**

2. Globalisation and Deregulation of the Maritime Industry – a General Review **15**

3. The Maritime Car Carrier Industry **42**

Part II The World of The Car Carrier Worker **77**

4. The World(s) of Car Carrier Crews **79**

5. Work and Working Conditions 1 – The Division of Labour, Contracts, Hours and Wages **99**

6. Work and Working Conditions 2 – Consultation, Compliance and Labour Control **126**

7. Work/Life Balance, Fatigue and Isolation from Family and Friends **143**

8. Trade Unionism **159**

9. Conclusion **178**

Appendix 1: Flagging Out and World Tonnage 1939–2003 *191*

Appendix 2: Distribution of Rank by Company *193*

Appendix 3: Turnaround Times and Voyage Cycles – Three Cases *194*

Appendix 4: Social and Welfare Facilities for Seafarers in Foreign Ports 196

References 198

Index 206

List of Figures

Figure 2.1 Flagging out and world tonnage (grt) 1939–2003 19
Figure 2.2 World shipping and own-flag contribution of 10 major nations 1970–2000 21
Figure 2.3 Flagging out by 35 most important marine countries and territories and GDP per capita 2004 22
Figure 2.4 Regulatory capacity of flag and average GDP per capita of flag state at purchasing power parities 2003, US$ 23
Figure 3.1 Global vehicle production and deep-sea shipments, 1981–2002 43
Figure 3.2 Japan's car production and exports 1950–2003 47
Figure 3.3 Major changes in global deep-sea vehicle shipment 1982 and 2002 49
Figure 3.4 Typical deck configuration of a PCTC 59
Figure 4.1 Over-representation and under-representation of various nations' seafarers by rank 88
Figure 4.2 Whether the job is a good one (percentages saying 'yes') 93
Figure 6.1 Perceived changes in the last five years (percentage balance of 'better' minus 'worse') 135
Figure 7.1 Is fatigue a problem on car carriers? (percentage who say 'yes') 150
Figure 7.2 Is social isolation a problem? (percentage who say 'yes') 152
Figure 7.3 How easy is it to get time off to attend personal events? (percentages) 155
Figure 7.4 If you need to take time off, how would you usually do it? (percentages) 155

List of Tables

Table 1.1	The automobile worker and 'alienation'	2
Table 2.1	Average AB wages in US$ 1992, 1995 and 1999	27
Table 2.2	Comparative wage costs (US$ per month)	27
Table 2.3	Multinational crew patterns (2002)	28
Table 2.4	Employment of own nationals in Panamanian, Maltese and Liberian flagged vessels 2002	29
Table 2.5	Ship operating budget 2004 (US$000s)	38
Table 3.1	Countries producing over one million cars 2003	43
Table 3.2	Cargo mix and net results	57
Table 3.3	Comparison of NYK's Anna 1978 and Virgo Leader 2004	63
Table 3.4	Major car carrier companies: Capacity and market share	70
Table 3.5	Average time in port for different types of cargo, Bristol, 1998	75
Table 3.6	Average percentage of voyage time in port, car carriers in different trades, Bristol, 1998	75
Table 4.1	How present job was obtained	82
Table 4.2	Why decide to be a seafarer	92
Table 4.3	The best thing about being a seafarer	95
Table 4.4	Worker expectation and aspiration – workers in China, Taiwan, South Korea, Turkey and Brazil compared to seafarers	97
Table 4.5	Would you like your son/daughter to do this job?	97
Table 5.1	ITF uniform 'TCC' collective agreement for crews on flag of convenience ships 1 January 2005, $US	118
Table 5.2	Port calls and lashing on a short-sea car carrier	124
Table 6.1	Consultation on various issues by rank with some comparisons to employees in British industry and to those in British car factories	127
Table 6.2	Perceived job influence and occupation with some comparison to employees in Britain	129
Table 6.3	Characteristics of companies	137
Table 6.4	Aspects of ratings' commitment to the company	139

Table 6.5a Ratings' evaluation of relations between officers and ratings and of relations with the company 137
Table 6.5b Officers' evaluation of relations between officers and ratings and of relations with the company 137
Table 6.6 Ratings' evaluation of support for employee participation 141
Table 6.7 Ratings' perceptions of influence by company 141
Table 6.8 Various further assessments of companies by ratings 142
Table 7.1 Seafarers' comparisons of conditions on car carriers and other vessels by rank 147
Table 7.2 Time at sea and time in port 147
Table 7.3 How often do you get six hours uninterrupted rest? 151
Table 7.4 Money sent home by regional origin and rank ($US per month) 153
Table 7.5 Form of communication with family and friends 157
Table 7.6 Form of communication from family and friends 157
Table 8.1 Experience of ratings aboard national flags and on FoC's with and without ITF Agreements 175

List of Boxes

Box 2.1 Why consider third party management? 34
Box 4.1 Two days to remember 86
Box 5.1 Reflections on the seafarer's job, past and present 103
Box 7.1 Port life as it was 146
Box 8.1 An example of solidarity action 164

List of Photographs

Car carrier terminal at Le Havre, France, 2004 (photograph: EK) 8
A general cargo vessel converted to carry cars, 1955 (photograph WWL Archive) 53
A dry bulk carrier converted to carry cars, 1976 (photograph WWL Archive) 53
Platforms being assembled to build car decks in the 1960s (photograph WWL Archive) 54
Car decks on a modern car carrier, 2000 (photograph WWL Archive) 56
High and Heavy cargo stored on deck 5, modern car carrier, 2004 (photograph EK) 58
The 'concept vessel' E/S Orcelle, 2005 (photograph of computer generated model, WWL Archive) 64
Crew notice on modern car carrier, 2004 (photogrph EK) 69
'Utility boys' at work, Rizal Park, Manila, Philippines, 2004 (photograph EK) 85
Filipino rating lashing cars (photograph WWL Archive) 102
Preparing the side-ramp for discharge, 2004 (photograph EK) 105
Bed linen lined up by rank, 2004, (photograph EK) 109
Arriving at Halifax, Canada, after crossing the Atlantic, 2004 (photograph EK) 148
Filipino cook in his 'eatery', Cebu, Philippines, 2002 (photograph EK) 189

Acknowledgements

Our main thanks are due to those who work in the car carrier industry – the car carrier crews who responded to our questions and with some of whom one of us sailed; and the managers of companies in the industry, who, in compliance with the wishes of some of them, must remain anonymous. We must also put on record our thanks to David Cockroft and his colleagues at the ITF who gave unstintingly of their time to answer our questions.

We received considerable help in the conduct of the investigation from Jamie Veiga and Nonoy Amante, who translated questionnaires into Portuguese and Tagalog, from Neil Ellis, who inputted quantitative data, and from Nonoy Ty and Jamie Veiga, who conducted some interviews.

A number of port chaplains were very helpful to us, none more so than Rev. Philip Auden at Portbury and Deacon Antje Zeller at Bremerhaven.

We are indebted to Tony Lane and Nik Winchester for reading an early version of the manuscript in draft and to Peter Fairbrother, Nick Hammer and Nathan Lillie for their comments on Chapter 8, although of course responsibility for what is written here remains our own.

The research was made possible by financial support received from the Economic and Social Research Council under Award L 212252072.

We are indebted to Sandra Bonney and Louise Deeley for their help with some of the tables and figures. The book draws on some data from the British Workplace Employee Relations Survey and the help is acknowledged of the WERS Users Sub-Committee and the Data Archive, University of Essex, for granting access to restricted and unrestrictive data.

Finally, a special word of thanks is due to the Wallenius Wilhelmsen Logistics Archive for permission to reprint several photographs from their unique car carrier collection.

Glossary

AB	Able Bodied Seafarer
AMOSUP	Associated Marine Officers and Seamen's Union of the Philippines
ASEAN	Association of South East Asian Nations
BIMCO	Baltic and International Maritime Council
CEU	Car Equivalent Unit
DWT	Deadweight Ton
EU	European Union
FDI	Foreign Direct Investment
FoC	Flag of Convenience
GDP	Gross Domestic Product
GRT	Gross Registered Ton
GUF	Global Union Federations
H&H	High and Heavy
HMM	Hyundai Merchant Marine
HUAL	Hoegh Autoliners
IBF	International Bargaining Forum
ICMA	International Christian Maritime Associations
ICONS	International Commission on Shipping
ICS	International Chamber of Shipping
ILO	International Labour Organisation
IMEC	International Maritime Employers' Committee
IMO	International Maritime Organisation
IMVP	International Motor Vehicle Programme
INTERTANKO	International Association of Independent Tanker Owners
ISAN	International Seafarers' Assistance Programme
ISF	International Shipping Federation
ISL	Institution of Shipping Logistics
ISM	International Safety Management Code
ISPS	International Ship and Port Facility Security Code
ITF	International Transport Workers' Federation
JAMA	Japan Automobile Manufacturers' Association
JETRO	Japan External Trade Organisation
JIT	Just-in-Time
JNG	Joint Negotiating Group

K LINES	Kawasaki, Kisen, Kaisha Limited
LCTC	Large car truck carrier
MARPOL	IMO Convention for the Prevention of Maritime Pollution from Ships
MIT	Massachusetts Institute of Technology
MOL	Mitsui OSK Lines
MPV	Multi Purpose Vessel/Vehicle
NCC	Non-Containerised Cargo
NGO	Non-Governmental Organisation
NUMAST	National Union of Marine, Aviation and Shipping Transport Officers
NYK	Nippon Yusen Kaisha Line
OECD	Organisation for Economic Co-operation and Development
OJT	On-the-job training (Philippines)
OPEC	Organization of the Petroleum Exporting Countries
OS	Ordinary Seafarer
P & I	Protection and Indemnity
PCC	Pure Car Carrier
PCTC	Pure Car Truck Carrier
PDI	Pre Delivery Inspection
POB	Port of Baltimore
POEA	Philippines Overseas Employment Administration
RO	Radio Officer
Ro-Ro	Vessels on which Vehicles can Roll on and Roll off.
SEA	Swedish Shipowner Employers' Association
SEKO	The Swedish Union for Service and Communication
SIRC	Seafarers International Research Centre
SMMT	Society of Motor Manufacturers and Traders
SOLAS	International Convention on the Safety of Life at Sea 1974
STCW	Convention on Standards of Training, Certification and Watchkeeping 1978 and Revised 1995
SUV	Sports Utility Vehicle
T/C	Time Charter
TAP	Temporarily Employed Personnel (Sweden)
TCC	Total Crew Cost
TEU	An International Container Unit: A Twenty-Foot Equivalent Unit.
UECC	United European Car Carriers

UNCTAD	United Nations Conference on Trade and Development
WWF	World Wide Fund for Nature
WWL	Wallenius Wilhelmsen Lines (after December 2005 Wallenius Wilhelmsen Logistics)

1
Introduction: Beyond the Assembly-Line

In his 1936 film *Modern Times* Charlie Chaplin plays a shipyard worker, a department store night watchman, a singing waiter and a prisoner – but it is the idea of the assembly-line worker struggling against the dehumanising effects of the machine that most people probably remember. For much of the post-war period, this idea was captured in the social sciences by two concepts above all others: 'alienation' and 'Fordism'. It might well be claimed that this is what the leading and most-read works of industrial sociology used to be about.

For Peter Drucker, the theorist of the modern corporation, car manufacturing was 'the industry of all industries' (Drucker 1946). For many people, the car assembly-line worker represented car workers as a whole and indeed, in both lay and social scientific accounts, often all workers – either in terms of their present condition or in terms of claims being advanced about what all work would become. Much of the impetus for this came from America. In the early 1950s Walker and Guest caught some of the flavour of much that was to come later – summed up for instance by a worker's complaint: 'Day in and day out plugging in ignition wires. I get through with one motor, turn around and there's another motor staring me in the face. It's sickening' (Walker and Guest 1952: 54). Another account by Chinoy (1955), based on material gathered in the late 1940s, had explored the manner in which car workers reconciled the conflict between the American Dream and the reality of car factory life, in part by transferring their ambitions from themselves to their children. In this, the specific 'sickening' aspects of car assembly-line work were taken for granted and car workers represented a prime example of those who experienced the realities of working class life and the way people sought to cope with these. By the mid-1960s, another

American sociologist, Blauner, was able to note that there had been at least seven full-length studies by sociologists, 'more than for any other industrial group in the United States' (1964: 5).

Blauner's own study was an attempt to demonstrate that workers in different industries experienced different levels of alienation. Considering four different industries – printing, textiles, automobiles and chemicals – he argued that the car assembly worker was the most alienated as judged on various dimensions. To demonstrate this, Blauner made use of a 1947 Roper survey of 3000 blue-collar factory workers in 16 industries. Table 1.1 constructed from a selection of some of these workers' responses, on the basis of which Blauner mounted his own analysis, brings to light two general patterns. The first is that printing and chemicals tend to have the highest percentages of positive responses (or the lowest percentage of negatives ones, depending in which way the question was put). The second is that the highest rates of response

Table 1.1 The automobile worker and 'alienation'

Percentages	**Printing**	**Textiles**	**Automobiles**	**Chemicals**
Can have present job as long as want it	92	84	73	94
Likely to be laid off at any time during next 6 months	3	14	29	2
Optimistic about security on retirement	58	43	33	63
Job too fast most of the time	10	32	33	12
Feel too tired	12	38	34	19
Feel can try out own ideas on job	79	38	47	64
Feel free to leave work for 30 minutes	81	49	60	58
Satisfied with their company	78	84	62	92
Rating their jobs as mostly or always dull	4	18	34	11
Feel jobs are too simple	16	23	35	21
Wish they could have chosen a different trade or occupation	36	54	69	58
Wanting another job at same pay	21	11	33	11

Source: Blauner (1964, Appendix A, adapted from various tables).

that signify insecurity are to be found among automobile workers; also, usually, the highest rates of response that signify lack of intrinsic satisfaction with the job; so, too, the highest rates of response that suggest a lack of attachment to the industry – wishing for a different job (the precise question was: 'If you could go back to the age of 15 and start life over again, would you choose a different trade or occupation?'); and also the highest percentage wanting another job at the same pay.

Blauner fitted these and other data into his idea that the history of work in capitalist society can be graphed as an inverted U curve. Essentially, in good part by influenced the writings of the early Marx, which were newly translated and influential in intellectual circles in the 1960s, he 'operationalised' alienation in terms of several dimensions – powerlessness, meaninglessness, isolation and self-estrangement. He then argued, using data from the Roper survey and elsewhere, that in the early period, dominated by craft production (and exemplified for him by printing), alienation was at its lowest and the workers' freedom at its highest. The curve of alienation was then seen to rise in the period of machine industry (represented by textiles) with increases in powerlessness and to reach its highest point in the assembly-line industries of the twentieth century – represented by automotive production, where 'the combination of technological, organizational, and economic factors has resulted in the simultaneous intensification of all dimensions of alienation' (1964: 182). Following this, automation, in the shape of continuous process industries, notably the chemical industry, the last of the 'prototypes of the historical epochs of manufacturing' that he considered, represented the onset of a countertrend (1964: 182). We are not concerned here with the adequacy of Blauner's analysis – a question one of us addressed several decades ago, which hardly justifies revisiting now (Nichols and Beynon 1977). Rather the point is that the car manufacturing industry, and in particular car assembly-lines, featured prominently in the sociology of work, and in Blauner's book they actually represented the high point of alienation.

The sociological study of the sorts of service occupations that have developed in more recent decades has tended to stress how like the car assembly-line they are. Sometimes work in call centres has been summed up as constituting an 'assembly-line in the head' (Taylor and Bain 1999). In similar vein, work in fast food chains has been seen to entail burgers being assembled, and sometimes cooked, in assembly-line fashion. By extension, the term 'McDonaldization' has come to be applied to many types of work that once might have been called 'Fordist', with the emphasis on calculability, predictability and control.

Not all the studies of assembly-line work have come from America. In the UK, Beynon produced the aptly named *Working for Ford* (1973). Based on observation and interviews conducted before and after the turn of the 1970s at Ford's Halewood plant at Liverpool, this variously enraged and delighted his readers, depending on their politics, by declaring 'to stand there and look at the endless, perpetual, tedium of it all is to be threatened by the overwhelming insanity of it' (1973: 109). He went on to examine in close detail the way that workers survived, joked, got their own back, resisted. In France, Linhart produced an account of comparable power, based on experience of the assembly-line at the Citroën car factory at Choisy in the late 1960s. In introducing Linhart's account, the British publisher, John Calder, wrote about Linhart learning 'the reality of working on the assembly-line and what it involves in terms of relentless and dangerous hard labour, loss of dignity and individuality, victimisation and exploitation' (Linhart 1981). Similar writing was also to be found in other countries.

In later decades, two developments occurred in the social science literature, both of which stemmed from the changing international division of labour: interest grew in Japanese transplants (Japanese-owned factories that operated abroad) and somewhat later, in global commodity chains.

At various times in the history of industrial capitalism different countries have served as exemplars of what a leading manufacturing nation should be – Germany in the last quarter of the nineteenth century, the USA after the Second World War, and then, for a period after this, Japan, whose manufacturing prowess attracted unparalleled interest among social scientists as her manufacturing success rocked industrialists and policy makers in Europe and the USA. Some of the early post-war writers on Japan had stressed the distinctive nature of Japanese (as opposed to European/American) society and culture (Abegglen 1958 and Dore 1973). Subsequent debate tended to focus on whether it was the culture that was different or whether more attention should be directed to the structure and ownership of industry or the role of the state. The usual game of 'spot the missing factor' ensued as industrial nations, not least Britain, sought the holy grail of increased productivity (Nichols 1986).

As other authors have pointed out, interest in things Japanese then took a pronounced turn in the mid-1980s, for at this time Japanese firms abruptly began to move systematically from being engaged in trading relations with Western countries and firms to forging joint

ventures and independent subsidiaries, located inside the US and Europe (Elger and Smith 2005, Chapter 1). Academics, industrialists, trade unionists and governments now fixed their attention on the implications of Japanese FDI (foreign direct investment) for jobs and on the 'transferability' to local firms of the supposedly superior transplant performance, and the practices that made for this. A mass of research centred on total quality management, quality circles, just in time and *kaizen* (continuous improvement) and the good news about Japanese management was broadcast worldwide at ever increasing velocity through a cultural circuit of capital that now extended even to so-called developing countries such as Turkey (Nichols and Sugur 2004: 79). Not everyone agreed that the news was good, however.

What these developments meant for workers became a subject for dispute. On the one side, there were those who took a positive view, for instance Kenney and Florida (1993). But there were others, for instance Parker and Slaughter (1990), two members of the UAW (United Automobile Workers' Union) in the United States, who saw the imported practices – and the rhetoric about worker commitment and participation – as a recipe for 'management-by-stress'. There were also some who questioned the meaning of teamwork and other 'Japanese' management techniques (Danford 1999); who emphasised the insidious control mechanisms to which workers were being subjected (Garrahan and Stewart 1992); or who suggested that even if workers were initially impressed by the new management methods, they became disillusioned later (Rinehart et al. 1997). Much of this discussion and argument spilt over into a wider debate on whether Fordism had been supplanted by post-Fordism (Beynon and Nichols 2006).

Books by leading management gurus came and went on the airport bookstalls, but one contribution to the discussion of 'Japanisation' (or its near cousin, lean production) exerted an influence above all others. This was the book by Womack and his colleagues (1990), which resulted from research at the IMVP (International Motor Vehicle Program) at MIT (Massachusetts Institute of Technology). 'Most people', they said, 'including so-called blue-collar workers – will find their jobs more challenging as lean production spreads. And they will certainly become more productive. At the same time', they conceded, 'they may find their work more stressful, because a key objective of lean production is to push responsibility far down the organisational ladder. Responsibility means freedom to control one's work – a big plus – but it also raises anxiety about making costly mistakes' (Womack et al. 1990: 14). In response to Parker and Slaughter (1990), however, Womack and his

colleagues strongly disagreed that lean production meant management-by-stress. They agreed, they said, that 'a properly organised lean production system does indeed remove all slack – that's why it's *lean.* But it also provides workers with the skills they need to control their work environment and the continuing challenge of making work go more smoothly ... lean production offers a creative tension in which workers have many ways to address challenges.' They also predicted that 'by the end of the century ... lean-assembly plants will be populated almost entirely by hugely skilled problem solvers whose task will be to think continually of ways to make the system run more smoothly and productively' (Womack et al. 1990: 101–2). In yet more declamatory and prescriptive style, they asserted: 'Lean production is a superior way for humans to make things. It provides better products in wider variety at lower cost. Equally important, it provides more challenging and fulfilling work for employees at every level, from factory to headquarters. It follows that the whole world should adopt lean production, and as quickly as possible' (Womack et al. 1990: 225). Somehow, outside of certain management circles, this idea that car factories provide challenging and fulfilling work has never really caught on.

In the 1980s and 1990s increasing recognition of the global organisation of production led to a shift of interest away from the factory towards questions of geographical location and spatial interconnection and the development of several forms of analysis that essentially invoked the notion of a 'chain'. Foremost among these was the work of Gereffi and Korzeniewicz (1994) and their concept of global commodity chains. This distinguished buyer-driven and producer-driven commodity chains. In the former, which is well represented in the apparel industry, large retailers or brand-name merchandisers utilise networks of independent contractors (or 'original equipment manufacturers'). Acting through a series of commercial contracts, they typically act as 'manufacturers without factories'. In the latter, typical of the automotive industry, control is exercised over production through the integrated production system of transnational corporations and their subsidiaries. As this distinction makes clear, the emphasis in this approach has been very much on the governance structure of the chains.

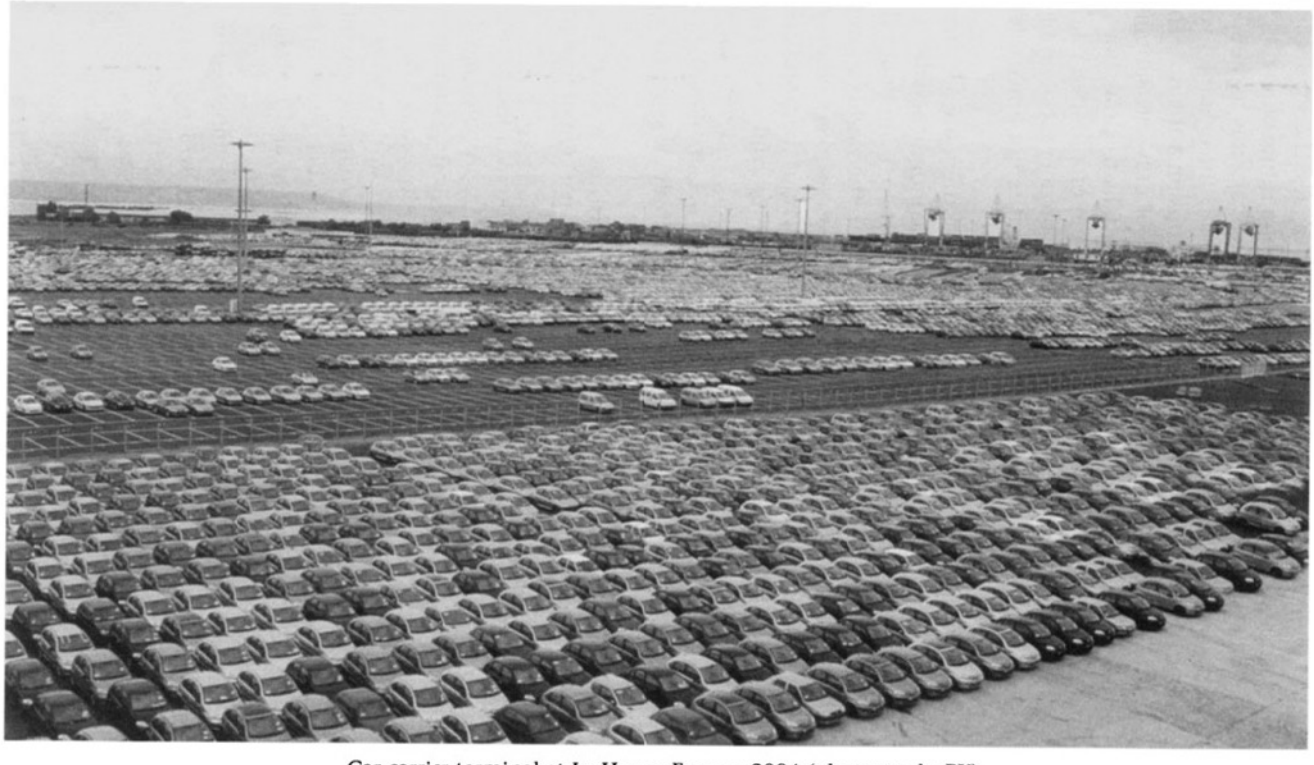
Froud et al. (1998) have criticised the Gereffi chain approach, and the work of Womack and his colleagues, for their limited focus and restricted concept of 'industry' or sector. As they put it: 'If cars is "the industry of industries", for most authors the question of questions has been about the future of the car makers or, more exactly, the major assemblers who undertake the variable amounts of in-house manufacturing and assemble

bought-in components.' For Froud and her colleagues, the significance of this is the assumption that current problems and future outcomes for assemblers depend on what they do in productive terms as new car manufacturers and chain co-ordinators – and not, for example, with reference to difficulties in raising cash through consumer finance. They argue more generally that the chain approach not only oversimplifies the private problems of the assemblers but also fails to show how an unequal society jointly produces a private problem of a limited market for new cars (via second-hand purchases) and the broader social problem of a growing parc whose result is congestion that is not amenable to easy political fixes.

What Froud and her colleagues and others like them are seeking to challenge is a 'productionist' chain concept of economic activity. Our purpose is a more limited one. To make it clear, there is no doubt that the automobile industry plays an important part in the world economy. On one estimate, there are three to four million workers employed directly in the manufacture of automobiles throughout the world and a further nine to ten million in the manufacture of components and materials. If we add the numbers involved in selling and servicing the vehicles, we reach a total of around 20 million (Dicken 1998: 316). As this suggests, though, the car industry cannot simply be equated with car production or, within that, assembly work.

Blauner himself was fully aware that assembly-line workers in all industries probably constituted not more than five per cent of the entire US labour force at the time he was writing (1964: 5). Despite this, and in part because of the impact of his book and of other yet more striking accounts, the car assembly-line worker has figured disproportionately in the social science literature on work and in the public imagination. The fact is, however, that, at all periods, whenever there have been car assembly-line workers there have always been other workers who have had it as their function to produce the components that they assemble, and there have also been yet other workers who have been employed to sell these vehicles, and still others who have repaired and maintained the vehicles once they have been assembled and sold.

At the turn of the century some social scientists have embarked on yet another wave of interest in things related to the car, which is part of a wider upsurge of interest in the significance of 'flows, movement and mobility in social life' (Featherstone 2004: 1). Urry (2004), for example, has developed the idea of a system of 'automobility', which he sees to have six components. These components comprise 'the quintessential *manufactured object*' (for short, the car); '*individual consumption*';



Car carrier terminal at Le Havre, France, 2004 (photograph: EK)

'quasi-private *mobility*'; 'the dominant *culture*' ('which sustains major discourses of what constitutes the good life'); '*environmental resource-use*'; and 'an extraordinarily powerful *complex* constituted through technical and social interlinkages with other industries'. This last is seen to encompass car parts and accessories; petrol refining and distribution; road-building and maintenance; hotels, roadside service areas and motels; suburban house building; retailing and leisure complexes; advertising and marketing; urban design and planning; and various oil-rich nations; as well as car sales and repair workshops (Urry 2004: 26–7, all emphases in the original).

Remarkably, from our point of view, although this expanded understanding of the automobile industry incorporates repair and maintenance (and presumably the workers engaged in this), and although it stresses the millions of cars produced each year, it leaves out of account how the transportation of these 'quintessential manufactured objects' (cars) from the factory to the customer takes place. Historically, this was accomplished by road and by rail and sometimes, in the case of expensive models, by air. With the expansion of international trade, however, it occurs to a significant extent by sea. It is here that this book comes in. It looks at some of the *other* car workers who have been entirely neglected by mainstream social science – those who transport cars by sea and the maritime car carrier sector in which they work.

The classic car factory studies and the literatures on transplants, commodity chains and the new-fangled sounding 'automobility' all fail to consider how cars get from the factory to the consumer. The omission is all the more surprising in the now enormous social science literature on globalisation. Urry comments: 'Strangely the car is rarely discussed in the "globalisation literature" ' (2004: 26) and this is indeed the case. But it is no less strange that the transportation of cars by sea has also escaped the attention of those who have deliberately urged their fellow social scientists to think in terms of 'flows' (Lash and Urry 1994).

In the region of eight million cars cross the oceans of the world in the deep-sea trade each year, linking countries and continents. Probably the same number again are transported by the short-sea trades.Our purpose is to examine the world maritime car carrier sector – a most important link in the chain that links the millions of cars produced worldwide every year to those who purchase them in other countries and indeed continents – and the nature of employment within this neglected sector. Unlike financial services, which may be transferred worldwide electronically, cars (and also car components, though it is cars upon which we concentrate here) are physical products and may require to be physically

transported. This transportation is a vital part of the 'chain' and, as we shall see, it is something that was powerfully affected by the rise of car transplant factories and, in its own way, by lean production too.

At the slightest mention of change in the maritime industry people are apt to start thinking in terms of containerisation. The container is, for most of us, something to be seen on land, transported by road or rail. We know full well that some of the containers we see may be bound to or from ports – that they belong to a transportation system part of which takes place at sea. We tend not to see the car in the same way. The car is an even more familiar sight but the industry that transports cars by sea is much less well known. Yet the cars that probably line the street in which you live; the cars that clog the roads; the cars that travel the motorways are not all built in Britain (or whatever other country in which you happen to live). Often, they will have been produced somewhere else and often too they will at some stage have been transported by sea.

The book is divided into two parts. Part I contains two chapters. The first of these, Chapter 2, attempts to outline the important developments that have characterised the maritime industry since the end of the long post-war boom in the 1970s. These include containerisation, as an important technological innovation, but go considerably beyond this to frame subsequent discussion in the context of the deregulation of the industry, the rise of flags of convenience, labour recruitment from low-wage countries and the emergence of a global labour force and, at the same time, increased concentration of capital, tighter integration of shipping as part of the transport industry, increased outsourcing and the development of bigger, faster ships with smaller crews and reduced turnaround times. Chapter 3 then focuses on the maritime car carrier sector, which is of course part of this larger industry, and details its structure, its spatial location, its ownership and management, its labour force and its dynamics, thus seeking to provide a political economy within which the various chapters in Part II can be set.

Part II turns attention to the nature of work on car carriers, how it is organised, and the implications of the industry's dynamics for car carrier crews. An initial chapter, Chapter 4, examines the way that crews both belong to a global labour force but one that, because of differences in rank, and notably and often related to this, nationality, inhabit different social worlds. A pair of further chapters, Chapters 5 and 6, consider aspects of work and working conditions – the division of

labour on board; differences with land-based work organisation; social isolation on board; various aspects of contract, hours worked and wages; the degree to which there is consultation with employees; the perception of influence by those of different rank; compliance and labour control; and issues of stress and workload. An analysis is then provided of differences between the main companies, among which those that practice what we call the 'social democratic option' are seen to be rated as best by their employees.

There then follow two more chapters and a conclusion. The first of these chapters, Chapter 7, examines in detail a subject that now dominates much discussion of work in land-based industry – the question of so-called work/life balance. For those who work in the maritime car carrier industry, hours of work (exceptional as we shall see that they are) are only one indicator of work/life balance. A number of related issues are also therefore explored – the chance to get ashore during what, especially for ratings, tend to be long periods contracted to go to sea; the impact of different voyage cycles; the consequences of the drive to maximise time at sea and minimise turnaround time; the implications of the rise of hub ports and the changing nature of port life; how easy it is to get shore leave; the extent to which crews get sufficient rest from their duties; problems of pressure of work, long hours and fatigue; and finally, problems of isolation from family and friends because of lack of communication with home. In the second of these chapters, Chapter 8, the focus shifts. Most seafarers on car carriers and indeed other seafarers, except those who are tied closely to ports in their home country and who sail under their own country's flag, face particularly difficult problems with respect to welfare support in foreign ports, and no less so, difficulty in unionising. Chapter 8 therefore examines the role of national trade unions and the problems they face, and what they represent to the crews we studied on car carriers. We then examine the role, conditions of success and unfolding strategy of the global union federation, the ITF – the only agency with the leverage to improve seafarers' conditions and an exceptional organisation in its own right. The Conclusion then provides an overview of the book as a whole.

Part I The Structure and Dynamics of a Globalised Industry

2

Globalisation and Deregulation of the Maritime Industry – a General Review

The end of the Second World War was followed by what is now widely looked back upon in the advanced industrial societies as a golden age of growth. The coming to an end of this period, for many people clearly marked by OPEC's decision to quadruple the price of oil in 1973, has been attributed to a variety of different causes, including not least a rise in wages as a consequence of the strengthening of labour, which had been brought about on the back of full employment and an increased sense of security engendered by the post-war welfare state. As Armstrong et al. (1991: 172) put it: 'In full employment lay both the historic achievement of the boom and its undoing.' The difficulties raised by full employment manifested themselves most obviously in accelerating inflation. A less noticeable but ultimately more crucial problem was a general decline in profitability. As long as the boom had continued, it had been accompanied by a rise in the mass production – and mass consumption – of durable goods. In the advanced capitalist countries GDP (Gross Domestic Product) and GDP per capita grew almost twice as fast as in any previous period since 1820. The growth in the volume of trade was eight times faster in 1950–73 than in the period 1913–50 and twice as great as in the century from 1820. World trade in manufactured goods grew eight-fold (Glyn et al. 1990: 42).

The shipping industry generally benefited from the boom. But it also faced some of the problems faced by land-based industries in its aftermath. As the authors of the history of industrial relations in the British merchant shipping industry comment, the changed political climate of the 1980s meant the exposure of managed labour markets and consensual industrial relations systems to the play of competition and market forces and the systematic reduction of workers' and trade union rights, particularly those acquired in the 1970s. The new political order thus set

the stage for the 'reversal of the roles of management and unions in the 1970s, with managements now on the offensive and unions defending their interests as best they could'. In merchant shipping, the labour shortage of the 1970s turned into a surplus; and the search was on for ratings 'who would accept low wages and whose statutory and negotiated fringe benefits were few, if any' (Marsh and Ryan 1989: 218).

With the benefit of hindsight, the 1966 UK seamen's strike can be seen as the beginning of the end. The strike, a struggle over hours and pay, in the context of a government policy to restrict wage increases in an attempt to combat inflation, lasted 47 days and led to the declaration of a state of emergency and the accusation from the then prime minister, Harold Wilson, that it was led by 'a tightly knit group of politically motivated men'. At the cost of some simplification, it can be said that land-based industry in the advanced capitalist countries dealt with its problems by closing plants, attacking organised labour, increasing the intensity of labour of those that remained and, over time, by relocating production to low-wage countries. Compared to this, the shipping industry dealt with its problems in a drastic and also distinctively global way.

The deregulation of an industry

To understand the distinctive nature of what the shipowners did, it is necessary to remember that by the beginning of the twentieth century almost all ships were crewed by nationals of the ship's flag and that this continued into the 1970s. A British study conducted in the early 1970s into the forces 'affecting joining, serving and leaving the merchant navy' (labour turnover had become a problem) makes no mention of foreign labour (Hill 1972). The practice of crewing ships with a country's nationals (along with some of Irish and Commonwealth origin and a few from 'elsewhere' as the study by Hill had put it) was typically the result of a legal requirement which varied in strength from country to country. Shipowners boldly circumvented such requirements by the practice of 'flagging out'. Looking at the development from an industrial relations perspective – something which is now very rarely done – Marsh and Ryan make the point that there is no parallel on shore to the ease with which ships can be flagged out 'for operation by low paid substitutes working under wholly different rules and systems of regulation, or, indeed, under systems which, if they exist at all, are so loosely enforced as to be easily disregarded' (1989: 202).

Examples of 'flagging out' can be found in the distant past. In the Eastern Mediterranean in the eighteenth century the flag of a vessel was

not indicative of either its ownership or the nationality of its captain. Shipowners from powerful nations usually flew their national flag as a means of protection for their vessels, but ships from Genoa might use the French flag and then the Austrian flag, as they did after the French state increased consular and other dues (Metaxas 1985: 8). Even before that, in the middle of the seventeenth century, the Swedish merchant fleet grew considerably in size because many Dutch shipowners chose to fly the Swedish flag. It paid to do so because Swedish neutrality offered benefits at a time when England and Holland were at war. Politically motivated reflagging had also occurred in the years before the second world war, when many of Esso's tankers, hitherto under the flag of the former Free City of Danzig (now Gdansk, Poland), fearing the outbreak of war, switched to the Panamanian flag and were thereby able to substitute American for German crews. Politically motivated reflagging was also at work when in the first years of the Second World War American-flagged ships were prohibited for reasons of neutrality from entering European ports, and a number of ships, especially tankers, registered in Panama so that they could go to England. A more straightforwardly greedy example of American flagging out had occurred in 1922 when Averill Harriman, owner of the US shipping company United America Line, wanted to circumvent Prohibition and make money from the sale of alcohol onboard his ships, switching to the Panamanian flag for this purpose (Johnsson 1996: 14–16).

However, the main line of development in more recent moves to flag out was prefigured by US owners who, after the Second World War, moved away from American-registered ships, which were required by law to use expensive American crews (Carlisle 1981, Lane 1996: 16). Indeed, the International Transport Workers' Federation (ITF) has been fighting flags of convenience (FoC) since 1948, the early ITF campaign having prompted an investigation by the International Labour Organization (ILO), which visited some 30 Panamanian vessels and found among other things that there were no regulations concerning crew accommodation, crewing requirements, hours and overtime, food and catering or inspection of seafarers' conditions of work; that, in practice, legislation did not apply to foreign seafarers; that seafarers could do nothing to recover arrears of wages; and that almost half the ships on the Panamanian register were more than 30 years old (ILO 1950).

The highly organised labour markets of the traditional maritime nations in Europe and Japan had remained relatively unscathed in the years after the Second World War until the prolonged recession in world trade in the 1970s and 1980s made itself felt to shipowners in the shape of falling

freight rates. When that happened, at sea as on land, the response was to find a way to cut labour costs; in the shipping industry that meant increased resort to flagging out. Land-based manufacturing enterprises that wish to cut labour costs have a choice, constrained by particularities in each given instance: either to export capital (shift their operation abroad; or less drastically, shift to a low wage area in the same state) or to import labour from cheap labour zones (use migrant labour; or again less drastically, employ disadvantaged groups at home – women, blacks, nonunionised labour, in fact labour of any weaker sort). By engaging in fictitious capital export – altering the national registration of their vessels – the shipowners could achieve the advantages that land-based employers get when they shift their factories abroad – and not only this, they were able to access labour from the whole world's cheap labour zones.

There is dispute about the exact definition of a flag of convenience. Having considered the issues, Bergantino and Marlow (1997:5) proposed that a flag of convenience should be identified as a flag which allows:

1. Lower crewing costs requirements, since registration under a flag of convenience generally means:
   - unrestricted choice of crew in the international market
   - not being subject to onerous national wage scales
   - more relaxed crewing rules
2. Lower operating costs generated by 'lighter' maintenance programmes and less stringent enforcement of safety standards imposed by the register
3. Less regulatory control and avoidance of bureaucracy
4. The probable avoidance of tax
5. Anonymity
6. Easy accessibility/exit to/from registry

Many other such definitions have been attempted but, briefly, a flag of convenience may be said to exist where there is no genuine link between the flag state and the ships on its register, and what is not in doubt is the importance of lower crewing costs.

It is difficult to underestimate the important contribution made to flagging out after the Second World War by the so-called Panlibhon countries (Panama, Liberia and Honduras) and especially by the first two of these. In 1949, for example, Liberia flagged 0.05 million grt. The amount then rose and rose – 1955: 4.0 million grt; 1960: 11.3 million grt; 1965: 17.5 million grt; 1970: 33.3 million grt; 1975: 65.8 million grt; 1980: 80.3 million grt. Panama flagged 3.02 million grt in 1949 – it then increased,

though to a more modest extent – 1955: 3.92 million grt; 1960: 4.2 grt; 1965: 4.5 grt; 1970: 5.6 million grt; 1970: 5.4 million grt; 1975: 13.7 million grt; 1980: 24.2 million grt (Bergstrand 1983: Table 2.2). At various times up to 1980 some other countries had also offered flagging out services, including Costa Rica, Lebanon, Cyprus, Somalia, Singapore, the Bahamas and Bermuda.

Of course, increases in ships flagged out have to be seen in the context of a growing total world fleet. Considered as part of this broader picture, the incursions made by FoC had appeared to have come to an end in the latter part of the 1970s. Indeed, in the early 1980s, a report on the shipping industry was able to make the observation that the rapid growth of total so-called open registry tonnage (the term favoured by shipowners for FoC) had actually ceased in 1977 and that such tonnage had declined as a proportion of all merchant shipping. The report was also mindful that 'there are massive potential savings in crew costs for Western ship-owners switching to an open registry and an Asian crew' (Bergstrand 1983, paras 7.2, 7.6). In retrospect, this last observation was to prove a prescient one.

With labour weakened, such savings were pursued with vigour in the rest of the 1980s when the practice of flagging out increased substantially. In 1983, 23 per cent of the world fleet was flagged out. By 1985, 31 per cent was flagged out and by 1990, 42 per cent. By 1995 about half of world fleet tonnage was flagged out; by 2000, 56 per cent (Figure 2.1).

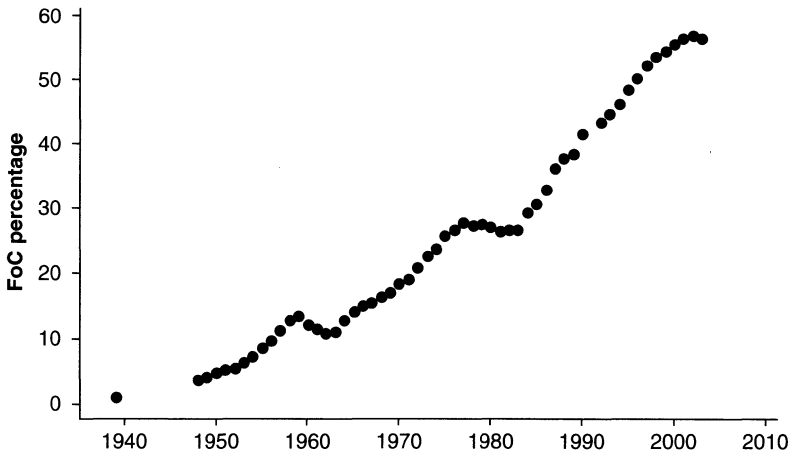


Figure 2.1 Flagging out and world tonnage (grt) 1939–2003. *Source*: See Appendix 1.

As Lane puts it: 'The oil crises of the 1970s, the slump in world trade, a glut of ships and the availability of offshore flags offering the symbols but none of the substance of developed modern states, saw waves of ships moving into the unregulated space of offshore' (2000: 6).

The rise of FoC, with Panama and Liberia prominent among them, had been at the expense of the Organization for Economic Co-operation and Development (OECD) country flags (Asteris 1995, Table 1). Partly through scrapping and sales, but partly also by flagging out, between 1975 and 1985 three quarters of British merchant tonnage disappeared. The number of seafarers who were unemployed and reporting for work at Merchant Navy Establishment Offices in the UK increased and the number who were found berths continued to decline (Marsh and Ryan, 1989: 218). Later, at the end of the century, a UK government report was to reflect that a fleet of around 50.8 million tons dwt in 1975 had fallen to 10.8 million dwt by 1997, and a spate of flagging out, which had taken place since the late 1970s, and most notably during the mid-1980s, meant that whereas 'up to the late 1970s it was almost unknown for UK-owned ships to be registered outside of the UK' only 20 per cent of the UK-owned trading fleet was then registered in the UK (DfT 1998: paras 25 and 26).

In much the same way, a report by the Japan Maritime Research Institute claimed that over the period 1979–89 the number of Japanese seafarers (officers and ratings) on the two main employers' register had declined more than 75 per cent – down from 37,088 to 8,536 (Guest 1991).

Between 1980 and 2000 world shipping tonnage increased by 33 per cent as the depressed years of the early 1980s were followed by an upturn in world trade. This movement was not matched by the contribution made to world shipping by the advanced industrial countries. Collectively, ten such countries – France, Germany, Greece (included because of its prominence in the industry), Italy, Japan, the Netherlands, Norway, Sweden, the UK and the USA – had accounted for 75 per cent of world shipping under their own flags in 1980 and approached 90 per cent in 1970. In the last two decades of the twentieth century the combined contribution that these countries made fell continuously – from 37 per cent in 1985 to 23 per cent in 1990, 18 per cent in 1995 to 16 per cent in 2000. In all of these countries fleets declined to 50 per cent or less of what they had been in 1980. In the UK, Norway and France they fell respectively to 13 per cent, 10 per cent and seven per cent of what they had been before. The term 'decimated' is often used loosely. Here it is highly appropriate. The severely reduced own-flag contribution of the top ten nations to world shipping in terms of grt can be seen in Figure 2.2.

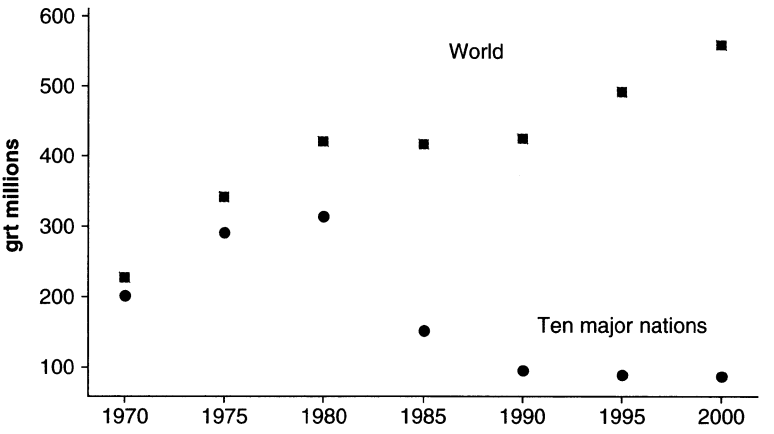


Figure 2.2 World shipping and own-flag contribution of 10 major nations 1970–2000. *Source*: Lloyd's shipping statistics.

In 1997, the increasing presence of flag of convenience registries in the international trades and the decline in national fleets led the European Commission to revise its guidelines on state aid to the maritime industry. Key proposals made at that time permitted the application of a tonnage tax system as an alternative to corporate taxation, the reduction or elimination of costs associated with social security and the reduction of seafarers' personal tax liabilities. In line with this, under certain conditions the UK has a 100 per cent foreign earnings deduction for seafarers resident in the country; Sweden has a system, in which one variant is that shipowners can pay seafarers their wages net of their assumed taxes and social security contributions, without having to pay anything to the government. Some other countries also have such schemes. In the Netherlands employers receive tax relief equivalent to 38 per cent of gross wages for seafarers who are resident in the country and 10 per cent for non-residents who are subject to Dutch social security. The considerable number of EU countries which now operate tonnage tax has drawn the attention of shipowners in Japan, the United States and elsewhere who fear being disadvantaged and are urging countervailing measures by their own states (Transportation Institute 2004). German taxation is now so favourable that it has been described as 'symbolic' and the 'gift of the century' (Klikauer and Morris 2003: 552), this encouraging ship management companies to 'back-source' from their foreign locations to the German Second Register (GIS). It is also

possible that such provisions may have the desired effect in stemming the loss of vessels and tonnage from European flag registries, but it remains to be seen whether it will reverse it.

Neither the speed with which flagging out was effected nor its extent was constant between nations. Nor were reductions in crewing levels and technical changes introduced uniformly. A part was played by public policy in different nations and by differences in trade unions, as a comparison of US and Australian shipping makes clear (Morris and Donn 1997). There is, though, no doubt about the direction of change. The new century has seen further flagging out by the richer nations of the world. In the period 2000–4 the foreign flag tonnage for OECD countries increased in absolute terms by 46.2 million dwt: but their national flag tonnage increased by only 1.6 million dwt (ISL 2004).

UNCTAD (2004: 32) reports that in 2003, 35 countries and territories controlled 97.5 per cent of the world merchant fleet by deadweight (as opposed to grt in Figure 2.2). Total tonnage registered under foreign flags represented 65 per cent of the 35 countries' total fleet. For developed market economies, the share of foreign-registered tonnage stood at 71 per cent and as can be seen from Figure 2.3, the general tendency, albeit with quite a high degree of dispersion, is for countries with higher levels of GDP per capita to have more of their fleet so registered.

A study of flag state regulatory performance by Winchester and Alderton (2003) distinguished flags with reference to their capacity to

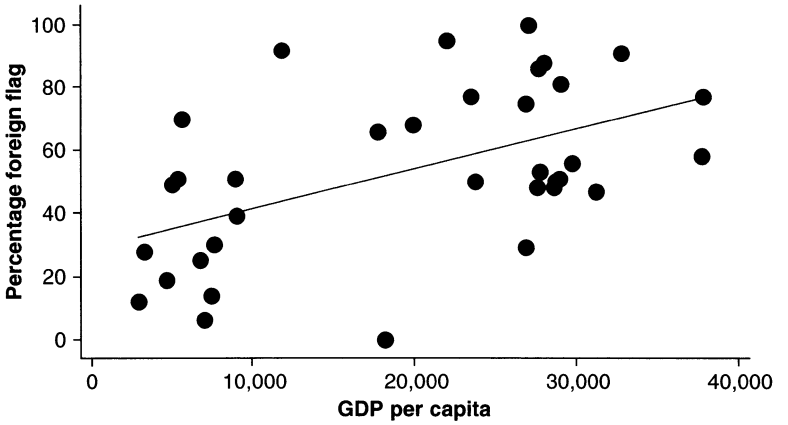


Figure 2.3 Flagging out by 35 most important marine countries and territories and GDP per capita 2004. *Source*: Percentage foreign flag from UNCTAD 2004: 23, table 16; GDP per capita from CIA 2004.

issue and enforce rules and procedures resulting in compliance with international maritime law, international conventions and best operational practice. An extensive rating system devised by Winchester and Alderton took account of several variables: performance, showing how well a flag performs in terms of such indicators as Port State Control detention rates, casualty rates and cases of crew abandonment; procedures, indicating the relationship between the flag and shipowner, in terms of registration requirements and transparency and ease of offshore company incorporation; the role of the state, measuring the extent of ratification of IMO (the International Maritime Organisation, a United Nations agency concerned primarily with standards of safety) and relevant ILO Conventions; and welfare/rights, assessing general and seafarer-specific labour standards. We have taken this dataset and, in all possible cases, related Winchester and Alderton's summary categorisation of flag states into 'high', 'good', 'modest' and 'poor' to the GDP per capita of the states which are home to these flags. The boxes in Figure 2.4 show the middle 50 per cent of cases in each regulatory category and the horizontal lines show the median GDP per capita. As is confirmed by the mean GDP per capita data (high: $25,240, good: $17,058, modest: $6,992 and poor: $2,300) the weakest regulatory flags tend to be located in the poorest countries. In short, uneven development

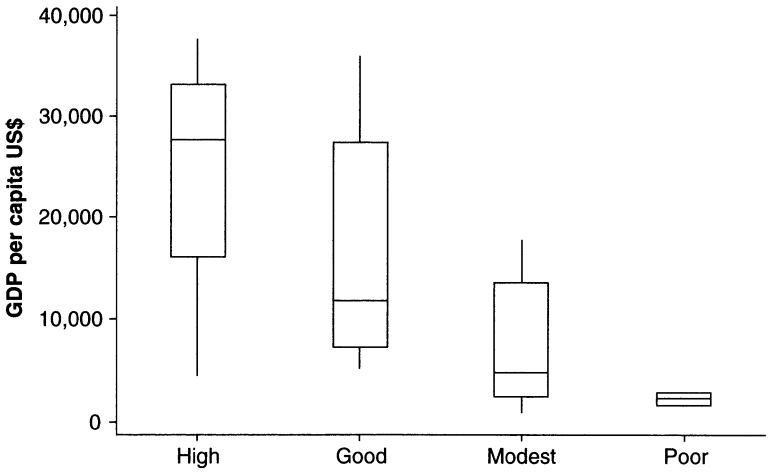


Figure 2.4 Regulatory capacity of flag and average GDP per capita of flag state at purchasing power parities 2003, US$. *Source*: Regulatory capacity of flag from Winchester and Alderton 2003: 4; GDP per capita from CIA 2004.

rules: the richer countries are likely to flag out more; and the 'best deals' to be got by shipowners (in the sense of the least regulation and the worst protection for seafarers) are from the poorest countries.

In 1990, a report on ship costs by Drewry Shipping Consultants had predicted an end to the ability of shipowners to continue to cut crewing costs and other expenses. Observing the emergence of 'a seemingly endless stream of new registers' it suggested that 'the end of the line has now been reached' (cited in Brewer 1990). But new states offering flags of convenience have continued to appear. In fact, the list becomes increasingly bizarre. In 2000 Bolivia, a country without a coastline and a navy which has been described as a Gilbert and Sullivan affair (it has admirals but no ships) launched its FoC. In 2001 Comoros, an island chain situated about two-thirds of the way between Madagascar and Mozambique, branded itself as the world's first Islamic FoC. In 2003, Mongolia, the world's largest landlocked country, with its capital almost a thousand miles from an ocean beach, offered its services. Such sometimes ludicrous developments have a serious side. The Mongolian FoC, for example, operates with an eye to assisting North Korean vessels to trade with Japan while circumventing new stringent safety and customs checks on that country's vessels entering Japanese ports. In November 2003 Russian sailors had to be rescued from a 40-year-old Mongolian-flagged ship loaded with logs that was sinking in the Sea of Japan, its engine having failed. Also that November, Irish police boarded a Mongolian-flagged vessel that had been moving around Europe for a month without apparent destination or cargo and which was suspected of being involved in smuggling illegal immigrants into Britain. In December 2003 the Indonesian Navy seized another Mongolian-flagged vessel which had no documentation to prove that its load of tropical hardwood had been legally logged. Asked about such incidents, the Mongolian Prime Minister responded, 'Unfortunately, there were a few Mongolian-flag ships that sank' (Brooke 2004). In 2000 Mongolia had ratified only one of fifty international conventions, protocols and amendments (Hanson ed. 2000: Appendix C). In 2004 it featured prominently in a review of shipping-industry flag-state performance produced by a round table of shipping organisations, including BIMCO, Intercargo, the International Chamber of Shipping / the International Shipping Federation and Intertanko. It was one of eleven flag states considered by the industry's employers to have 12 or more out of 18 'negative performance indicators' (the others were Albania, Bolivia, Cambodia, Costa Rica, Democratic Republic of Congo, Honduras, Madagascar, Sao Tome and Principe, Suriname and the Syrian Arab Republic). Performance tables always merit careful scrutiny but it is perhaps worth noting here

that, at the other end of the shipping employers' league table, the countries with two or less negative indicators were overwhelmingly from the old established flag state countries – Germany, the Netherlands, Japan, the United Kingdom, the United States and so on (Marisec 2004).

FoCs lend themselves to a whole range of illegal activities: false invoicing – transferring charges for cargoes and for 'services rendered'; bogus cargoes; false manifests; invention of phantom crews to cover dubious payments; trafficking in migrants and refugees; drugs smuggling through the ports; installation of secret compartments in ships to carry illicit goods, so that sections can be quietly detached at destination; use of companies, ostensibly devoted to commercial shipping, for other trading purposes. Recently, moves have been instituted to crack down in particular on their use in money laundering (Brewer 2000). As far as the welfare of seafarers is concerned, suffice to say here that any approach to this question needs to begin by recognising that the driving idea behind the adoption of FoCs has been to circumvent national regulation and to lower labour costs. It is true enough that all registers are not the same. Some are markedly better than others. Some are remarkably worse. Also, some FoC vessels are under ITF contracts (considered at some length in Chapter 8 where we discuss the ITF's Flag of Convenience Campaign). But FoCs exist for a reason.

The term 'global' is overused but it can truly be said that the decision of shipowners to cut labour costs by flagging out their ships led to the creation of a global labour market for seafarers. In the 1980s, these owners and managers ended their dependence on the established and regulated labour markets of the nations in which their businesses were sited and every world region able to offer cheaper seafaring labour immediately became a potential source of supply. Thereafter, nationality became irrelevant, and selection of employees was made on the basis of a trade-off between price and the quality of prior training and accumulated experience. Of these characteristics, as Alderton et al. (2004: 66) stress, the irrelevance of nationality is the defining one.

Today, the ability to assemble crews at will from any nationality on one engagement, and then to make completely different choices of nationalities at subsequent engagements, is the defining feature of the global labour market for seafarers. As the ITF has argued, FoCs enable shipowners to minimise their operational costs by, *inter alia*, tax avoidance, transfer pricing, trade union avoidance, recruitment of nondomiciled seafarers and passport holders on very low wage rates, nonpayment of welfare and social security contributions for their crews and avoidance of strictly applied safety and environmental standards (ITF 1999: 72). Of key

importance to seafarers is that when at sea they are subject to the laws of the nations under which they are flagged and that the relevant flag states may not effectively monitor their working conditions – a situation that is particularly likely in states that are poverty-stricken and war-torn.

On one estimate, made on the basis of consultancy records at the end of the 1980s, the annual cost of owning and operating a 300,000 dwt bulk carrier varied between $US11.4 million for a US flag to $US3.6 for a Liberian flag. Part of the advantage to the Liberian flag ship was accounted for by assumptions made about cheaper finance, maintenance, insurance, administrative costs and taxes, whereas costs for fuel, terminal and port services were constant regardless of flag. But the author adds 'crew costs are a variable upon which the profits usually depend' and these were estimated at $US2.8 million for the US ship and $US0.5 for the Liberian FoC vessel – a five-fold difference (Eyre 1989: 180). As an article in Lloyd's List reported in 1994: 'The main reason for flagging out to open registers or second registers [registers in which weaker conditions apply than in a country's main register] is to save large sums of money on crew costs. The differentials between the wages of mariners from ship owning countries and those from developing countries is enormous.' It went on to cite a comparison from an International Shipping Federation (ISF) survey that had been conducted the previous year, according to which an American Chief Officer under US national agreements cost 19 times as much as a Pakistani working under his national agreement and a Norwegian able-bodied seafarer (AB) cost 20 times as much as a Chinese on a similar ship (Hindell 1994). Even if wages were to be nominally the same, which is rarely the case, flag of convenience ships would still incur lower costs because of the avoidance of social security and pensions costs.

Wage data for ABs of over 30 nationalities for certain years over the 1990s has been obtained from the ISF. Table 2.1 presents a range of results which represent high, medium and low paid nationalities. The table avoids extreme cases, such as the United States among the high paid nationalities and Papua New Guinea among the low paid, but it still underlines the considerable difference in pay rates. It does so despite the fact that there had been some convergence over the decade, higher paid nationalities faring relatively worse and the lower paid relatively better, so that whereas German ABs were paid over 18 times more than Bangladeshis at the start of the decade, they were paid 'only' over five times more by its end.

The comparison of seafarer wage costs is made difficult by different national crew mixes and by size of crew. Recently, the UK Select Committee on Transport received a memorandum from the Chamber of

Table 2.1 Average AB wages in US$ 1992, 1995 and 1999

Nationality	1992	1995	1999	Percentage change 1992/1999
German	5,758	6,575	2,689	−53
Australian	4,527	4,701	1,590	−65
Danish (DIS)	3,524		2,000	−63
Italian	3,351	2,524	1,583	−53
Dutch	3,328	3,844	1,687	−49
Filipino	899	894	1,068	+18
Polish	861	1,197	1,261	+46
Indian	825	869	1,026	+24
Indonesian	778	487	852	+9
Pakistani	477	446	402	−16
Chinese	381	747	726	+90
Bangladeshi	305	277	509	+66

Source: Data obtained from ISF.

Table 2.2 Comparative wage costs (US$ per month)

	Complement	US$ per month
British Officers / Filipino ratings	9/10	78,000
Chinese Officers / ratings	9/10	37,000
Indian Officers / ratings	9/9	47,000
Filipino Officers / ratings	9/9	47,000
Polish Officers / ratings	9/9	48,000

Source: International Chamber of Shipping 2004.

Shipping that went some way to take such factors into account. These data (Table 2.2) do not represent all possible nationality combinations but they do underscore the magnitude of some of the differences. What they do not and cannot capture is the fluidity of the situation, from the shipowners point of view, and the insecurity it engenders, from the seafarers' point of view.

Multinational crews

Until the early 1970s national crewing patterns were more or less in line with post-colonial links. Thus British seafarers were to be found with Indian, Bangladeshi, Sri Lankan or Hong Kong Chinese seafarers aboard British-owned vessels. Dutch seafarers sailed with Indonesian or Surinamese seafarers aboard Dutch-owned vessels. Since the mid-1970s

seafarer labour markets have been substantially re-formed by the globalisation of the shipping industry. Today a distinctive feature of the global labour market for seafarers is that it is highly organised through extensive networks linking shipowners, ship managers, crewing agencies and training institutions. These linkages result in the periodic movement of crews from their homelands to ships in foreign ports. The once common practice of individual seafarers choosing their ships and employers has almost disappeared.

According to a 1992-3 survey of ship crews calling at UK ports, 98 per cent of Filipinos (the largest national category) were working on FoC ships. The survey also showed that 77 per cent of Polish, 67 per cent of Indian and 59 per cent of South Korean seafarers worked on FoC ships. Other important national/ethnic groups were Russians, Chinese, Indonesians, Ukrainians, Turks and inhabitants of island archipelagos in the Atlantic (Cape Verde), the Indian Ocean (Maldives) and the South Pacific (Kiribats, Tuvalu, Samoa) (Lane 1996). In 2002 the SIRC Seafarer Global Labour Market Survey estimated that the Philippines supplied 32 per cent of the world's seafarers (GLM 2002).

The global labour market for seafarers now has no national restrictions, that is, it is possible for any seafarer of any nationality to be recruited by shipowners of any nationality. Table 2.3 shows the distribution of multinational crewing patterns in a 2002 sample of over 5000 vessels in the global seafaring labour market. It can be seen that only 38 per cent of crews consisted of a single nationality. The remaining 62 per cent had two or more nationalities; 37 per cent three or more. These data also demonstrate that a multinational crewing pattern is more widespread aboard FoC vessels. The top three FoC states in the 2002 sample were Panama, Liberia and Malta which had 35, 26 and 41 per cent single nationality crews respectively aboard their vessels. Non-FoC states such as China, Russia and Turkey had 88, 91 and 96 per cent single

Table 2.3 Multinational crew patterns (2002)

Number of nationalities in crew	**Percentage**
1	38
2	25
3	18
4	11
5	5
6	2
7+	1

Source: Derived from GLM 2002.

Table 2.4 Employment of own nationals in Panamanian, Maltese and Liberian flagged vessels 2002

Flag state	**Number of seafarers in sample**	**Number of domiciled seafarers**	**Percentage of domiciled seafarers**
Panama	16878	71	0.4
Malta	8493	0	0
Liberia	7562	17	0.2

Source: Derived from GLM 2002.

nationality crews respectively aboard their vessels. More strikingly, these countries had their own nationals – Chinese, Russian and Turks – substantially employed aboard their ships. By contrast, the employment of own-domicile seafarers is almost nonexistent for the Panama and Liberian flags and in the case of Malta, totally so (Table 2.4).

Industry managers are quite open about the gulf that can exist between the wages of their own nationals and those paid to other nationalities. A crewing manager of a German company operating almost 200 vessels put it like this:

> We don't have any German Ratings in our company. We have Junior and Senior officers. We have 104 German crew employed and they are the ninth largest group of seafarers we have. We have 600 Filipino seafarers followed by Ukrainians, Russians, Sri Lankans, Indians and Maldivians. A Filipino AB with US $1,000 a month in his pocket is a big king in his country but US$ 1,000 for a German AB is below the social security. No German Rating would accept our wages (TNC 2001).

Other managers make much the same point:

> If you want Croatian Senior Officers you're going to have to pay for them. If you want Pakistani Senior Officers, you can go and get them for that price. And when you look at the living conditions in their home countries, I would say the Pakistani officers are probably better off at the end of the day than the Croatian officers are. [On some ships] a Croatian Chief Officer out-earns a Pakistani Master (A manager in a company managing 18 vessels in TNC 2001).

> We have a different pay scale for different nationalities. The wages of the PRC crew are the lowest. For example, a Chinese Chief Officer. He works on a ship, a Panamax. He works with an Indian Captain and

> Filipino Second Officer. His wages are lower than the Filipino Second Officer but he understands that, because his salary is related to the living costs in his own country (A manager in a ship management company operating 45 vessels mainly employing Chinese, Thai, Filipino, Indian and Malaysian crew in TNC 2001).

Not only the wages but other costs are also taken into account. There is social security of course but sometimes even food is costed differently:

> We have two different daily catering rates and it depends on the ship – $5.75 if we have a mix of Filipino and other non-Europeans; $6.40 if it's a mixed Filipino/European. There is variation because more food is being cooked. Norwegians like their smoked salmon, etc. Filipinos want to have chicken feet or whatever (A manager of a ship management company with 120 vessels in TNC 2001).

A manager of a Dutch-owned company mainly employing Dutch, British, Indonesian, Filipino, Ukrainian and Thai crew emphasised that having a mixed nationality crew reminded their seafarers that 'nobody's indispensable' and reduced the company's dependence on particular labour suppliers:

> We have not actually come to that stage where we have had United Nations. But the positive aspect of having multinational crew would be that we don't allow any nationality to think they've cornered the market here and nobody's indispensable. That's very important for us. Not only that. We could also have a situation where a particular country, let's say the Philippines, decides to throw in some legislation that really makes it difficult for us to get the crew. That could have a very damaging effect because on the one hand it's so specialised that we need only these guys. You can't just go and pick anybody up. So if you rely on one nationality it could be a serious problem. So it's good to have a few (TNC 2001).

Having a multinational 'United Nations' crew is a matter of pride for some companies. As a crewing manager of a big American company specialising in the tanker sector put it:

> On our tankers, you name any nationality, we have it. We have Russians, we have Germans, we have Indonesians, we have Filipinos, we have Burmese and we have even Ghanaian. ... In our vessels

> normally we have a complement of thirty crew members and then from thirty some crew you sometimes walk in, find fifteen to seventeen different nationalities onboard. ... You are like walking into the United Nations. ... and they feel comfortable, I think, in a way because you are not a majority and you are not a minority (TNC 2001).

Not having a sizable group from one nationality among a crew has been favoured for other reasons, as revealed in this story of 'bad guys' and (though it isn't put like this) divide and rule:

> When you have a big nationality group on your vessel it is a potential problem .... When a national group becomes too big, they might build up a block against the ship's command or whatever. Very often, when you have a bigger nationality group onboard there is also what we call a 'sea lawyer'. They know about their rights and he might induce the others and might gather them together. For example, last year, for the first time we started to employ Chinese seafarers. The ship was new built in China but at the last minute they informed us that we needed some crane drivers so we had to speedily employ eight Chinese crane drivers. They amounted to a big group and had bad guys amongst them ... and for the ship's command it was nearly impossible to co-operate with them. We identified three bad guys and sent them off. Immediately the other five had to co-operate. The last report from forty days ago from the Master who still has three of this first batch of Chinese crane drivers, told us that they are absolutely perfect, performing as it is required, happy with our rate of pay. They are crew members like others (Crewing Manager in TNC 2001).

The search for cheaper labour is far from over. Asia, especially the Philippines was to the fore in the 1970s; then, from the late 1980s, Eastern Europe; and China has been an increasing point of interest for some time. In 1995 Japanese shipowners were drawing up a plan to employ as many as 20,000 Chinese seafarers, these being a cheaper alternative to the Filipinos who then represented 80 per cent of their total foreign labour force (Lloyd's List 1995). In the more recent words of a General Manager of one of the biggest ship management companies, who was interviewed for this book:

> At this moment, we have 14 resources [sic]. We have Bangladesh, Romania, the Philippines, and eleven others. The next option

> obviously seems to be for us to grow a bit stronger into China, and there are plans for us to go into China.

The search is not confined to China, however: 'We looked at Romania, where we now have a contract in place, and we also have a contract in Bulgaria' a shipping manager told one of us:

> In other words, we have the ability to take people from there if we need them. We have looked at Ghana, Senegal, Cote d'Ivoire. We have had another look at Indonesia and we have recently set up a joint venture crewing agency in China. We have looked at Venezuela, Ecuador, Peru, Cuba, and Jamaica. We are always looking (Kahveci et al. 2002: 67).

New, yet more vulnerable, sources of crew labour continue to be monitored to screw out further advantage or to prevent the loss of advantage secured already. In 2004, for example, a study by the Korean Ship-Owners' Association found seafarers from Myanmar to be the 'most cost competitive' and 'available on easy employment terms' following visits to that country as well as to Vietnam, Poland, Ukraine and Croatia (Fairplay Daily News 2004). In 2005, the prospect of a rise in basic earnings for Filipino Ratings led the President of the Philippine Association of Manning Agents and Ship-managers to complain 'there is an increasing problem on the Ratings side' and to express the worry that 'Filipino Ratings might be pricing themselves out of the market' (Fairplay International Shipping Weekly 2005). There have been signs of this happening already. In 2001 the Filipino Association of Mariners Employment and the Philippines Association of Manning Agents conducted a survey which showed that 80 of their member agencies had lost 8300 jobs to other Asian and East European nationalities over the previous two years. However, proficiency in English is a prerequisite for employment in the world fleet and this, as an industry journalist observes, 'provides the nation with a trump card in its bid to stay number one in crew supply' (Hand 2001).

The deregulation of the market for seafarer labour over the last two decades has meant wresting it from national control but it has also required the development of new enabling institutions. In theory, the existence of FoCs makes it a relatively straightforward matter for buyers of labour to arrange and rearrange crew composition at will but the international recruitment of crews requires organisation. It is the

development of a worldwide network of agencies and organisations dedicated to crew management that has made it possible for crews to be recruited from different regions – something that would impose heavy costs on ship owners were they to have to do this themselves.

Ship management companies

Although largely owned in traditional maritime countries such as the United Kingdom, Germany and Scandinavia, ship management companies tend to be concentrated in locations that offer undemanding tax regimes and other advantages – including the Isle of Man, Hong Kong, Singapore, Cyprus and Kuala Lumpur in Malaysia. In 2003, for example, Cyprus had about 200 shipping agencies outsourced from shipping firms originally located in OECD countries, which paid taxes on their profits at 4.25 per cent.

The case for resort to ship management companies may be surmised from some promotional material put out by the Cyprus-based company Navigo Shipping (Box 2.1). This company is part of the German-owned Schulte Group, one of the world's largest ship management companies.

Traditionally, shipping companies managed their vessels in-house. This pattern still persists in some shipping companies: for example, Oldendorff Carriers, one of Europe's leading dry cargo operators, with two hundred vessels, still follows the traditional method of management. Oldendorff employs about 3,400 people from 66 different nationalities. The company headquarters in Lübeck has satellite offices in Canada, the United States, Brazil, Turkey, South Africa, India, China and Japan. Oldendorff conducts chartering, bunkering, project development, sale and purchase of ships, marketing, operations, technical management, crewing, training and ship building in-house. Although this pattern of management still exists, subcontracting to ship management companies has become more common. Actual arrangements vary but in principle the industry is now organised in such a way, say, that a car carrier owned by company X might have its crews recruited, trained and employed by company A, its technical management (repairs and maintenance) performed by company B, its operational management (contact with manufacturers, scheduling of vessels, chartering and marketing) performed by company C and its coordination of port activities (organisation of crew signing on and off, organising tugs, bunkering and provisions, dealing with port papers) by company D or even companies D and E.

Third party ship management had originally become a specialist business in the 1950s when US ship owners established the Liberian

Box 2.1 Why consider third party management?

There is an increasing trend for shipowners to outsource ship management.

The main drivers are:

VARIATION IN FLEET SIZE

Managing more ships in-house adds to your administration costs and overheads (employing qualified and experienced office staff as well as finding suitable working space), costs that are saved through outsourcing. Don't grow your own personnel, implement larger computer systems or look for bigger offices. Instead, maintain and make full use of a core capacity and let the overflow or variation in workload (number of vessels) be handled by third party management. Outsourcing ship management offers flexibility in resources and allows a shipping company to expand freely while the administrative burden is transferred to the manager.

GREATER CONTROL OF OPERATIONAL COSTS

With outsourcing, crew costs become fixed and any variation risks are transferred to the manager. NAVIGO also uses its buying power to keep the technical costs low (all commissions and discounts are refunded to our clients).

SHARING EXPERIENCE

NAVIGO and the Schulte Group have unchallengeable experience in the management of a wide variety of vessels and crew. This knowledge will be made available to shipowners, saving considerable costs when dealing with a new type or unfamiliar vessels. Also NAVIGO will exchange best practice with the shipowner, providing an opportunity for reducing operating costs and improved safety.

UTILISATION OF MANAGEMENT TIME

(Organic) growth and complying with applicable laws and regulations require management time; time which could be used to focus on your core activities such as business expansion.

NAVIGO takes these problems away, releasing management time for the shipowner.

TRANSFER OF RISK

Outsourcing offers ship owners the opportunity to transfer operational risks to the ship manager. For crew management NAVIGO underwrites its performance through contractual and financial incentives, thus providing a guaranteed performance.

Source: Navigo ship-managers 2005.

registry and flagged out mainly tankers to the Liberian flag. Its more recent origins go back to the oil crises of the 1970s and the wider shift to flagging out. It became the global pattern from the mid-1970s onwards. Following the oil crises of the early 1970s many shipowners went bankrupt and their vessels were repossessed by creditors, mainly the banks that mortgaged these vessels. In order to maximise their returns, some banks, instead of selling these vessels at scrap value, decided to run them commercially. Since they lacked ship operation experience, they turned to specialised emerging ship management companies, and these companies took full management control of these vessels (Spruyt 1994:12; Alderton et al. 2004: 20). As we have seen, flagging out relieved shipowners from the strict national crewing requirements of the traditional maritime nations. Ship management companies, in particular those who specialised in crew management, benefited from this by offering a variety of national compositions at a variety of costs.

The shift to third-party management has been so pronounced that one commentator has referred to it as a new 'wave' in the development of shipping that is on a par with the flagging out of vessels and, yet more grandly, as the emergence of international rather than regional seafaring (Sletmo 1989: 298). There is no need to go this far to appreciate that the development has significantly altered the industry's internal structure and that the third party provision of services can cover a wide range of activities. The following services are on offer for outsourcing, a particular company providing the following services in part or whole depending on its size and specialisms:

- Technical management
- Crew management
- Commercial management
- Supply of stores and spares
- Insurance and claim handling services
- Accounting services
- New construction plan approval and supervision
- S & P condition survey
- Consultancy and repair supervision
- Conversions
- Dry dock supervision and negotiations
- Financial and Appraisals
- Third party procurement
- Quality assurance implementations

- Planned maintenance
- Travel arrangements
- Asset production surveys
- Ship agency
- Regulatory compliance
- Performance monitoring
- Maritime software solutions
- Bare-Boat/time-charter arrangements
- Logistic solutions
- Vessel company registration

In recent decades outsourcing has increased in land-based industries but in few has it been resorted to as extensively as in the case of shipping. Ship management is a competitive business and the current trend is for the bigger companies to merge or to acquire smaller ones. In 1998, for example, the Monaco-based company, V.Ships, took over Celtic Marine; in 2001 it took over another company, Acomarit. These acquisitions increased V.Ships' market share to 12 per cent, twice as much as its nearest competitor, the Cyprus-based company Colombia Ship Management. Currently V.Ships has 44 offices located in 26 countries employing 1100 office staff, and servicing a fleet of over 600 vessels of various types. It manages a pool of over 20,000 seafarers of whom 12,000 are at sea at any one time. The company has seafarer training centres in the key supply countries, including India, the Philippines and the Ukraine. The year 2005 saw further growth for V.Ships when the company signed a joint-venture agreement with a well-established Asian shipping organisation, IMC Group, to form a regional company to provide shipping and related services to Asian industrial markets from their Singapore office, jointly managing 90 ships (Lloyd's List 2005).

In 2001 two other firms merged, the Scotland-based Denholm Ship Management and Hong Kong-based Anglo-Eastern. The new group has its head office in Hong Kong and full ship management offices in Montreal, Glasgow, Singapore, La Spezia and Jakarta; it has crew management offices in Mumbai, Manila, Guangzhou and Isle of Man; and also liaison/marketing offices in Auckland, Antwerp, Copenhagen, Connecticut, Oslo and Tokyo. In 2001, the merged company operated 130 ships under full technical management with an additional 30 in joint ventures. There were 63 vessels under a full crew management and over 5,000 seafarers under contract.

Barber Ship Management, part of the Norwegian Wilhelm Wilhelmsen group (now itself part of the huge WWL group), is the third largest ship

manager with a global market share of around 4 per cent with over 250 vessels, 150 of them with full technical management. In a competitive market, Barber distinguishes itself from its rivals by offering a service centred on a single superintendent who is in charge of a whole vessel's activities and is the one-stop point of contact for both ship and customer. In 2002 Barber serviced a diverse fleet, including 29 bulk carriers and 9 multipurpose vessels, 6 containers, 37 car carriers, 72 tankers with one combination vessel, 15 LPG gas tankers, 18 roll-on roll-off (Ro-Ros), 26 seismic research survey vessels, 11 offshore supply and survey craft, 8 passenger ships, and 2 specialised vessels, a sea launch and a drill ship (Lloyd's List 2002). Crew training is also a major area of activity, with a dedicated centre in India offering courses for the large number of crew now coming out of the region to service the world fleet. The Indian Maritime Centre in Mumbai is a private university facility set up by the company for this purpose, and around 150 cadets are admitted to the Barber pool each year. India is now second only to the Philippines as a provider of seafarers within the group, with 1,254 at sea out of a total of 4,927 and providing a pool of 1,756 seafarers out of the group total of 6,412. There are 2,272 Filipinos in the pool, with Poland providing 1,168 and Norway 340 crew members.

According to market research conducted by V.Ships, in 2000 the eight largest ship managers, with fleets of more than 100 ships, had 36 per cent of the market. There were also 10 medium-sized companies with between 50 and 100 ships and 170 smaller ship management companies. Compared with 1990, the number of ships under third-party management had risen from 3,500 to 5,000, a compound growth rate of 3.5 per cent a year. This compared with a 1.5 per cent compound growth rate for the world fleet as a whole. The percentage of the world fleet under third-party management had risen from 20.5 to 25 per cent (Osler 2000). On a more recent estimate, there are perhaps 10,000 vessels that have at least one of their functional areas run by third-party managers (Alderton et al. 2004: 22). Some understanding of the cost of such services and their extent can be gained from a third-party ship management budget presented to a shipowner for services to a 15,500 dwt car carrier vessel in 2004 (Table 2.5). This vessel had a crew of 26; the senior officers were Norwegian, the junior officers were Indian and the ratings were Filipinos. The large relative contribution that 'payroll/welfare' makes to operating expenses is evident enough, as is the interest of ship management companies in the control of this.

As argued earlier, some of the changes that have occurred in the shipping industry have close parallels with what has happened in land-based industry in the last quarter of the last century. Flagging out has no exact

Table 2.5 Ship operating budget 2004 (US$000s)

Payroll/welfare	762
Insurance	185
Provisions	65
Lubricants	96
Stores	106
Repair and maintenance	450
Telecommunications	36
Miscellaneous	45
Management fee	138
Total operating expenses	1882
Dry docking	820
Damage repairs	50
New installation/convers	50
Pre-operation	0
OPA-90 / NCR / Port calls	0
Life extension / upgrading	40
Grand total expenses	2832

Source: Information provided by a ship management company on an anonymous basis.

equivalent in land-based employment but it performs a similar function to two of the broad alternatives that land-based employers face – to export capital (relocate the factory) or to import labour (utilise migrant labour at cheaper rates). Similarly, changes in the organisational structure of shipping companies, and the contracting out of various functions, are familiar to students of land-based manufacturing and services. In shipping, though, all these processes have been accentuated.

A further option in land-based industries is to seek to enhance profitability by substituting capital for labour and/or intensifying the labour of the workforce. This latter possibility is one that plays out in different ways in different industries, whether land-based or not, and it will be addressed with reference to seafarers in later chapters. The importance of capital substitution for labour has been of major importance in shipping however – notably in the form of containerisation and related developments, to which we turn now.

Containerisation

In reviewing the development of merchant shipping in the 25 years up to 1984, Beth and his colleagues divided their analysis of liner shipping (the sort that regularly connects thousands of ports between and within continents) up to 1966 and thereafter. They saw 1966 to mark the

zenith of conventional liner shipping: after that they saw 'the time of the structural change, which is still continuing' (1984: 61). Their point was that, until the 1960s, liner shipping had operated in accordance with the organisational and technical system introduced during the nineteenth century. What this meant was that cargo liners had several tweendecks for the storage of thousands of items – cases, barrels, sacks, components or whatever – with a variety of handling gear. They called at several ports, a part of the cargo being discharged at each port and new cargo taken on, with care being taken to store heavy items low in the holds and to make other items accessible for discharge at the next port. The handling of the cargo would have required a gang of 15 to 20 men per hatch or crane who would shift 10 to 15 tons per hour. As a consequence of this, a 10,000 dwt cargo liner would spend 10 working days in port for loading cargo – with the total time spent in port amounting to between 40 and 50 per cent of the ship's working time. Today, by contrast, loading might take only a few hours.

The transition from steam to motor drive had made ship operation more efficient but had not affected cargo handling or time in port. The introduction of patent hatch covers did help reduce time spent in port. This entailed the replacement of hand-operated beams, boards and watertight tarpaulins with hatches that could be folded and quickly taken up with winches and which, because they were flush with the tweendeck, facilitated loading and discharge. During the 1960s these hatch covers became larger which allowed cranes to manoeuvre more easily and the trend toward the 'open ship' produced vessels with two or three hatches side by side so that much of the deck was open. Another new feature was the replacement of some conventional derricks with what Beth et al. describe as 'very mobile deck cranes'. They concluded, however, that these innovations, which they saw to have exhausted the technological means of improving the general cargo vessel, had, crucially, little effect 'in speeding up the cargo handling operation' (1984: 62).

In 1966, the arrival of a new technique in the general cargo trade – containerisation – was signalled by the Atlantic voyage of the *Fairyland,* a vessel owned by Sea-Land Services, an American transport company. The idea behind this had come from the US military, which had used containers to move cargoes between land and sea without the need for loading and unloading. Containers have proved highly adaptable. They are now available as box type, refrigerated, insulated and so on. They can carry bagged goods, like cement or potatoes; liquids; fruit, meat, butter and so forth; as well as other more obvious general cargo.

The commercial attraction of the container system of unitisation was clear enough. Containerisation has meant 'handling homogeneous cargoes by mechanical handling equipment in as near a constant flow as possible' (Gubbins 1986: 29) and it greatly reduced the idle time that ships spent in port. As Beth et al. put it: this was such a large step that it changed ships, ports and the organisation of trade and represented a major structural change. The container made for faster loading and discharge. Faster turnaround in port made for more voyages per year. It also speeded up land transportation because intermediate storage was not required. In addition, containerisation had the advantages of protecting contents against damage, preventing loss and pilfering, and protecting against the weather. On one estimate, the productivity of container ships is about five to seven times that of the conventional general cargo ship. In good part this is because they are larger, faster and have quicker turnaround times, but they are also operated by 30 per cent less crew members (Gubbins 1986: 37). The speed at which containers are moved is such that larger ship operators are now reported to be looking for 650 moves per hour – one every four or five seconds (Alderton 2005: 55).

Container traffic made it profitable to develop bigger ships, with bigger engines that could operate at higher speed. As Alderton (2005: 57) comments: 'The shorter the port time the greater impact ship speed has on the total voyage time' and when containerisation dramatically reduced ships' time in port this itself was an incentive to increase ships' speed.

Containerisation has also led to bigger ports. Container terminals require huge paved storage areas for storing containers. Gubbins cites expert opinion to the effect that at least 20 acres of land are required per berth (1986: 38). The terminals also require infrastructure in the shape of motorway, direct rail and sometimes inland waterway connections. An account of container terminals at the port of Rotterdam refers to 'a vast isolated area of the port' dedicated to container loading and unloading; of 'avenues formed by stacks of containers up to nine boxes high'; and of some yards 'devoid of human life and ... operated by driverless automated guided vehicles' (Sampson and Wu 2003: 133–34). Such developments have meant severe reduction in dock labour forces, who had fought containerisation worldwide. It has also meant massive investment, with consequent pressure to gain a return on this.

The need for increased investment has meant increased entry costs and greater concentration. The drive for returns on higher capital investment has meant, in turn, the need to ensure an optimum flow of containers and to develop logistics systems to integrate the entirety

of the transportation process. Indeed, this drive for integration is fundamental. Although the practice of putting cargo in containers became much more common from the late 1960s, as Gubbins points out (1986: 30–2) cargo has been put into containers since the early years of the last century - what was new was the 'through transport concept' that involved the organisation and management of the whole transport chain, including road, rail, inland waterway and so on.

The most important advantage of containerisation was the reduction in total time taken to transport goods from manufacturer to consumer, which cut manufacturers' lead times. This put pressure on port operations precisely because delays in port could undermine the efficiency of the whole transport system, no matter how big, fast and efficient the ship. A consequence of this has been that the biggest container operators are now seeking to operate their own container facilities. As Alderton et al. (2004:18) report, the major container companies grew bigger during the 1990s through merger and acquisition and the sector looks likely to be dominated by perhaps as few as six companies, each with global route patterns. These main carriers are not just the owners of ships however; they are at the centre of organisational alliances with other companies and have vertical and lateral ownership of ports and terminals, warehousing, road transport and rail rolling stock. In 2005, the world's two largest container shipping alliances, the Grand Alliance and the New World Alliance, announced they were to start cooperating on three key routes as the sector continued to consolidate following the earlier merger that year of the two biggest container companies, AP Møller-Maersk and P&0 Nedlloyd, with the prospect that cooperation will extend in future to yet other routes.

In now turning to the maritime car carrier sector we will see that some of the features already introduced in the more familiar setting of containerisation are also at work there – mounting size of vessel; increasing concentration of ownership; the drive to reduce idle time; the development of logistics systems and moves to integrate the whole transport system; so, too, the presence of the global labour force. Our starting point in considering the maritime car carrier sector has to be a highly specific one, however, for the development of this sector has been in large part a function of the development of car manufacturing.

3
The Maritime Car Carrier Industry

Broadly speaking, the more vehicles manufacturers have produced, the more deep-sea shipments there have been (Figure 3.1). It is the motor vehicle industry that brought the maritime car carrier trade into existence, ships being much more appropriate for the mass transportation of these goods than airplanes; it is also the car manufacturing industry and its customers that have determined where ships have sailed and under what conditions; and it is the particular nature of the motor vehicle as ocean cargo – that it can move around under its own power – that has led to an important feature of the modern car carrier's distinctive ship design: the Ro-Ro handling system rather than a containerised one. In the last chapter we outlined some of the important developments that have taken place in the maritime industry generally. In this chapter, we consider developments with special reference to the car carrier sector.

Global car production

In 2003, almost 43 million cars (as opposed to the total number of vehicles referred to in Figure 3.1) were produced worldwide. A dozen countries produced over a million cars each (Table 3.1). Among these, Japan had a clear lead, having overtaken the US in 1980. As this suggests, since the Second World War the geography of production has undergone considerable changes. In 1960, Japan produced only 165,000 cars, and Spain and Korea, which now produce well over two million each, produced only 43,000 and 20,000 respectively. Moreover, in 2003 two emergent car-producing countries just failed to reach the million mark: Mexico and India, producing 913,309 and 908,527 cars respectively.

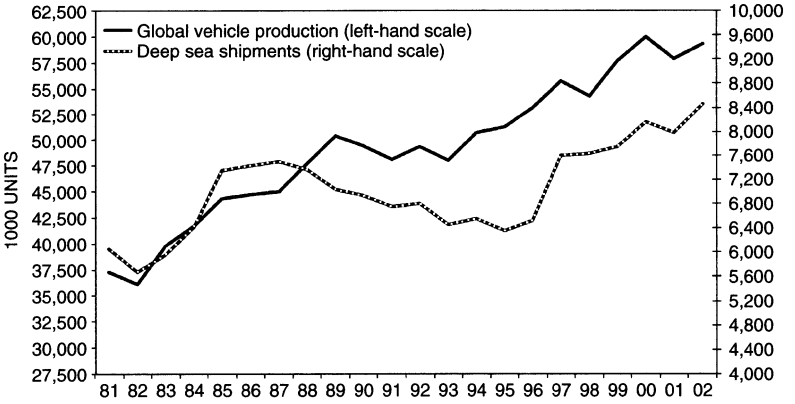


Figure 3.1 Global vehicle production and deep-sea shipments, 1981–2002. *Source*: WWL (2003)

Table 3.1 Countries producing over one million cars 2003

Japan	8,478,328
Germany	5,145,403
USA	4,509,565
France	3,220,329
Korea	2,767,716
Spain	2,339,238
China	2,018,875
UK	1,657,558
Brazil	1,504,998
Canada	1,339,607
Italy	1,026,454
Russia	1,010,436

Source: Adapted from SMMT (2004), Table 1.10.

Despite the emergence of new car-producing nations, the industry's companies remain highly concentrated and brands prove a poor guide to ownership. Ford owns the apparently very British Jaguar and the apparently very Swedish Volvo. GM has stakes in Suzuki and Fuji (the maker of Subaru). Merger and acquisition on a worldwide basis have led to a diminishing number of car firms, and the long established ones have struggled against overcapacity and mature markets – in particular America's big three, GM, Ford and DaimlerChrysler. As a consequence, and aided by trade liberalisation, profit margins have come under pressure. Average

profit margins have declined from 10 per cent in the 1960s to less than 5 per cent today (Carson 2004).

The UK industry, once home to British Leyland, which used to be one of the world's leading car manufacturers, has been in secular decline, but largely because the UK has been considered a convenient point of entry to the EU, and also because of language considerations, it has attracted Japanese manufacturers and become strongly oriented to exports. Exports only accounted for about 20 per cent of UK car output in the mid- to late 1980s but by the mid-1990s this had risen beyond 50 per cent, and it had reached almost 70 per cent by 2003. In that year, BMW, Honda, Land Rover and Nissan all exported over 70 per cent of their output; Toyota exported 84 per cent and Peugeot and Vauxhall over half. Only MG Rover exported less than half its production, but even so it managed over 30 per cent (SMMT 2004: 4). On the other side of the coin, the UK imported over two million cars (mostly from Europe). The tendency to export – and to engage in international trade generally – is likely to increase in future as China, India and other countries cease to concentrate almost exclusively on meeting demand in the home market. Honda made its first shipment of Chinese-made Jazz compacts from Guangzhou to Europe in 2005. In the same year the Chinese company Geely was shipping vehicles to the Middle East in a trial run for exports, Brilliance China was planning to introduce an up-market model into Germany and Chery announced a plan to start selling cars in the US in 2007 (Dyer and Mackintosh 2005).

Whereas Korea and some other countries have a strong record in protecting themselves from imports, the general trend to the opening of the world economy will mean, and has meant already, an increase in the world car trade. A recent estimate found total global traffic to have increased by over 100 per cent over the previous ten years (Nightingale 2004: 23).

Along with the pressure to export, one important imperative faced by the world's car manufacturers – and, in particular, by Japanese, Korean and European producers – has been to get into the US, the world's largest single market for cars. In the 1980s, Japanese producers invested approaching three and a half billion dollars in the US; in the 1990s, their further investments accounted for the bulk of another three billion dollars worth of direct investment, thus feeding overcapacity in America's car industry (*The Economist* 2004). In addition, car manufacturers have made moves to relocate production to countries other than the US (or, as seen above, the UK). This has been partly to serve regional markets better and partly to access cheap labour. Particular car models are now often assembled in one

or two plants and then distributed within one of the three regional blocks – the Americas, Europe or Asia – and indeed among these.

The drive to exploit cheap labour and to open up new markets in order to maintain or increase market share has led the major car companies to set up plants in newly developing areas. In the Americas, DaimlerChrysler, GM, Nissan, Ford, Honda, Volkswagen and Renault all produce vehicles in Mexico. In 2003, Mexico had a production capacity of 1.8 million vehicles per year, out of which 1.3 million were destined for export (Dron 2003). A striking example on the EU periphery is Turkey, which by 2003 had become home to car and commercial vehicle plants owned or operated on a joint basis by BMC, DaimlerChrysler, GM, Honda, Hyundai, Isuzu, Peugeot, MAN, Mercedes-Benz, Ford, Fiat, Renault and Toyota. It is improbable that all these operations will survive, of course, but manufacturers have been drawn to Turkey in a bid to counter the difficulty of surviving profitably elsewhere, and already several of these firms are engaged in production for export. For example, Renault exports the Mégane saloon; Fiat (Tofaş) exports the Dobló Multi Purpose Vehicle (MPV).

The major car manufacturers are spread worldwide. As well as its North American plants, Ford has assembly plants, among other places, in Australia; it also has plants in Asia: in the Philippines, India, Taiwan and Vietnam; in South America: in Argentina, Brazil and Venezuela; and in Europe: in Belgium, Germany, Spain, Russia and the UK. BMW has plants in the Philippines, Thailand, the US, Mexico and the UK. Honda has plants in Pakistan, Thailand, the Philippines, India, Taiwan and the UK. Mercedes-Benz has a plant in East London, South Africa. Korea's Hyundai/Kia has plants in China, India, North America and Slovakia.

It is evident, in so far as the aggregate picture is concerned, that increased imports and exports of cars make for increased demand for car transport by sea, but a special feature of the link between car production and sea transport is the part that has been played by one country, Japan. A symbol of the country's importance to the maritime car carrier industry is that a standard measure of car size, RT-43, was originally based on the Toyota Corona RT-43 series, other vehicles being rated accordingly, for instance a Volvo V70 being equivalent to 1.5 RT-43. However, Japan has entered into the history of the maritime car carrier industry not once but three times.

Japan's threefold contribution

The first way that Japan entered into the relation between car production and sea transport was as a new player in the world car market.

Japan's manufacturing performance was the most spectacular of all the major industrialised nations in the post-war period – at least until the early 1990s. In 1963 Japan ranked fifth in the world with 5.5 per cent of world manufacture in total. In 1994 it ranked second with a share of 21 per cent. During the 1960s, manufacturing growth in Japan averaged 13.6 per cent, two and a half times greater than that of the United States and four times greater than that of the United Kingdom. Even though Japan's growth rates fell to half that level in succeeding periods, such growth continued to be much greater than that of all the other established industrialised countries until the end of the 1980s (Dicken 1998: 28). The Japanese car industry played a central part in all this.

Car production in Japan soared from the mid-1960s to 1990. Japan made a mere 1500 cars in 1950 but by 1960 this had risen to 165,000 and from then on a steep ascent began – to nearly 3.2 million in 1970; to over 7 million in 1980; to nearly 10 million in 1990. It fell from this height to only about 8.5 million in 2003 – but remained the world's leading car manufacturer. The increased exports that accompanied the dramatic rise in Japanese production put pressure on the car industry worldwide. In 1970, Japanese exports had only accounted for less than three quarters of a million cars and 22 per cent of production. In 1986, in the space of a decade and a half, they amounted to four and a half million cars and accounted for 59 per cent of production. This mass of exports fed the deep-sea trades as cars poured out of Japan and headed for North America and Europe. This is what the deep-sea car carrier trade was fundamentally about. In the 1980s, the Japan–North America trade had accounted for about 40 per cent of all deep-sea shipments; the Japan–Europe trade accounted for about a further 20 per cent (Porter 2003).

The second way that Japan entered into the determination of the relation between car production and transportation by sea arose from the penalty it paid for the very success it had enjoyed from its post-war miracle. The increase in exports led to increasing trade friction. Although production continued to rise until 1990, the number of cars exported declined, and both production and the number of cars exported fell in the first half of the 1990s (Figure 3.2).

Car manufacturers in other countries wanted to keep out Japanese imports and the increased value of the yen made exports from Japan more difficult for the country's manufacturers. The 1980s therefore saw a major shift in Japanese FDI. Honda, Nissan, Toyota, Mazda, Mitsubishi, Fuji Heavy Industries and Isuzu all established either independent or joint production operations in the US between 1978 and 1989. A particular factor at work was the 1985 Plaza Accord, which led

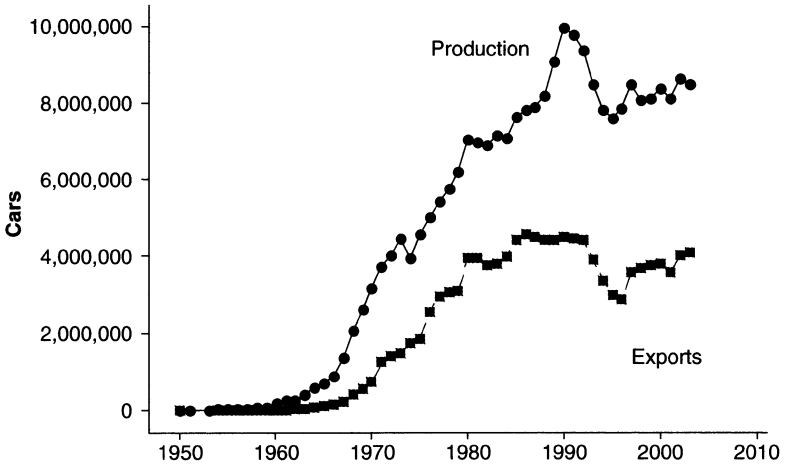


Figure 3.2 Japan's car production and exports 1950–2003. Source: SMMT (2004), Table 1.14; JAMA (2004)

the dollar to fall by over 50 per cent against the yen over the next two years and thus increased the cost of Japanese exports and cheapened the cost of investment in the US. Capital was available from Japan's success as an exporter and direct investment in the US provided an additional advantage as a hedge against possible protectionism.

In 1986 Japanese companies produced 617,000 cars and trucks in US plants. In 2003 they produced approaching three million (JAMA 2003b). At more or less the same time, the need to get inside the Single European Market led to a surge in the number of new Japanese manufacturing affiliates in Europe. The overall number of such affiliates rose from just over 200 in 1984, to over 500 in 1995, to over 900 in 2000, to approaching 1,000 by 2002 (JETRO 2003, Table 1.1). Nissan established its own independent operations in the UK in 1984, quickly followed by Isuzu in a joint venture in 1987, and Toyota in 1989. Japanese companies also established independent or joint operations in Germany, Spain, Portugal, the Netherlands and Hungary (JAMA 2003a). Looking at the broader picture, by 2004 Toyota alone had 19 production sites in North America and four in Europe, with others planned in Poland and the Czech Republic for 2005, with a total of 51 overseas manufacturing companies in all (Toyota 2004).

The consequence of these developments for the maritime car carrier industry has been that new routes have been opened up. Although

carrying cars from Japan to North America and from Japan to Europe has remained an important part of the industry, these two trades now account for only about 30 per cent of the total deep-sea trade. This is a far cry from the 1980s, when they accounted for 60 per cent in the early years often returning to Japan in ballast (Porter 2003). The major changes in global deep-sea vehicle shipments over the last 20 years can be clearly seen from Figure 3.3. There are now a number of cross trades and sometimes complex patterns of import and export. For instance, in 2000 the car carrier division of Hyundai Merchant Marine (HMM) was reported as trading with vessels fully loaded with Korean vehicles when leaving Ulsan, but was actually making up to 40 per cent of its total vehicle cargo from non-Hyundai carryings, from contracts with Volvo, Volkswagen and DaimlerChrysler and ex-Europe trades (Lloyd's List 2000a).

The relocation of production undertaken by car manufacturers from nations other than Japan has added to the fragmentation of trade routes. The US, European, and Korean car makers (with Korea following Japan as the second significant Asian player in the industry) have invested in assembly plants in China, India, Brazil, Russia, Thailand, Vietnam, Turkey and elsewhere. Further fragmentation stemmed from events in Japan when, following the burst of the so-called Japanese bubble in the early 1990s, Japan's manufacturers increased their production in ASEAN (Association of South East Asian Nations) countries. Such diversification of trade routes is likely to increase as the car industry relocates, sometimes seeking to produce within their main established markets or close to them; sometimes with the intention of entering emerging markets; sometimes in the hope of profiting from low-wage areas; and sometimes with a combination of these factors in mind.

If the first contribution of Japan to the maritime car carrier industry was to generate trades from Japan to the US and Europe, and the second was to develop further, more varied trades by building transplants in other countries, the third contribution was of a rather different order. It concerned the development of the lean production system of automobile manufacture that we referred to in Chapter 1. The key point here is that this system, which has been adopted worldwide (albeit, as within Japan, with different degrees of success) has implications not only for what happens inside the factory but also for what happens outside it. By no means least, it has implications for transportation – for the delivery of parts to factories, and for what is our prime concern here, the delivery of cars to their ultimate customers. Such systems run into major contradictions, if materials and components are not only pulled

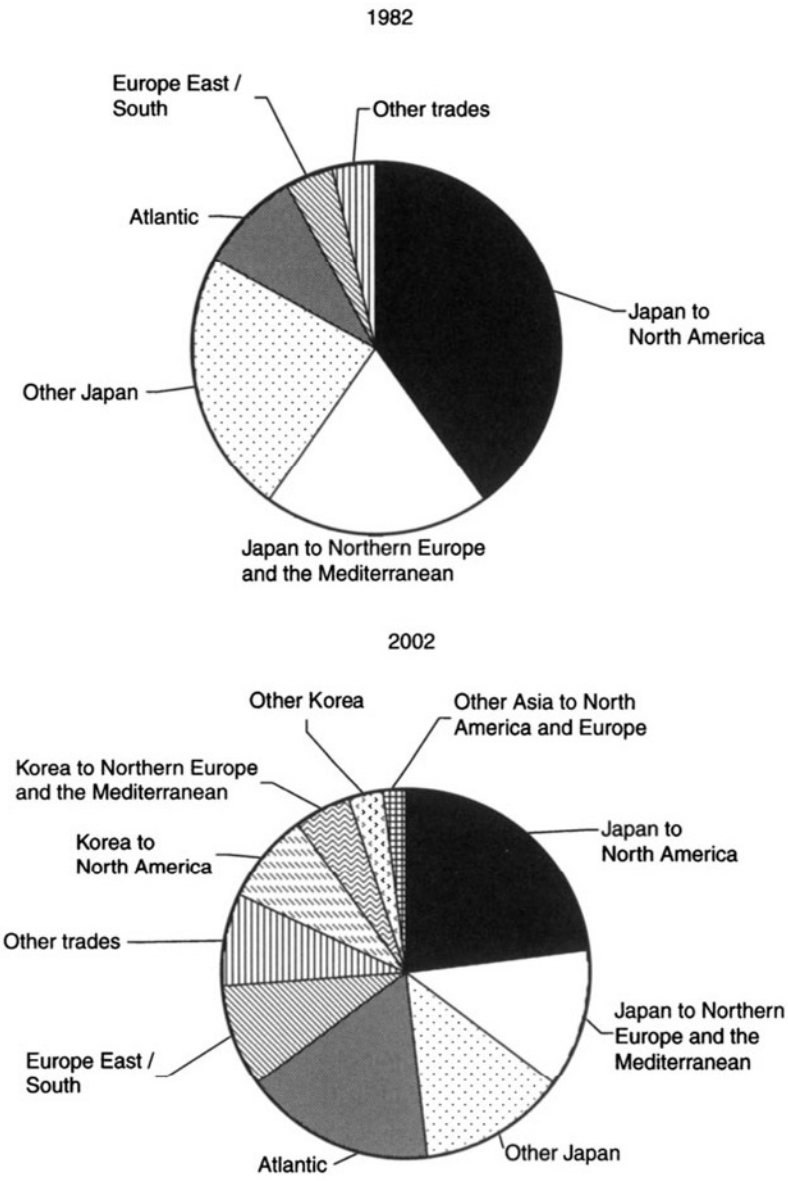


Figure 3.3 Major changes in global deep-sea vehicle shipment 1982 and 2002. *Source*: WWL (2003)

into the factory on demand but also if the finished goods are not pushed out of the factory to get to the customer on time.

Such systems are usually described in the social science and management literature as customer-driven, but this can be misleading. The relation between manufacturer and retailer can differ between industries. In the clothing industry, for example, it is often the big retailers who have the whip hand. In the extreme case, they can chop and change suppliers when it suits them and pull goods towards them when they want. But to the extent that car manufactures still have their own distribution networks, rather than there being powerful independent dealers, they are the ones who push the maritime car carriers to deliver the final product fast, undamaged and on time. In the same way that the lean production car factory necessitates leverage over the suppliers of components (and labour), it also leads to pressure on those who transport the finished product.

It is for this reason that car carriers have become part of the logistics revolution – a way of transporting and warehousing goods that rests on just-in-time delivery systems. As Bonacich (2003: 2) puts it: 'International logistics involves the efficient movement of offshore-produced goods to their ultimate markets. Some of the movement occurs via air-freight, especially high value, low-bulk items. But the great mass of movement occurs by ocean transportation.' Bonacich goes on in this context and points to the container as an important technological innovation that contributed to the feasibility of offshore production. This is correct, and the very same pressures apply in the maritime car carrier industry, although affected by the highly specific nature of the product. Bonacich refers to containers as 'essentially truck trailers with the wheels removed'. The very simple point that has to be made here is that the cars have their wheels on. What the box ship and its containers are to many general commodities, the Ro-Ro vessel is to wheeled vehicles.

For cars, as for containers, the pressure is on to reduce turnaround, and for the car carrier sector, as for containers, there is further pressure to secure control over the entire supply line time and logistics system. To signal the point: lean production in the factory has as its correlate the emergence of a lean transportation system. We will look at what this means for port systems and logistics later. Before doing so, since not only does the precise nature of the motor vehicle as a physical commodity matter but so, too, does the nature of the vessel in which it is transported, it is useful to consider the development of such vessels.

Phases of vessel development

At the end of 2000 an article appeared in Lloyd's List about the coming into service of the giant vehicle carrier *Tarago*. This was the third of four ultra large vehicle and project cargo carriers that WWL had ordered at the Daewoo yard in South Korean. The four were described as 'the largest Ro-Ro vessel type ever built' with a deadweight tonnage of 38,486, which 'supersedes the loading weights of pure car carriers significantly'. Specifications included a length of 240 metres, a width of 32.2 metres (just enough to get through the Panama Canal) and a maximum draft of 11.7 metres. The scale of such vessels is difficult to grasp. Consider, then, that 240 metres is over two and half times the length of the longest permitted football pitch and that the ultra large and project cargo carriers referred to above have ten cargo decks, with a total space of 46,350 square metres. They offer a variety of different cargoes, ranging from 6.4 m high vehicles or static cargoes to unitised cargoes and are able to take up to 5,400 cars over the 12 metre wide, 320 tons quarter stern ramp (Wittholn 2000).

All this underlines that the modern vessels that carry vehicles are indeed giant ships; in fact, as we shall see, they are not only big but have been getting bigger. The *Tarago* and its sister ships are, however, 'vehicle and project cargo carriers'. They are specifically designed so that they can simultaneously carry cars and high and heavy (H & H) Ro-Ro vehicles (which include, for example, agricultural vehicles, cranes, heavy trucks and buses, earth moving equipment, tractors, machinery of various types and other breakbulk cargo, that is, other cargo that is not containerised). As such, they might be called hybrid vessels.

As far as cargo mix is concerned, there is a sense in which the history of carrying cars by sea has moved from hybridity towards homogeneity and back towards hybridity. Three moves can be distinguished. First, early on, cars were carried as general cargo. Sometimes they were 'crated', either literally in wooden cases or put in containers, as still happens with some expensive cars (for instance, Mercedes cars shipping out of South Africa, and some cars, a small fraction of the market, where customers order direct from the manufacturer). Second, it became more common for cars to be transported as exclusive cargo. Third, the more recent trend is towards cargo that is again to some extent mixed. Examples of some of these changes in cargo mix will become evident in the following brief account of the history of the vessels that have carried cars. The key processes at work here are adaptation, specialisation and specialist modification, and although for convenience we refer to 'phases' it needs to be appreciated that these overlap.

The adaptation phase

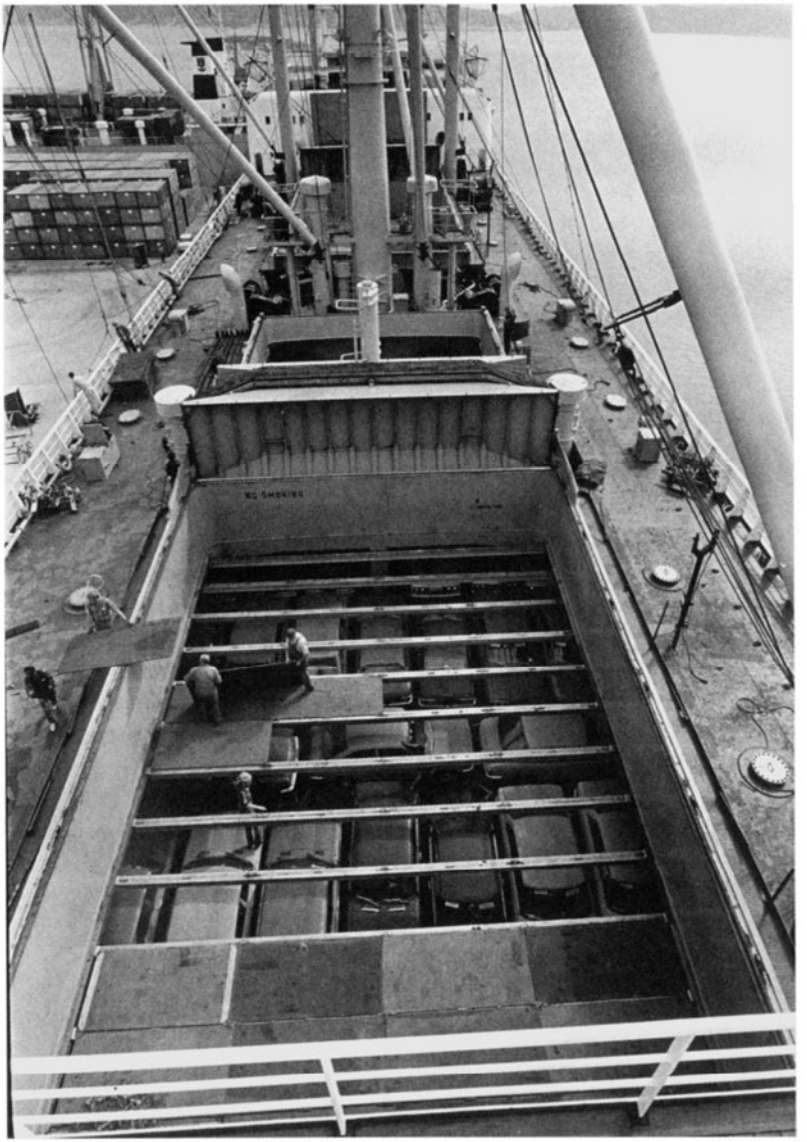
In this phase in the development of car carrying vessels, cars were transported making use of whatever types of vessels were already available. They were carried by bulk carriers on portable decks slotted into their holds; by refrigerated ships (reefers), with their refrigeration plant switched off; and by converted tankers and converted passenger ships.

Four decades ago, existing types of vessels were converted to export uncrated cars from Europe to North America. Beth et al. report, for example, that refrigerated vessels, which took bananas from South and Central America to Germany but which had been empty on their return journey, found it possible to make a detour to the US to discharge a full cargo of German cars; and that, around 1960, a number of shipowners from Germany, one of the leading car manufacturers, provided their new bulk cargo carriers with suspension tweendecks on which cars could be carried. These were suspended from wire ropes and pulled up below the main deck when the ship carried bulk cargoes such as grain or coal (1984: 85). In some cases, cars were loaded one at a time and secured to a deck; another deck was then lowered until the entire hold was filled with car decks loaded with cars – and all this after the ship's bulk cargo had been discharged, whether grain, phosphates, coal or any other thing. An account of the export of Volvo and Saab cars from Sweden to North America describes vessels going out loaded with cars and returning with a full cargo of forest products from British Columbia for the UK. These vessels were fitted with two gantry cranes that travelled on rails along the five holds, which were served by 32 pontoon hatches. Special steel platforms were used for loading the cars under deck in cellular compartments in the ship's holds or stacked on deck in the same way as in containers – 984 such platforms were stowed under deck and a further 210 could be stacked three tiers high on the hatches, allowing 2,250 cars to be loaded on each outward trip (Drewry 1999: 9).

In 1971 it was reported that many of the ships then trading as car/bulk carriers had begun life as conventional grain and lumber carriers, and in one instance a case is described in which two former-Esso tankers were converted so that the central tanks could slot in eleven car decks with a maximum capacity for 3,400 cars (Drewry 1971: 29, 31). The history of the HUAL company provides a case in point. At the beginning of the 1970s, when it started operations, two of its five carriers were converted from tankers. Shortly thereafter, another three were converted from passenger ships (HUAL 2005).

A general cargo vessel converted to carry cars, 1955 (photograph WWL Archive)

A dry bulk carrier converted to carry cars, 1976 (photograph WWL Archive)



Platforms being assembled to build car decks in the 1960s (photograph WWL Archive)

The specialisation phase

It was the need of the Japanese manufacturers to shift large quantities of cars in the deep-sea trades that prompted the emergence of the pure car carrier (PCC). In 1966 there were ten PCCs in operation; by 1981 there were over 250. These vessels were typified by two ships, the *Don Juan* and the *Don Carlos*, which were built in the early 1970s for the Swedish company Wallenius Lines. These were fully developed Ro-Ro vessels and could each take over 4,000 ceu (car equivalent units). They generally have two ramps: a stern ramp and a side ramp. To avoid damage, cars are lashed to the decks. Such vessels came to be equipped with variable pitch propellers and bow thrusters. These were partly fitted to aid berthing in strong winds – the massive above-waterline profile gives these ships 'sails', and this means they need additional propulsion – but they save on the use of tugs and also allow faster berthing times.

Apart from their increased size, these vessels had two important advantages, both of which stemmed from their Ro-Ro loading and discharging. For one thing, the Ro-Ro loading and discharge system reduced turnaround and ship and equipment costs; by one estimate, on short-sea trades the productivity gains were as much as sixfold through reduced loading and discharge times (Drewry 1999: 9). For another, it meant that it was not necessary to lift vehicles on and off by crane, which risked causing damage. This was a highly pertinent consideration for car manufacturers, who wanted their products to be transported in top condition and without scratches and dents. An industry report at the end of the century commented: 'Senior management still looks back on the introduction of deep-sea Ro-Ros/PCCs into the car trade as a major milestone in its development' (Drewry 1999: 11). Although the last PCC was built in the mid-1980s, there are still such vessels in operation today. The development of car carrying vessels did not stop here, however.

The specialist modification phase

The third phase, specialist modification, has left the external appearance of the modern car carrier much the same. It still looks like what it is: a floating multi-storey car park. These ugly, rectangular, giant vessels may take up to 7,000 standard cars, or now even more, on 13 decks, and because of this and their low volume-to-weight ratio (cars actually representing a relatively light cargo), they tower out of the water.

The PCC had the advantage over the vessels used previously that it carried more and turned round faster and, as noted already, it meant that cars were protected better against damage, certainly as compared to

systems that required movement by crane. Its disadvantage was that most of its decks were fixed at a height of about 1.7 to 1.8 metres. Useful as this was for the average saloon, it meant that, when the vessel was not full, the remaining space went unused because little other cargo could fit into it. It also meant, in particular, that when in the early 1980s, jeep-like four-wheel drive sports utility vehicles (SUVs) began to appear, at heights of up to 2 metres, they could not be carried. The arrival of MPVs in the mid-1990s made for further difficulty.

Optimum profitability dictates that car carriers are in service for the maximum time possible. The quicker turnarounds made possible by the roll on, roll off system contributes to this end. Other things being equal, faster turnaround means that ships are working at sea for the greater part of the year. But optimum profitability also requires that ships have high capacity utilisation. It therefore pays to have flexible storage areas. The ability to modify the height of the decks is one answer to this, and these are now a standard feature of the modern car carrier. Yet whereas the owners of car carrier fleets were confronted by difficulties forced upon them by changes in the tastes of car buyers (their preference for the bigger SUVs and MPVs), and wanted increased flexibility for this reason, they also saw an opportunity for enhanced profit if they could alter their cargo mixes.

Car decks on a modern car carrier, 2000 (photograph WWL Archive)

Freight is charged by space, and the SUVs were a welcome source of additional revenue. As *Fairplay International Shipping Weekly* comments: 'Shipping companies love these high vehicles [SUVs] as they take up more space than ordinary cars' (2004). However, for this same reason, shipping companies also love H & H. The prospect of carrying H & H offered a particular advantage on the Japan–North America and Japan–Europe routes on which vessels had initially returned to Japan at well below capacity and sometimes on ballast.

In the words of Wallenius Wilhelmsen's head of global yield management: 'Small changes in cargo mix can have dramatic effects on net results'. His example (summarised in Table 3.2), is based on the Europe–North America trade route. As can be seen from a comparison of rows 1 and 2, a small switch from H & H to NCC (non-containerised cargo) makes an extra $3,000-per-day one-way difference to T/C (revenue). But, as can be seen from a comparison between rows 1 and 3, a further switch from cars makes a yet greater difference of $8,000.

Of course, shipping companies cannot switch cargoes at will, but for the sake of flexibility, and thus for the prospect of increased profitability, the PCC has given way to the pure car and truck carrier (PCTC), a vessel that has decks that have been made higher and stronger in order to accommodate larger vehicles and other rolling stock, and which also has a stronger, wider quarter ramp. A reasonably typical example can be seen in Figure 3.4. This PCTC is 199.92 metres long and 32.25 metres wide. It has a capacity of over 21,000 metric tons. There are 12 cargo decks, with a total cargo deck area of 55,000 square metres (sufficient, to revert to our football example, to cover more than five of the largest permitted football pitches). The main deck, deck 5, is water- and gas-tight: the only other gas-tight decks are 7, 9 and 11. All decks have smoke alarms and ventilation systems to counter exhaust fumes, which can be strong during loading and discharge. Eight of the decks are hoistable. The maximum hoistable height is 5 metres and the minimum height is 1.85 metres. Inside the ship, every deck has a number of ramps, the widths of which are adjustable, for moving vehicles from one level to another.

Table 3.2 Cargo mix and net results

Mix percentages	**Cars**	**H & H**	**NCC**	**T/C one way per day $000**
1	81	17	2	18
2	81	12	7	21
3	76	12	12	26

Source: Derived from Mattsson (2004: 10).

High and Heavy cargo stored on deck 5, modern car carrier, 2004 (photograph EK)

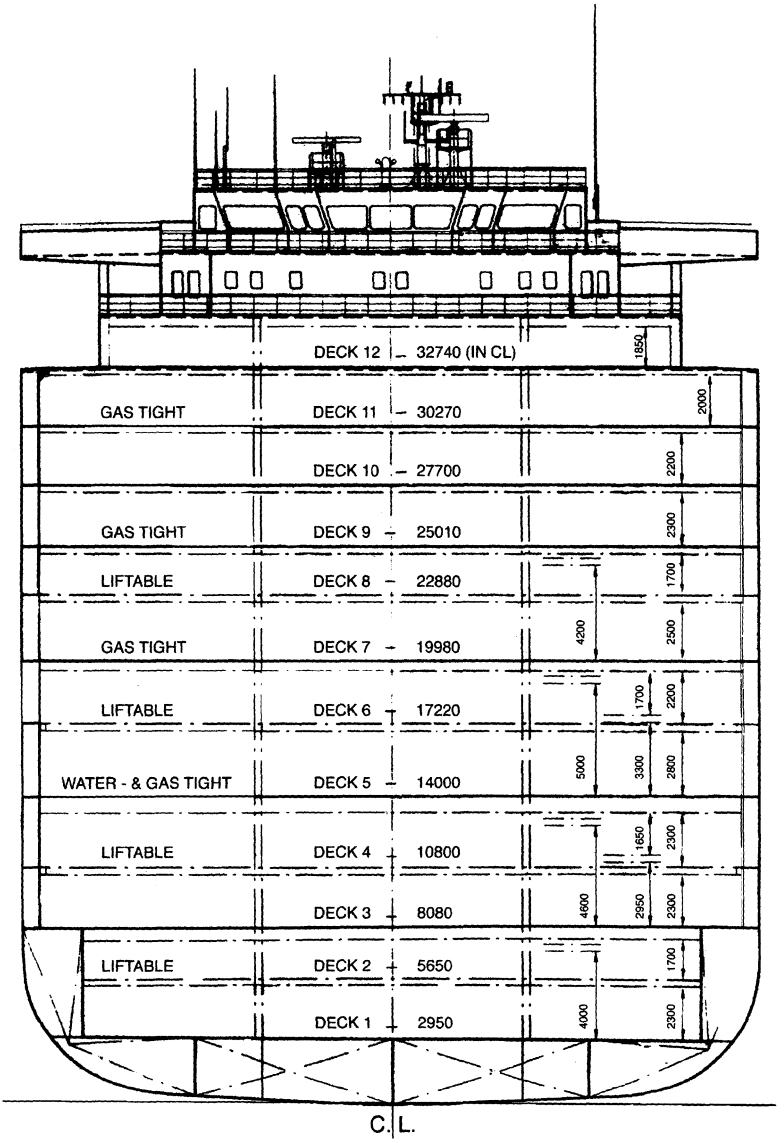


Figure 3.4 Typical deck configuration of a PCTC.

There are also two hydraulic ramps, for external loading and discharge; one at the stern with a capacity of 150 tons and one side ramp with a capacity of 14 tons. Each of these ramps is connected to deck five, which is the heaviest and strongest deck, used to store the heaviest cargo. Above the vessel's main deck, a ship like this has been aptly described as 'little more than a huge high hangar of light steel, inside which are lightweight decks' (Lloyd's List 2003). Such a ship may be over 35 metres tall when standing in dry dock. When at sea, a seafarer on the weather deck will be at a height equivalent to five or six London double-decker buses piled on top of each other above the sea.

When the ship docks at one of the main ports, the cargo superintendent from the ship operator's main office comes on board with the cargo plans for each deck, which specify what is to be loaded and/or discharged. Depending on how much is to be loaded (the ship can carry up to 6,600 ceu), decks 1–5 will be loaded with cars and H & H vehicles via the stern ramp; other decks will be loaded via the side ramp. The cars are driven on by land-based drivers who are directed to their places on each deck where they are parked very close together and lashed to metal rings on the deck. Standard saloons are lashed at a minimum of four points, six points if they are parked on the ramps (every attempt being made to stuff every space with cars) or packed port to starboard (most are packed stern to forward). Larger vehicles have more lashings; very large cargo is welded to the deck. At the top of the vessel, above deck 12, is the crew's accommodation. Additional cargo is stored at the sides of this on the weather (or 'garage') deck and also aft of it, and depending on visibility from the bridge, sometimes forward of it as well.

WWL regards their 1977 vessels the *Rigoletto* and the *Traviata,* with their 13 decks and capacity for 4,070 cars, as the first PCTCs, though the *Madame Butterfly,* a vessel built for WWL in 1981, is generally considered to have been the model for subsequent PCTCs. It was designed to carry either 4,120 saloon cars or 2,900 cars and 520 trucks/ H & H vehicles. Testimony to the importance of this shift to specialist modification in the design of vessels is that between 1995 and 2003 the world fleet of PCTCs grew from about 325 to about 425. As we shall see, by 2004, another step was taken in specialist modification with the ordering of a new vessel type, the large car and truck carrier (LCTC).

Technology and ship size

Along with other merchant vessels, car carriers have become faster. According to one shipping-company executive, who has been in the car

carrier industry for some time, vessels built in 1978-9 had a service speed of 17.5 knots, compared to 20 knots today. They are also, again in common with other merchant ships, likely to be equipped with modern navigation systems.

Considering merchant shipping more generally, Alderton et al. (2004: 23–4), whose account we follow here, claim that the main innovative development of the last thirty years has been the introduction of satellite communications and the displacement of the radio officer's role by the introduction of electronic distress and safety communications. Otherwise, and aside from the separate development of high speed craft, they reckon technological changes to have been developments of existing innovations. The most significant of these has been the automated engine room with a day-working complement. Now only a rapidly dwindling number of ships have manned engine rooms.

Automation and integration technology has been adopted in the shipping industry since the 1960s. It is now applied to most shipboard systems. Integrated bridge systems are now a standard feature on new ships. The bridge has become an information and control centre for all shipboard functions including navigation, propulsion and communications. The layout of this system has more in common with an aircraft's cockpit than with the traditional wheelhouse arrangements centred on navigation. The primary applications of integrated ship management systems between ship and shore – again on vessels generally – are:

- reporting systems, including automatic record data such as noon position report, engine performance, cargo condition and manual input from deck, engine and port logs
- weather routing
- cargo/load calculations and procedures
- maintenance management systems
- interactive electronic manuals for shipboard procedures
- computer-based training modules
- condition monitoring of main engine

The above developments are characteristic of shipping as a whole, however, as are a host of other, less striking innovations – for example paint, which better withstands the elements and makes for less chipping and repainting, and the use of microwaves in the galley. In the case of car carriers in particular, the trend has been, among other things, towards:

- hoistable (that is, adjustable) decks
- the removal of internal columns, with consequent increases in car carrying capacity for a vessel of given size
- a move from chain or rope lashing to purpose-designed lashing
- the replacement of fixed spiral ramps by movable vertical ones
- an increase in ramp capacity

Ship building materials have also changed to provide greater strength and lightness, and the days are long gone when single-haul bulk car carriers had to erect and dismantle as many as a thousand platforms to make decks to carry cars. In recent years, with shipbuilding yards at full capacity, existing vessels have had their lives extended to meet high levels of demand. A number of measures have also been introduced to modify them:

- decks have been added, 11-deck vessels being converted to 13-deck vessels
- vessels have been sliced in two and lengthened, for example from 199 to 227 metres with an increase in capacity of in excess of 1,000 ceu.
- the weather deck has been turned into an additional car park. In 2004, for example, five older vessels owned by WWL had their weather decks modified to install garages for about 1,800 extra cars

Generally, though, car carriers have got bigger – and the crews have got smaller. We are unable to provide a systematic account but a Safety Officer at HUAL reported to us that in the 1970s the vessels that had been converted to carry cars had as many as 40 crew members, which is in the region of twice as many that work on the car carrier of today, which tends to operate with between 16 and 20.

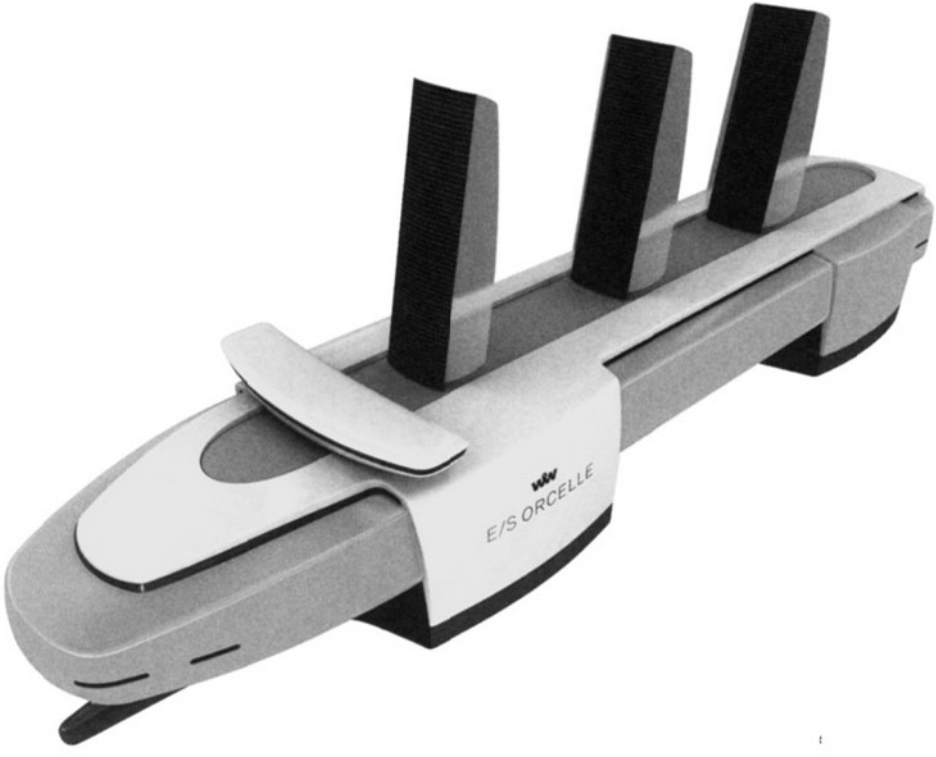
There is some 'blue skies' thinking in the industry. In 2005, for example, Wallenius Wilhelmsen, mindful that fuel oils might become prohibitively expensive in twenty years or so, sought to stimulate debate by presenting its zero-emission concept car carrier, E/S *Orcelle,* at Expo 2005. This vessel, were it ever built, would look quite different from the car carriers of today. It would be made of aluminium and thermoplastic materials and have a pentamaran hull, sails, solar panels and fuel cells. It would not release emissions because it would reclaim 50 per cent of its energy from the sun, wind and waves, with around 50 percent envisaged as coming from multiple energy generators that would include fuel cells. In truth, though, this is for the future, if ever, and as a leading

naval architect has observed, 'If you look back to the 1950s, you will see that the development of ship technology has not followed a steep gradient' (O'Mahony 2005). Most of the 'modern' innovations in car carrier ship design are not of very recent origin. The Ro-Ro method of loading and discharge has been used on inter-island ferries since the 1920s and 1930s and was introduced on small car carriers built for the North Sea and the Baltic trades in the early 1960s. Pure car carriers go back at least to the mid-1970s. Wallenius Lines placed its first orders for ships with liftable car decks in 1977. Moreover, although the industry is such that technical advances made by one company are soon common knowledge among the others, much of the world fleet is of considerable vintage. In 2003, for example, 40 per cent of the world's car carrier fleet had been built before 1985 and was thus over 20 years old (Hual 2004). This means that change takes time to implement and ships with different technical configurations coexist.

A snapshot of some of the developments that have taken place in car carriers over the last quarter of the century is provided in Table 3.3, which compares the NYK *Anna*, which dates from 1978, and the NYK *Virgo Leader*, built in 2004. It is also evident from the way in which one of the car carrier lines, UECC, advertises its services to customers. It offers:

Table 3.3 Comparison of NYK's Anna 1978 and Virgo Leader 2004

	NYK Anna	**NYK Virgo Leader**
Year built	1978	2004
Car capacity	4,300	6,000
Main ramp loadable tons	2.7	150
Hoistable deck	No	Yes
Maximum deck height (cm)	215	685
Number of cargo decks	11	13
Main ramp operation	Lift on/lift off by external winch and manual securing	Fully automatic and hydraulic
Internal ramps	Fixed spiral ramps	Movable vertical ramps
Berthing	Heavy reliance on tugs	Use of variable pitch propellers and bow thrusters
Speed	18 knots	22 knots



The 'concept vessel' E/S Orcelle, 2005 (photograph of computer generated model, WWL Archive)

> Simultaneous loading and discharging operations ... using a combination of stern and quarter ramps, in conjunction with the flexible design of internal decks. Our new generation of pure car and truck carriers (PCTC vessels) incorporate wide open decks free of internal pillars or obstructions with high levels of lighting. The ships are powered by twin engines for reliability, providing fast service speeds of 20 knots. They are also highly manoeuvrable, incorporating twin rudders, bow thrusters and the very latest in hi-tech navigation and control systems (UECC 2004)

Recent years have seen increased interest by the main companies in measures that protect the environment, sometimes of course allied to more commercial considerations. MOL now has its ships built with wind-resistance features that are intended to save energy and reduce carbon dioxide and nitrous oxide emissions, and plans to introduce a tree-oil to increase the efficiency of the filters on the diesel engine exhausts of its car carrier fleet. It has developed a new cylinder injection system for main-engine lubricating oil that, it is claimed, will reduce oil consumption and cut particulate matter emissions by about 30 per cent. In 2003 it also announced plans to build new car carriers with fuel tanks located in the double hull to reduce the risk of fuel spill in case of accident or grounding and to enhance stability – and also to allow more vehicles to be accommodated than is possible with a more conventional car carrier design. NYK claims the latest generation of its car carriers will feature environmentally friendly technology: its recently delivered *Andromeda Leader* is reported to feature a wind generator facility, which powers lighting aboard and can thus help cut fuel consumption. Wallenius Wilhelmsen claims to be an environmental forerunner. Its zero emission concept ship is one indication of this, but others are that it paints its ships with tin-free anti-fouling bottom paint, pursues the objective of reducing the sulphur content of fuel oil significantly below international requirements and, among other things, reduces the oil content in bilge water. It is also working on a small-scale hybrid technology, exploiting hydrogen-rich methanol.

To the layman, however, the most striking development in ship design is one that we have not listed above – the sheer size of many vessels. In 1970, it would have been common enough for a typical car carrier company to have had ships with a capacity for about 2,500 standard cars, but things have certainly moved on since (even though a car carrier's whole fleet is unlikely to be all the same size, not only because it is likely to consist of a mix of older and newer vessels but also because

ships of different sizes suit different routes). Writing in 1984, for example, Beth and his colleagues reported that in the previous 12 years the capacity per ship had almost doubled (1984: 85) but ship size continued to increase thereafter. In 1986 (a peak year for newbuildings) 36 vessels were built with a combined capacity of 160,000 cars, an average of 4,444 cars; in 2006 the market is expected to receive 34 newbuildings with a capacity of about 180,000 cars, an average of 5,294 cars (Reinikainen 2004). A further indication of the direction in which things are moving is that in 2004 there were approaching twice as many vessels of over 15,000 dwt as there were of under 5,000 dwt and the order book for the larger vessels was rising faster (Nightingale 2004: 21).

Recent increases in size have surprised even shipping specialists. In April 2004, for example, a consortium led by the Norwegian shipowner Peter Gram placed an order for two Panamax car carriers (that is, vessels that have a beam consistent with passing through Panama Canal locks), which each had a capacity of 7,000 vehicles. It was claimed these would be the largest vessels of their type in the world when they were delivered in 2007, but in the same year WWL announced plans to lengthen five existing 5,900 car capacity PCTCs. By adding an extra 28 metres to their length, each of these so-called 'jumboised' vessels will reportedly increase their individual capacity by 20 per cent, to be able to carry 7,100 car units (Nightingale 2004: 22). Matters did not stop there. By the end of the 2004, WWL had contracted three PCTCs from Daewoo in Korea for deep-sea long hauls with delivery in 2008. These have an 8,000 car capacity. (WWL's future concept ship, E/S *Orcelle*, has a capacity of 10,000 cars but this is, thus far, fantasy.)

There are some limitations to the size of vessels. WWL's 8,000 capacity vessels will be 228 metres long and thus unable to dock in some major ports in Japan, where berths are designed to take ships up to 200 metres, the standard length of a 6,500 car PCTC. The 32.3 metre width of the Panama Canal also has to be taken into account on some routes, and the height of bridges on others. As noted already, the two 7,000 capacity Panamax vessels ordered from Croatia by Peter Gram have been designed with the width of the Panama in mind. The capacity limitations imposed by the length constraint has been got round by making the ships taller, with 13 flexible cargo decks instead of 12, though this has meant additional ballast to ensure stability (Reinikainen 2004).

Some of the technical specifications of these vessels make them a less than attractive insurance risk, and in 2005 the re-insurer Munich Re, which had been hit by a number of losses, especially from business in South Korea, reported that it was reducing its business involving cargo

on car carriers because 'we found the risk is high and that risk management efforts were insufficient' (cited in Fromme 2005). Car carriers have a high centre of gravity; the sheer side walls offer a greater 'attack' surface for the wind and waves; and, in the case of collision, whereas the crushability of the light steel construction means that other vessels might be relatively protected from damage, the car carrier's open decks spell danger should the water get in. This would appear to be what happened to the *Tricolor*, a Norwegian car carrier, which collided with a container ship in the English Channel in December 2002. It sank and about 2,000 expensive Saab, Volvo and BMW cars hit the bottom with it. Earlier that year the car carrier *Hual Europe* had been driven ashore by a typhoon in Japan and subsequently was partially destroyed by fire. In May 2004 another car carrier, the *Hyundai 105*, sank in the Singapore Strait following a collision with an oil tanker. It was on its way to Europe and suffered a loss of over 4,000 South Korean and Japanese cars. In March 2005 the car carrier *Aniara,* again laden with over 4,000 cars, caught fire in Piraeus. Despite the fire having been in the engine room, the smoke caused damage to some of the cars (a peculiar feature of the industry is that the cargo loses its value when the 'new car smell' is lost; another insurance consideration is that fears about car manufacturers' loss of reputation can make for major difficulty in the sale of salvaged vehicles). One insurance expert reckons that, as well as a myriad of smaller claims, there is an average of one total loss per year and three or four big losses from incidents such as fire or collision (Hill 2005).

Concentration, integration and the commodity chain

Car carriers are not only big; they are big money. WWL's 8000 capacity PCTCs are estimated to cost over $72 million each. Even a standard 6,400 carrier costs around $50 million. This alone makes for high entry costs. Then again, terminals are necessary and, again, expensive. Less obviously, operators tend to keep their tonnage until they scrap it, so reducing the chance of entry via cheaper second-hand purchase. Size of fleet is also a factor. New ships take time to build and a large operator can take advantage of upturns in the market more readily by extending the life of selected vessels. Not least, a proven record for quality of service is a major consideration for the car manufacturers (which is why most car carriers carry notices that warn crew against sitting or leaning on vehicles, against causing handprint damage and against the wearing of unprotected buttons, watches and rings). Cars transported on car carriers are not protected by containers but lashed close together, and every

scratch and dent can mean disruption to the product flow and time and money spent on repair. Car manufacturers therefore have a bias towards established carriers with good quality records.

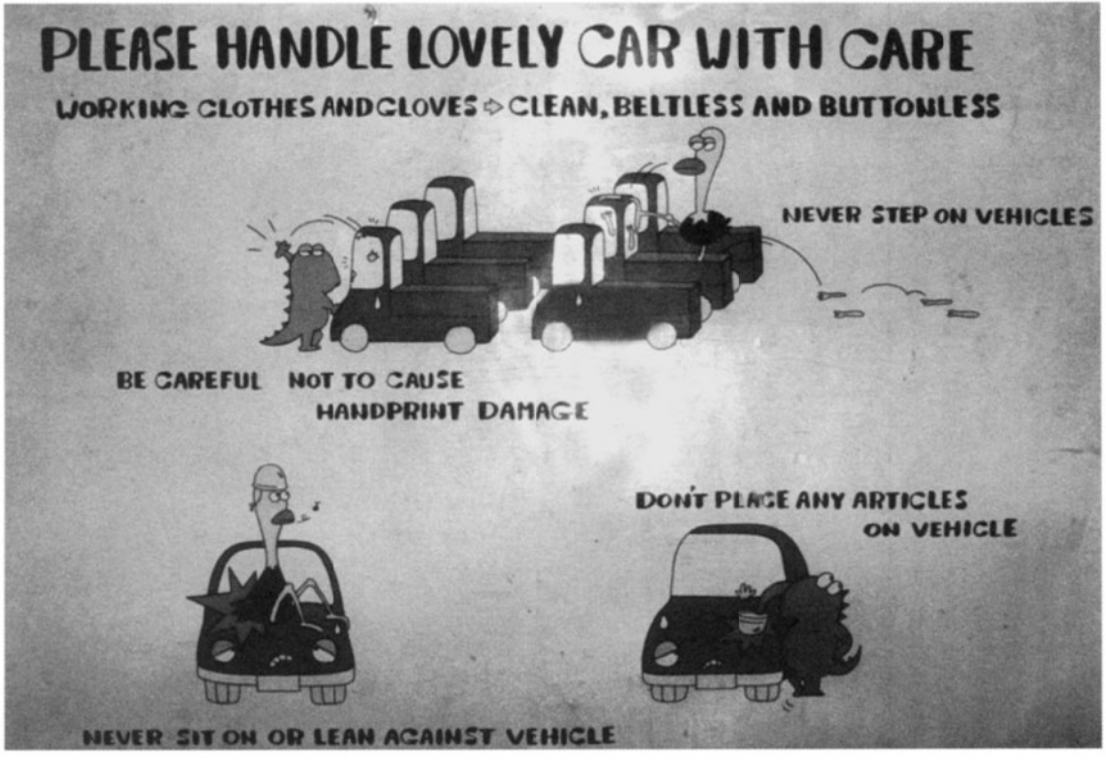
In Japan (and Korea) car carriers have close relations with the manufacturers which derive from the traditional horizontal and vertical networks that tend to have structured inter-firm relations. Thus Mitsubishi has a close relation with NYK and Matsui with MOL, and Toyota and K Line have been described as being 'married to each other' (Hall and Olivier 2005: 288). Everywhere however (there are no major United States car carrier operators) car manufacture is itself now a highly concentrated industry and as a vice president of a car carrier company explained:

> When it comes to the manufacturers, the big factories, we have known them from way back and called them and visited them and we have contracts with them

All this means that the maritime car carrier sector is not easy to break into.

On their side, the car manufacturers are few in number. Six main groups – GM, Ford, DaimlerChrysler-Mitsubishi, Toyota, VAG (Volkswagen – Audi), Renault-Nissan – account for around three quarters of worldwide vehicle output. On the car carrier side, half a dozen pure car carrier and pure car and truck carrier lines – WWL, EUKOR, NYK, MOL, K Line and HUAL - account for almost 90 per cent of capacity, with a pronounced bias towards Japan and Scandinavia (Table 3.4). The degree of concentration is yet higher if beneficial ownership is considered since, although Wallenius and EUKOR act as separate entities, they have the same parent (WWL).

This high degree of concentration has been fed by mergers and acquisitions, notably by the 1999 creation of a jointly owned company, Wallenius Wilhelmsen Lines (WWL), out of Wilhelmsen Lines of Norway and Wallenius Lines of Sweden; and Wallenius's subsequent acquisition of 80 per cent of the former Hyundai Merchant Marine operation in 2003 to form EUKOR. The first move (to form WWL) created a company with increased world coverage: Wallenius having concentrated on the Asia to Europe and Atlantic trades and Wilhelmsen on trade routes between Asia and North America, Europe and Australasia, and between North America and Australasia. The newly established WWL became the world's largest specialised vehicle and Ro-Ro transportation and logistics company, controlling a fleet of more than 70 vessels, primarily PCCs and PCTCs. The second move (to form EUKOR) created further synergies through the



Crew notice on modern car carrier, 2004 (photogrph EK)

Table 3.4 Major car carrier companies: Capacity and market share

	Percentages		
	Country of ownership	**Global fleet**	**Vehicles handled**
WWL	Norway/Sweden	16	20
EUKOR	Norway/Sweden/Korea	15	12
NYK	Japan	20	20
MOL	Japan	14	18
K Line	Japan	13	15
HUAL	Norway	8	8
Others		14	7

Source: WWL (2003).

consolidation of WWL's trade out of Europe, Japan and the Americas with the newly established EUKOR's trade out of Korea. EUKOR is now owned 40 per cent by Wilhelm Wilhemsen, 40 per cent by Wallenius Lines, and 20 per cent by Hyundai Motor and Kia Motor.

In another move towards increased concentration in 2000, Leif Höegh purchased Ugland International's 50 per cent stake in HUAL. In 2001 HUAL then acquired New Zealand's Kiwi Car Carriers, a firm that carried used cars from Japan (where strict warrant of fitness regulations apply, encouraging used car exports) to New Zealand. There are further interconnections. UECC, the European short-sea shipping company, is jointly owned by NYK and Wallenius Lines. Car carrier companies also have close relations that do not extend to ownership, the increasingly fragmented pattern of trade routes further encouraging the sharing and selling of space between them. There has been an increase in space chartering, as given an increase in the number of shipping destinations, companies have sought to increase the flexibility of the services that they offer to manufacturers and to utilise their own fleet capacity to the full.

The high degree of concentration found among both the car manufacturers and the maritime car carriers has its complement in the emergence of massive hub ports. Three such ports in Europe are Southampton, Zeebrugge and Bremerhaven. Southampton now has a throughput approaching one million cars a year; Zeebrugge is already over the one million mark; Bremerhaven, has yet higher levels of traffic and took nearly 1.5 million cars in 2004. Similar installations are now to be found worldwide – whether in Pusan in South Korea, Vera Cruz in Mexico, Durban in South Africa or in what are generally considered to be more developed nations.

Bremerhaven, the largest port for the transit of vehicles in Europe, serves the main liner car carriers, including HUAL, K Line, MOL, NYK, UECC and WWL. Situated close to the DaimlerChrysler factory in Bremen, it has direct motorway access by which Volkswagen and Karman plants can be reached in less than two hours. It receives imported vehicles from Japan, Korea, the US and elsewhere. Over 500 feeder vessels connect the port with destinations in Europe, Scandinavia and the Baltic region.

Southampton is a smaller operation than Bremerhaven, but this in itself only serves to underline the extent of such operations. The port has direct road access. Trains carrying vehicles for export arrive at Southampton's Eastern Docks several times a week, and many imported vehicles that arrive at Southampton are distributed from there to dealerships at various locations in the UK. Ford has a railhead in its compound. The port can accommodate the largest PCTCs and caters to various ramp configurations. It has regularly handled, among others, models produced by Ford, Rover, Land Rover, Jaguar, GM, Toyota, Fiat, and Peugeot and has served, again among others, such deep-sea carriers as WWL, HUAL, NYK, MOL, K Line and Grimaldi. When Honda began shipment of vehicles produced at its Swindon plant, a new dedicated car-handling terminal was opened for the company able to accommodate more than 3000 cars at a time. Southampton caters to services to the Middle East, the Far East, Australasia, the Mediterranean, the USA, Africa, Continental Europe and the Baltic states. As well as facilities for cars, the port offers facilities for handling heavy-wheeled freight cargoes such as tractors, earth-moving equipment, buses and other commercial vehicles, thus serving the needs of car carriers for mixed cargoes.

In 2002 Southampton opened the UK's first multi-storey car export-import terminal, built as part of a ten-year agreement with WWL. Covering approximately one hectare, this terminal provided almost five hectares of storage for up to 3,120 cars on five levels. The facility features a bar-coding system that scans cars as they enter and permits tight inventory control. The risk of damage is minimised through padded stanchions, high-grade lighting and one-way traffic flows. The facility gave WWL a capacity of over a third of a million cars in the multi-storey terminal and its other compounds at the port. But by 2005, when Southampton's deep-sea car trade had more than doubled since 2000, and it was therefore faced with demand for additional capacity, it planned to open another multi-storey terminal at a cost of about £4 million.

As the above suggests, the major car carriers tend to have their own terminals. Aside from Southampton for example, WWL operates its

own terminals at seven locations throughout Europe and the US, including Zeebrugge, where it has the capacity to store and handle in excess of 20,000 vehicles; Liverpool (around 8,000); Kokta, Finland (6,000); Brunswick, Georgia (approaching 1,000 vehicles); Port Hueneme, California (around 6,000); Baltimore, Maryland (875 vehicles and 1,500 H & H). WWL also has dedicated terminal space for handling and storage at several other ports in Europe, including Radicatel, France, and in the US at Savannah, Georgia; Jacksonville, Florida; Galveston, Texas; Long Beach, California; and Newark, New Jersey (WWL Terminals 2005).

While several of the car carriers have moved in-shore and involved themselves in port activities, car manufacturers have tended to follow a trend among manufacturers generally to concentrate on core functions. This has meant that they have tended to subcontract the production of components and even whole modules. In many cases, following a similar logic of sticking to core functions, they have left certain functions to the car carrier companies.

It remains to be seen whether this situation will change, given increased interest by the manufacturing industry in a build-to-order business model as opposed to the forecast-based model that more usually holds sway (Holweg and Pil 2004). But there are limits to the idea that cars cannot only be built to customer order but can be delivered quickly to those customers when this entails sea journeys of thousands of miles. (Understandably, the so-called 3DayCar research project, which investigated barriers to the idea of manufacturers building and delivering cars within three days of customer order, was a land-based project. Moreover, ten years after Womack et al.'s work of homage to lean production, *The Machine That Changed the World* (1990), one of the first findings of the UK 3DayCar project was that 'few volume manufacturers are able to build to customer order, and only one builds solely to customer order' and, no less interesting, that the prevalent focus in research on manufacturing efficiency had led to 'ever more efficient factories producing ever growing vehicle stocks in the marketplace', which its authors saw to have important implications for the development of logistics (Holweg and Miemczyk 2002: 829, 845)).

In the meantime, the increased engagement of car carrier companies in the operation of terminals is an aspect of the part that they are playing in the fuller integration of the car supply chain. The car manufacturers are the maritime car carriers' lifeblood and as the manager of a car carrier company that was developing a new dedicated terminal pointed out to us, whereas one goal was to make profit on the operation another

was to tie the company closer to the manufacturers since 'it brings you quite close to the manufacturer when you are also responsible for their products from when they leave the production line until they are loaded on the vessel or discharged at the final port of destination.' There are, in short, clear advantages in this in terms of planning and, hopefully, future contracts.

Most of the major car carriers not only operate their own terminals but they attempt to perform a number of other functions through running vehicle processing centres for the preparation of vehicles in port. In this way they seek to gain better control over both costs and quality. Additional services, often referred to as 'value added' activities, include tracking and tracing delivery status; PDI (Pre-Delivery Inspection); quality control; anti-corrosion treatment; rectification of defects; special modifications of import/export units; custom fittings; putting the correct manuals in; fitting radios; fitting hub caps (not fitted on loading to facilitate lashing cars at a standard interval of 10 cm); putting on or taking off a wax coating or shrink-wrap coating.

This book is itself, we hope, reminder enough that transportation is not simply a link between production and consumption but that it is also a source of profit in its own right. In pursuing value added activities the maritime car carriers are seeking profit additional to that derived from shipment pure and simple. They are attempting to extend their command over other activities in the commodity chain. Car carriers are no longer mere deliverers of vehicles by sea. Several of the leading companies have made a definite attempt to provide logistics services in order to wrest more profit from the value chain and they present themselves as logistics providers. Sometimes this extends to running land-based transport systems to achieve door-to-door delivery. UECC commonly uses the logo 'United European Car Carriers – More than a Shipping Company' and represents itself as 'Europe's leading provider of logistics and sea transportation services for the vehicle manufacturing industry'. WWL represents itself as a global leader in Ro-Ro ocean transportation and outbound supply chain management solutions. According to its President and Chief Executive: 'We are committed to creating a company that can lock into the total logistics chain' (Lloyd's List 2000b). In keeping with this, the President of WWL, Americas, resisted reference to the company as 'Wilhemsen Willenius *Line*' and expressed the hope 'that we are perceived as a multidimensional partner in the global supply chain' (POB 2002: 17 emphasis added). In 2005 WWL acquired Distribution and Auto Services (DAS), Nissan's North American distribution network, which had seven US distribution facilities, one in Canada,

and one to open in Mexico. This followed the earlier acquisition of the UK-based vehicle transportation group Richard Lawson Logistics and the acquisition of a stake in the French company Compagnie d'Affretement et de Transport (CAT), formerly Renault's distribution subsidiary which distributes vehicles, manufactured goods and spare parts to 14 countries. In 2000, ocean services had been the company's main business. It is now aiming for a 50/50 split in group revenue between ocean and logistics services – an objective partly driven, on one account (Porter 2005), by the recognition that, in time, other companies, not least from China, could start their own car carrier services, just as Hyundai did when Korean car makers moved into the export market but which can also be seen to offer economies of scope and increased leverage. Remarkably, by 2004 the company was moving more than twice as many vehicles by land as by sea (Thirud 2005: 13). Whereas WWL is the clear logistics leader – it actually changed its name to Wallenius Wilhelmsen Logistics just as this book went to press - other car carriers are also keen to perform extended logistics services.

The large amount of capital invested in ships and often also the additional capital invested in port and other facilities puts pressure on ship owners to utilise their ships as fully as possible. This has implications for capacity utilisation and cargo mix; in particular, we have seen the effects of this in attempts to avoid ships making return journeys on ballast and the redesign of ships to enhance carrying capacity and flexibility. Profitable operation also requires that ships be kept in service: an idle ship means a lower return on capital. Such pressures apply whether a ship is managed directly by its owner or by a ship management company. Added to these pressures is often another one however, which comes directly from the car manufacturers and is the equivalent in shipping terms of just in time delivery – the requirement that the cargo be discharged at a particular port on a specified day. The combined effect of all this has been a drive to reduce the time that car carriers spend in port.

Cargo shipping has experienced an across-the-board decrease in turnaround time since the 1970s. An analysis of the turnaround of around 650 ships in the Port of Bristol in 1970 and of over a further 1,500 ships in 1998 amply underlines this point (Kahveci 1999). This shows that an average port stay of over 138 hours (over five days) in 1970 had fallen to under 16 hours by 1998. This is all the more remarkable because the reduction of 800 percent in turnaround time was paralleled by an increase in grt of 400 per cent (and, no doubt, by decreases in crew level).

Car carriers closely resemble containers as spending less time in port than the other types of cargo ship surveyed (Table 3.5). Among car carriers, there are some differences between the different trades – deep-sea car carriers spending an average of 98 per cent of their time at sea between the last and next ports either side of their visit to Bristol (Table 3.6). Even so, the equivalent average for all car carriers was as high as 96 per cent. A Swedish captain of a deep-sea car carrier who was interviewed at the time reported:

> We loaded Toyota and Honda cars in Japan in Nagoya. Our first port of call was Leixoes and we discharged 326 cars there. We arrived in Bristol this morning at nine o'clock and we're sailing at 4.30 this afternoon. We're discharging 1,321 cars here. The next port of call is Cherbourg and 808 cars will be discharged there. Then Rotterdam to discharge another 485 cars. Then Bremerhaven to discharge a further 1,455 cars. We are in ports just for hours not for days – eight or nine hours here for 1,321 cars.

This ship, with its 15 crew, had set out from Japan with a crew whose tour of duty would last nine months. They were on a cycle of three month

Table 3.5 Average time in port for different types of cargo, Bristol, 1998

Cargo	**Hours**
Dry bulk (196)	48
Forest Product Carriers(N=171)	28
Petroleum Product Carriers (N=372)	21
Liquid bulk (63)	17
Car carriers (N=525)	13
Containers (253)	11

Source: Kahveci (1999), Tables 14.

Table 3.6 Average percentage of voyage time in port, car carriers in different trades, Bristol, 1998

Trade	**Percentage**
All car carriers (N=525)	4
Short-sea (N=203)	16
Mediterranean (N=127)	6
Deep sea (N=195)	2

Source: Adapted from Kahveci (1999), Table 4.

round trips, this one beginning with 4,395 cars. Each round trip consisted of a long passage, followed by intense port calls, during which time the crew spent 4 per cent of their time in port – 85 hours out of 2,040.

Chapter 2 examined some of the broader determinants and development of shipping political economy. This chapter has considered the specific nature of the maritime car carrier sector. Our main stress here has been on the relation between car manufacturing industry and the car carrier sector; on the way in which the sector has developed, in terms of vessel technology, ownership of firms and markets; in terms of bigger ships and smaller crews; in terms of the rise of logistics and integrated transport systems; and with reference to industry dynamics, on the drive to utilise vessel space to the full, the drive to keep vessels working at sea and the related need to reduce turnaround time in port. Some of these issues will be revisited in Part ll but the underlying purpose there is not to examine what has happened to the car carrier sector as such; it is to consider the implications of these and other developments for car carrier crews: to ask what working on car carriers is like for the crews and how these and other developments have affected them.

Part II The World of The Car Carrier Worker

4
The World(s) of Car Carrier Crews

In 2003 and 2004 we conducted research into the lives of seafarers who work on car carriers. Survey data on 627 seafarers, which were collected as part of this, constitute one of the major research materials upon which Part II is based; others include 109 days of observations conducted on board six car carriers; further in-depth conversations with seafarers on board and in port; seafarer diaries; and interviews with 40 maritime car carrier managers and 10 trade union officials.

Our initial intention was to interview seafarers when they were off duty at the ports of Rotterdam, Bristol and Southampton. Rotterdam is the biggest port in the world and one of the major ports for car carriers. Bristol and Southampton are the biggest UK ports for car carriers. In the event, we found that we could catch many seafarers who passed through Southampton at Bristol and we switched the focus from Southampton to Bremerhaven, one of the world's leading car carrier ports. Bristol is disproportionately a first port of call for carriers sailing from the Far East and North America. Rotterdam caters disproportionately to trades with Scandinavia and the Baltic as well as attracting trade worldwide. These ports therefore provided a cross section of sea passages.

A structured questionnaire was prepared in English (the lingua franca of the sea), Tagalog and Portuguese. Since we thought it would prove instructive at various points to compare seafarers to land-based workers, several of the items on this were chosen to replicate those on the major British land-based study of employee opinion that was part of WERS 98 (the 1998 British Workplace Employee Relations Survey, some of the main results of which are presented in Cully et al 1999). Most seafarers were interviewed, generally for about one hour, but the free time that is available to them during port calls is limited (in fact, severely limited as we shall see later) and in some cases it was found necessary to provide

them with the questionnaire, having gone through it with them, and then, having established their next port of call, to arrange for port chaplains to collect and post it back to us. The sample was drawn in such a way that the balance between officers and ratings and between the different departments on board – that is, Engine, Deck and Galley- approximated to what we knew to be the division of labour aboard car carriers.

Here we first provide a brief profile of the 600 or so seafarers in the survey. Then we provide an overview of the world of car carrier crews – or, as the plural title of this chapter suggests, their worlds. For, as will be seen, although in one sense they are 'all in the same boat', sociologically speaking this is not the case.

Summary demographics

Of those included in the seafarer survey, 48 per cent were employed on deck, 42 per cent in the engine room and 8 per cent in the galley. Forty-eight per cent were ratings. Of the rest 19 per cent were senior officers, 22 per cent junior officers, 8 per cent petty officers and 2 per cent were cadets. Seven out of ten reported that they usually worked on car carriers as opposed to other types of vessel, a rather higher proportion of officers doing so than ratings. All claimed to speak some English, only one per cent confessing this to be 'poor' or 'very poor' but with a response stratified by rank for those claiming their English to be 'very good' (a claim made by 40 per cent of senior officers, 28 per cent of junior officers, 10 per cent of petty officers and only 8 per cent of ratings).

Most seafarers were married (73 per cent), 25 per cent were single and the remaining two per cent were divorced, separated or widowed. There were no women, which is generally the case on car carriers (and many other types of vessel outside of cruise ships, Belcher et al 2003). The youngest seafarers were aged 18, the oldest 62, and the average age was 37. Their years at sea varied from one to 42 years with an average of 13 years. On average, married seafarers had 4.7 dependents. Married Filipinos had an average 5.3 dependents and in one case as many as 17.

In line with the developments in the maritime industry described in Chapters 2 and 3, many of the car carriers on which these seafarers sail have been affected by flagging out, 62 per cent of the sample working on flagged out ships. The consequences of this are to be seen in the regional composition of our seafarer sample, which it is convenient to divide into five groups:

- The largest group (48 per cent) is from the Philippines.

- The second (22 per cent) is from Indian Ocean countries, of which the main component is represented by India (18 per cent); others represented here including seafarers from Pakistan, Bangladesh and Sri Lanka.
- The third (14 per cent) is from Eastern Europe, dominated by Bulgaria and Poland at six and five per cent respectively.
- The fourth (eight per cent) is from Asia, led by Myanmar at four per cent.
- The last group (seven per cent) is from the Rest of Europe, led by Sweden at three per cent and including seafarers from Italy, Norway and the UK.

The above representation of different nationalities is broadly in line with the pattern discovered for seafarers on car carriers by the 2002 and 2003 SIRC Global Labour Market Surveys (GLM 2002, 2003). In these, Filipinos are again the leading source of labour (61 per cent), followed by seafarers from Indian Ocean countries (10 per cent). An industry source, *Shipping Intelligence Network*, reckoned that there were 535 car carriers in 2004 (SIN 2004). This suggests that between 10,000 and 11,000 seafarers are employed on car carriers (assuming an average crew of 20, which may be generous given the existence of smaller vessels in the industry). Our sample of 627 therefore represents at least five to six per cent of all car carrier seafarers.

Becoming a seafarer

Only 25 per cent of senior officers and 28 per cent of junior officers had worked before going to sea. As a consequence of this they have limited experience of the land-based world of work. Among petty officers, 66 per cent had land-based experience as had 69 per cent of ratings. For all ranks Filipinos were more likely to have had other work experience. Among ratings, those in the galley had sometimes worked in fast food chains or restaurants. Ratings in the engine room had sometimes worked as mechanics or welders. Generally, though, ratings had experience of a wide range of jobs. Some had worked as security guards or taxi drivers; others in garment factories or on construction sites; others had helped their fathers on farms or with fishing.

The great majority of the seafarers had obtained their jobs through crewing agencies (Table 4.1), the only notable exception to this being seafarers from the Rest of Europe over half of whom had been hired directly by a shipping company.

Table 4.1 How present job was obtained

	Philippines (*N*=302)	**Indian Ocean (*N*=139)**	**East Europe (*N*=88)**	**Asia (*N*=47)**	**Rest of Europe (*N*=45)**	**Total (*N*=621)**
Crewing agency	82	60	81	92	18	73
Personal connection	13	2	3	0	11	8
Direct company hire	3	23	17	9	56	13
Company trained	1	17	0	0	0	4
Other	2	0	0	0	16	2

Note: For 'Rest of Europe' 'Other' refers to permanent employees. Percentages may not add to 100 because of rounding.

To concentrate for the moment on the largest of these nationality groups, the Filipinos, is to see that the actual social processes entailed in getting a job through a crewing agency may be very far from straightforward and, indeed, in many cases, it can mean that job seekers are subjected to various forms of unfree labour. The Philippines is a poor country and jobs in the formal economy are scarce, despite the generally high level of education.

About seven million Filipinos work abroad, usually as contract labour, in a variety of capacities – including domestic servants, hospital workers, as well as seafarers. In the year 2000 remittances from Filipino seafarers alone were estimated to exceed $900 million (Leggate and McConville 2002: 47–8 citing data from the Philippines Overseas Employment Administration). As early as 1976, such large influxes of dollars were recognised by the Marcos administration as essential to the viability of the Philippines' economy. Since then the government has encouraged Filipinos to migrate in search of work and has also sought to regulate such migration and maximise the benefits which accrue to the Philippines' economy. Seafarers' employment is thus overseen (along with that of other overseas workers) by the Philippines Overseas Employment Administration (POEA), which exercises general control over their employment terms and conditions. All the country's seafarers are required to remit a minimum of 80 per cent of their basic earnings aboard foreign vessels to a Philippines bank account. According to the POEA's figures, today there are over half a million registered seafarers in the Philippines and about a third of a million who are surplus to requirements. A very small number of Filipinos are creamed from the maritime colleges, of which there are many, and gain employment on the Norwegian Second Register (the 'Norwegian International Ship

Register'), which runs a special scheme for these so-called Alpha students.

In our sample, six out of ten of the Filipinos had fathers who were manual workers, half of these being farmers or fishermen. Nonetheless, such is the value placed on education – as a prized means of social mobility- that only one per cent of the Filipinos in our sample lacked education beyond elementary level and 80 per cent had graduate or equivalent qualifications. Competition for jobs means that it is common practice to bribe crewing agencies to get a job. Many also, not least because they are burdened with the responsibility of looking after their large families, are sufficiently vulnerable to agree to work for crewing agency managers in a personal capacity for free, or for minimal wages, on a variety of tasks, often unrelated to their intended occupation.

A fourth engineer, working on one of the car carriers where observation was carried out, recalled:

> I spent two years looking for a job in Manila - most of the time I was hungry. My father had a friend in Manila and his brother was the owner of a crewing agency. So my father wrote a letter to his friend and asked him to introduce me to his brother. I applied to his agency. There were plenty of applicants and a long waiting list. So you have to wait for your turn. But I asked the Lord everyday: 'Please give me a chance'. For a year I stayed with my first cousin in Manila. He was also short of money. After a year, the owner of the agency took me on as his personal driver, then he got to know me....
>
> For four months I drove him everyday from his house to his office then I drove him to conferences for meetings sometimes until midnight. He asked me to lodge in his house because I had to drive his children to school every morning and by 7.00 am I was ready to take him to work. I had to wake up at five in the morning.

His wife also lodged with him in the manager's house (or rather in an outhouse in the garden). She also worked without pay, as a domestic helper.

Others told similar stories. One seafarer we interviewed recounted how it took him two years to get the job. He worked for the crewing agency for eight months as a utility boy (Filipinos sometimes refer to this as 'OJT' – On the Job Training). He did office work, carrying papers and parcels as a messenger, going to the embassy to take other people's visa applications. He cleaned the office and so on. For these eight

months he worked without any pay at all in order to get a contract. He said that at that time there were about 200 unpaid utility workers. Now, six years later, his cousin is a utility boy in the same agency and they have 60–70 others. His cousin is also unpaid and says some messenger boys still work up to 16 months just waiting for a contract to be offered by this agency.

Another seafarer who had worked as a utility boy recalled how he had slept in the agency office with three others. They slept in the office chairs – they put the chairs together, side by side, and made a bed out of them. He said they had some pillows and also some bed sheets. They also cooked and ate in the office. They bought rice and some food and the agency gave them a meagre allowance (270 pesos a month for all four of them in 1999). There is no guarantee that such sacrifice will be rewarded. In this case, there was no verbal or written agreement between the utility boys and the office, and the agency was treating about another 350 utility boys in a similar way.

Yet another seafarer reported that one of the jobs that he did as an unpaid utility boy was to take seafarers' contracts to the Filipino Employment Agency to be signed and that he sometimes also went to Lunetta (Rizal Park) – an open street labour market in Manila for experienced, certificated seafarers whom he would direct to the agency. He said the pay he got for doing this was very, very little. It was worth it for him because he lacked the very experience that those at Lunetta had, as did those whose papers it was his lot to process. His problem was that he not only faced competition from thousands of others, all like him desperate to get a job. He also faced a Catch-22 situation. To get a job he needed experience. To get experience he needed a job. Working for a pittance was his attempt to find a way round this. Others resorted to bribes.

Same boat, different worlds

Certain physical conditions are the common lot of everyone on board car carriers. Even on the most modern vessels, the wind and sea can have disturbing effects. The low draft and the sheer height that car carriers stand out of the water accentuate the motion effects well known to seafarers on many types of vessel and everyone has experienced sea sickness (Box 4.1). In high winds, the ships pitch and roll (they lack stabilisers) and the stench of disturbed sewage from the septic tanks can override the smells from the galley which on many vessels are likely to circulate through the air conditioning system. At times of loading and

'Utility boys' at work, Rizal Park, Manila, Philippines, 2004 (photograph EK)

Box 4.1 Two days to remember

It must be 1 pm. Since last night the sea has been very bad. I haven't thrown up but you cannot move around so I'm just lying in my bed. I wasn't able to sleep last night because of the sea movement and the pitching and rolling the ship gets is unbelievable. These are inhuman conditions to work in...

The rolling on the ship is awful you can't even walk and we are still waiting outside the port. It's so bad that we can't drop anchor. Towards 6 pm it got even worse. I had to go back to bed. Fitter Miguel came to my cabin during all this rolling and asked me about what benefits the research has got for seafarers. I tried to explain as best as I could...
I am thinking that having this much rolling and pitching month after month must have some sort of effect on seafarers. It seems impossible not to be affected by it. At seven I went to the crews' recreation room despite great difficulties – the sea seems to be getting worse. I saw 6 people, 3 sitting in the mess room and the other 3 playing darts. They must get extra fun out of playing darts in this weather. In the Officers' recreation room the Catering Officer is watching a video alone. The Messboy came to me and asked whether I want to eat anything. I said 'No'. He said that many people are feeling headachy and sick...
I went to the open air but it wasn't a good idea. Firstly, it seemed very dangerous – it was dark, there was no one there and you could hardly hold on to the rails. Secondly, the smell of the Galley and oil and smoke from the funnel made me feel even worse. Having fresh air in this ship is almost out of question. I cannot even open my porthole because of the smell coming in. The air conditioning still blows the Galley smell into the cabin – it's awful. I looked out of the porthole in my cabin. The situation out there is terrible – must be gale force 11 – if not worse. I have not eaten anything for the last 29 hours and this is not the first time onboard this ship and I don't know when I am going to be able to eat next...
I went to the crews' recreation room briefly, Santos and another AB were watching a Filipino video and the trainee OS was eating something accompanied by the Indian Fitter from Goa, Miguel. I sat next to them. Then the engine Cadet came and joined us. The sea movement was very bad. In an instant, the OS's chair tipped over. He tried to catch the table but missed it and he ended up on the floor with his chair. We could only laugh.

Excerpts from Kahveci's voyage diary

discharge the exhausts from the many cars being moved on deck can fill the air, sometimes setting off smoke alarms. Vibration from the engine is a constant part of everyone's life, night and day, for months on end. Climates can change rapidly as ships move through weather zones, and extremes of heat and cold are also endemic for those in the galley and engine room and for those who have to work on open decks. Galley provisions may only be renewed every one or two months so fresh food can be a rarity.

Even if everyone on a car carrier is a 'seafarer' and is likely to share experiences such as those above, from another point of view they inhabit different worlds. Differences exist among them on the basis of nationality, function and indeed social origin.

The most reliable source of information on the relation between rank and nationality for car carrier crews has been collected by SIRC, which surveyed the crew lists of 112 vehicle carriers in 2002 and of a further 93 in 2003 (GLM 2002, 2003). Figure 4.1 reports the results of a secondary analysis that we conducted of these data which we pooled, thus providing a sample of over 4000 seafarers on board such vessels from 47 different countries. This indicates various degrees of over- and under-representation among the six countries which had over 100 seafarers in the combined 2002 and 2003 samples. Seafarers from capital-supply countries tend to be skewed towards the supply of officers. Seafarers from Japan and Korea, for example, are over-represented among senior officers and under-represented among ratings. The data for seafarers from Sweden show a less pronounced skew from the top of the authority structure, where they are over-represented, to the bottom, where they are under-represented. At the other extreme from Japan and Korea, the Philippines, which is a clear example of a labour-supplying country, stands out for the under-representation of its seafarers among both senior and junior officers and its disproportionate representation among petty officers and ratings.

The generally subordinate positions occupied by Filipinos were reflected in the crew mixes of the six vessels upon which observation was conducted for this research. Voyages were undertaken with six different vessels in six different regions (Mediterranean, Baltic, Western Europe, Middle East, North America, West Africa) and on vessels of different vintage and technological sophistication. Composition by rank and nationality on these ships was as follows:

- British senior officers, Filipino and Ghanaian junior officers and Ghanaian ratings

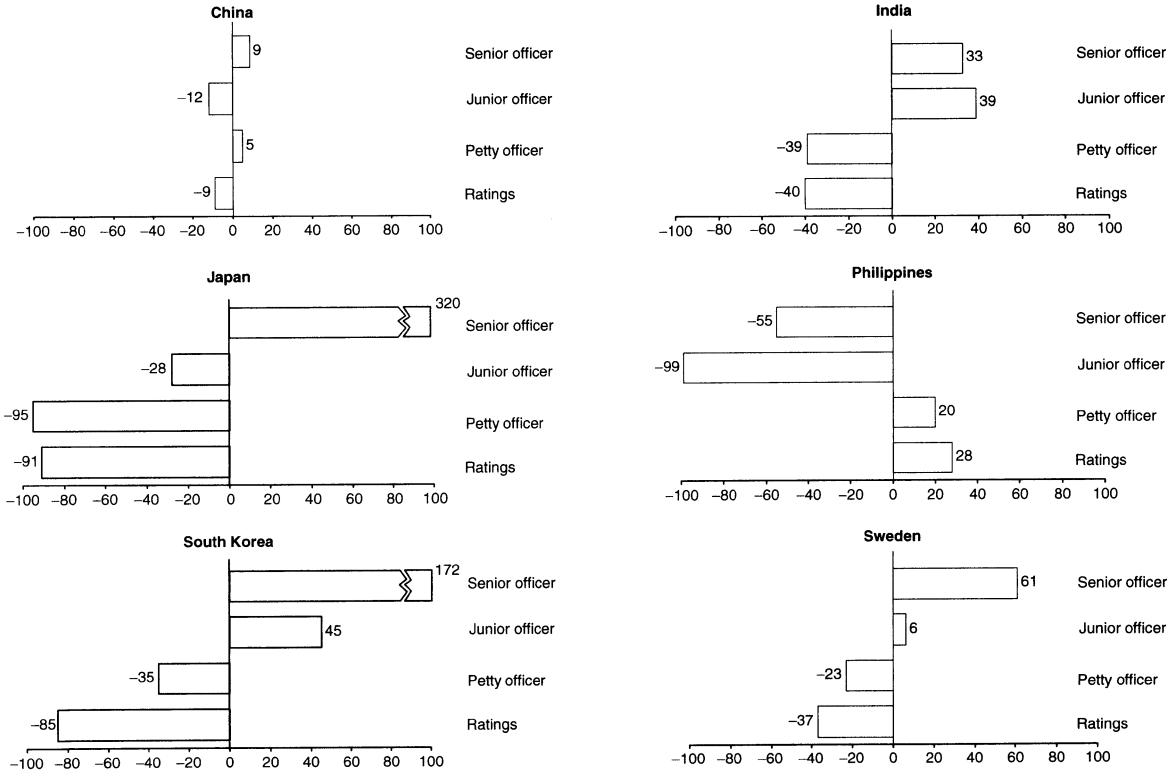


Figure 4.1 Over-representation and under-representation of various nations' seafarers by rank.

- Indian and Bangladeshi senior and junior officers, Filipino ratings
- Indian and Bangladeshi senior and junior officers, Indian ratings
- Indian and Bangladeshi senior and junior officers, Filipino ratings
- Bulgarian and Ukrainian senior and junior officers, Filipino ratings
- Swedish senior and junior officers, Filipino, Myanmarese and Singaporean ratings

There are several factors that contribute to the uneven contribution that different countries make to the supply of labour to different points in the hierarchy. The level of education is one (also the level of maritime training). The nationality of shipping owners is another (which as we have seen shows up sharply in the tendency of Japanese car carriers to have Japanese senior officers). There is also of course, for ratings, the relative capacity of different countries to supply an abundance of labour at the desired (and from an advanced country perspective, most certainly low) rate of pay. Considerations about nationality can also enter in a different way. For example, a casual conversation with a Filipino chief cook on a Greek vessel about whether a replacement second cook was coming from Greece led to the laughing response 'Oh no! You never have a Greek second cook under a Filipino.'

When we sought permission to take part in voyages some car carrier and ship management companies asked to see our interview schedule. Having inspected this, some of these would not permit us to ask questions about equal treatment either when on voyages or as part of the survey part of the research. As a consequence only 218 seafarers were asked about this ('Are all nationalities treated equally on board?'). Of those on mixed crews 38 per cent said that treatment was not equal. Among Filipino ratings this rose to 52 per cent. These findings are in line with those of a survey that MORI conducted for the ITF in 1996. This found that 43 per cent of Filipinos (whether on mixed crews or not and whatever their rank) also thought there was unfair treatment because of race/nationality (MORI 1998: 61). Among car carrier crews, seafarers partly related their claims to racial discrimination and partly to different national contractual conditions. The following are typical responses to the question:

> Filipinos get less wages.
> Filipinos onboard are ignored and everything needs to be done in a Korean way.
> I've been treated like a rating [from an officer].
> If a white officer does something wrong, there is no problem. If a Filipino seafarer commits a mistake, most probably he will be dismissed and sent home.

It is normal for white officers to look down on Filipinos, the way they act.
Italians get paid more.
Koreans say their blood is higher than ours.
Officers are racist.
Our superiors look down on us.
There are no Filipino senior officers
Whites generally look down upon those of us who are from Asia.
There is discrimination if you're a Filipino, especially by the Japanese.

The charges made about the wages of Filipinos relative to those of some other nationalities – British, Italian and so on – are irrefutable. For employers, FoC ships have the advantage that they permit such discrimination. (National Flags are not immune from this. Since 1976 the British Race Relations Act has had a special exemption for cases where an employer engages a seafarer for employment on a ship when the seafarer is engaged outside the UK. In 2003, threatened by the prospect that the EU would require the removal of this exemption, the director general of the British Chamber of Shipping claimed that this would represent 'the most serious threat to the UK mainland flag for many years' and that 'owners could be forced to flag out at least 400 ships, out of a present total of 497' (Bray 2003). In the event, the legislation was amended – with the effect that the only aspect of a person's employment in which they may be discriminated against is pay, and the only permitted ground for discrimination is that of nationality, rather than race or ethnic origin.)

On the one side, different national pay rates can breed resentment. Seafarers from cheap labour countries are well aware that they are paid less. Pragmatically, they accept it. What else can they do? But this does not mean that they like it. In private, if not in the tight public sphere of their workplace, they say so. The other side of this is that the industry's all too evident pursuit of cheaper labour can breed insecurity on the part of those who are better paid. As a Polish captain observed, 'Demand for Polish seafarers is getting less. We have three Chinese trainee senior officers sailing with us and they are paid less. The captain's salary is $2,200. No doubt they'll take our positions in the future' (a Polish bosun on the same vessel said much the same thing: 'We are already training our replacements'). Fear grips some of the Filipinos too. 'Filipinos are better paid than Bangladeshis and Indians', a Filipino AB told us and he went on to say that although he had been married for five years he had only seen his wife for less than two. In the past he had

taken longer periods of leave but now he dare not. He felt he had to take less time on trips back home 'because of the competition'.

It has been seen that nationalities differ in the contribution they make to the positions that exist within the division of labour on board. Analysis of the data in our survey of seafarers suggests further that, in aggregate, it is the case that officers (we combine senior and junior here to avoid the small numbers that would otherwise result) are less likely to have manual social origins (33 per cent) than petty officers and ratings (55 per cent); and that they are more likely to have fathers who had professional or managerial jobs (15 per cent compared to 6 per cent). This pattern is far from uniform across our different nationality/regional categories. Among Filipino officers, only five per cent had fathers in professional or managerial jobs, 52 per cent came from manual origins (used in a broad sense here to include manual workers/drivers, craftsmen/mechanics and also farmers/fishermen). Among Indian Ocean officers (those from India, Bangladesh, Sri Lanka and Pakistan), 35 per cent came from professional and managerial origins and only 13 per cent came from manual origins. For the Eastern European countries (Croatia, Bulgaria, Poland, Romania, Russia and Ukraine) , 17 per cent were from professional and managerial origins; 31 per cent from manual origins. Among officers from the countries we grouped together as 'Asia' (China, Indonesia, Myanmar, Singapore and South Korea), no officers came from professional and managerial origins and 65 per cent had manual origins. And, with reference to another distinctive feature of social origin, more officers in our Rest of Europe countries (35 per cent) had fathers who were seafarers.

The figures upon which these percentages are based are sometimes small but they serve to underline that not only are car carriers places of work in which there is a mix of peoples, with the disproportionate representation of different nationalities in given positions, but that the work that people do may differ in its meaning, as refracted through social origin as well as rank and nationality. To pursue this line of investigation in detail would require a very much larger sample than we have at our disposal. It might also make for difficult reading. In what follows therefore we attempt to make more general comments as carefully as we can, with the focus mainly on rank and with special reference mainly centred on our largest country group, the Filipinos.

The meaning of being a seafarer

Looking at the responses of seafarers as a whole to a question about why they decided to go to sea, romantic ideas about the attraction of

Table 4.2 Why decide to be a seafarer

	Percentages
Get better pay (*N*=287)	46
Trained for it (*N*=131)	21
See other places (*N*=99)	16
Relatives seafarers (*N*=55)	9
Influenced by other seafarers (*N*=57)	9
Lack of other employment (*N*=49)	8
Adventure (*N*=46)	7
Lived near the sea (*N*=23)	4
Get a job quickly (*N*=18)	3
Parents/relatives chose (*N*=11)	2
Other (*N*=18)	3

Note: More than one response is possible.

the seafaring life do not figure prominently. Relatively few cite the chance to 'see the world'; even fewer a sense of adventure (Table 4.2). Over half (54 per cent) refer explicitly to the need to get better pay than was available to them or to the lack of other employment.

As we have seen, ratings come disproportionately from poor countries – 68 per cent of those in the sample come from the Philippines, only 3 per cent from the Rest of Europe. As a consequence, differences between the reasons given for going to sea among those from different regions are also inflected by differences of rank. Whereas responses from the Philippines are dominated by the need to earn good money or lack of employment opportunities (64 per cent) as are responses from Indian Ocean countries (61 per cent), this is much less the case with responses from other countries and, most particularly, the Rest of Europe (14 per cent). Moreover, whereas the romance of the sea idea has little support as a reason for going to sea for the general run of seafarers, it gets more support when situated in a broadly European context. Of responses from the Rest of Europe, 67 per cent cite the chance to see the world or a sense of adventure as reasons. Those from Eastern Europe come next (34 per cent), then those from Asia (26 per cent), the Philippines (19 per cent) and the Indian Ocean countries (11 per cent).

Figure 4.2 presents responses for the major occupational groups and for all respondents to a question about whether they think their job a good one for someone like them. On the face of it, the results are remarkably similar, and also remarkably positive, with senior officers somewhat more likely to take a positive view. However, the reasons

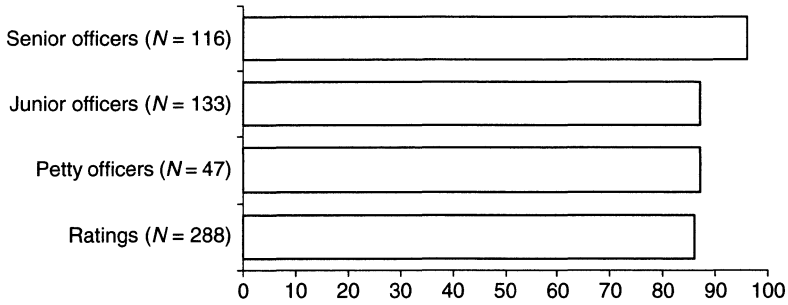


Figure 4.2 Whether the job is a good one (percentages saying 'yes').

given for such responses repay further inspection. These apparently generally positive responses mean different things to seafarers in different positions and from different parts of the world. senior officers for example tend to point to the satisfactory nature of their work-life balance, especially Europeans, most especially Swedes. They refer to:

> Good work and leave periods (Swedish officer)
> Good work and leave ratio (Swedish officer)
> Ten weeks on. Ten weeks off is OK (Swedish officer)
> It's a flexible job and I chose it myself. I also like the long off-duty period. The only disadvantage is that it can be hard to keep shore-based contacts (Swedish officer)
> I work six or seven months after which I have up to six months rest. I can go around with my family and take care of other business (Ukrainian officer who has a small food shop)

Senior officers are also likely to point to their respected position in the community, not least those from Indian Ocean countries:

> It's a reputable position (Indian officer)
> It gives money. It gives self-respect and position. You can apply your knowledge and education to the job (Indian officer)
> It's a well-respected position and you have to prove yourself to come this far. People have trust in me (Indian officer)
> I started from nowhere. If I were ashore I wouldn't come to this position. It's also financially much better (Indian officer).
> I have reached the highest position available at sea (Bangladeshi officer)

Filipino senior officers in particular are given to make comparisons to land-based occupations

> I earn good money in comparison to land jobs
> In our country we cannot earn what we earn here. There is a big difference.
> I am able to give a good life to my family.

There are other reasons that senior officers give – for example, promotion prospects and that it is a challenging job. Engineers are apt to point to the transferability of the skills that they have developed. But the overall weight of the reasons given by senior officers differs considerably from that of ratings.

For ratings, land-based comparisons, such as those made above by the Filipino senior officers but not usually by others, loom large. The fact that ratings consider their jobs good ones for people like them depends crucially on their lack of alternative sources of employment that would allow them to support their families.

Themes of a primarily economic, and comparative, nature – about the wages being better than anything available at home; about the financial contribution that can be made, with the money, to the family welfare and standard of living, and to the education of children – recur again and again in ratings' replies about why they consider they have a good job.

> My salary is better than in Myanmar.
> I earn a better salary than in Bangladesh.
> I am earning more money than many other people in the Philippines.
> Good money and paid in dollars.
> My family is not hungry and I have educated my children.
> I can help my sisters financially and give them a better future.
> I am earning money to support my family and the education of my children.
> I have four children and can educate them.
> But just for money only. If you work in India you wouldn't get this money but this job is very stressful.
> What I used to earn in a week in Pizza Hut, I earn it here in a day.
> I am able to help my parents, especially my wife, with God's help.
> Because of this job, I am able to help my parents, my siblings, and my family.

There are people in my neighbourhood they can't buy the things I could.
I can save money.

Consistent with the picture that emerged when we asked ratings why they considered they had a good job were the responses they gave when we asked them what they considered the best things about being a seafarer. 68 per cent of them cited financial/material factors of the kind reported already (Table 4.3). Overwhelmingly they mentioned 'money', sometimes explicitly in relation to what it meant to their family, or in comparison to what could be gained in their home country or sometimes with reference to the fact that payment was in US dollars. A few of them added comments such as 'There is nothing about the sea. Only money.'

Of the 23 per cent of ratings who said that the best thing about being a seafarer was their enjoyment of the job, two thirds referred to the chance to see other countries or the chance to see other countries 'for free' or simply to 'travel'. The rest referred to making friends. Some referred to 'adventure', one stating unequivocally, 'Life at sea is happiness'. But just two cited the *intrinsic* satisfaction of the job ('I like my work,' said one, and another referred to his work as 'challenging'). In sharp contrast to senior officers, only two per cent of ratings mentioned either career prospects or good leave periods or contract lengths. Such matters accounted for over a quarter of the reasons that senior officers advanced as the best things about their job.

Generally, the reasons given by ratings who say they have a 'good job' underline the economic logic outlined already. This is no cause for surprise. After all, the whole strategy of the world shipping industry is to

Table 4.3 The best thing about being a seafarer

	Senior officers (*N*=119)	**Junior officers (*N*=125)**	**Petty officers (*N*=48)**	**Ratings (*N*=269)**	**All (*N*=575)**
Financial/material considerations	52	65	71	68	64
Enjoyment of the job	14	19	19	23	20
Career prospects	10	5	0	1	4
Good leave periods/ contract lengths	15	3	0	1	4
Other	8	9	10	7	8

utilise labour from areas of the world in which it is disadvantaged and it is predicated on the idea that workers in such areas will be anxious to perform work that others will not because they lack other equivalent alternatives and, in short, will be driven by comparative economic advantages. The brute fact is that wages from alternative shore-side employment are often considerably lower in developing countries than are the wages that can be obtained at sea. On one estimate, in the case of Filipino AB's, monthly wages might exceed those available from industrial occupations as much as seven-fold (Lillie 2004: 50, Table 1). This estimate is necessarily imprecise but it leaves a lot of room for error.

The significance of the differences reported so far, which relate to the stratified and differentiated nature of the world of the seafarer, will become clearer in later chapters. But before leaving this more general introductory account there is another response from our seafarer survey that merits comment because it further underlines the essentially contingent nature of many ratings' apparently positive appreciation of the job. It concerns whether these car carrier workers would like their children to follow in their footsteps.

Do seafarers employed on car carriers want their children to do the same work that they do? In previous research, this question has been put to factory workers employed in the car, white goods and textile industries in Turkey and to other factory workers employed in the white goods industry in China, Taiwan, South Korea and Brazil. In the white goods research in South Korea 60 per cent responded that they did *not* want their children to do the job, in Brazil 75 per cent, in China and in Taiwan 94 per cent (Nichols and Cam 2005: 208). In Turkey, 72 per cent of all the workers questioned replied that they did not want their children to do the same work; in the textile industry, represented by two companies, an average of 88 per cent took this view; in the white goods industry, represented by three plants, 60 per cent did so; in car manufacturing industry (an interesting point of comparison for those employed in transporting cars by sea), in two car companies 60 and 86 per cent of workers did so (Nichols et al. 2002b: 82; Nichols and Sugur 2004: 197).

These results about workers *not* wanting their children to follow them into such jobs all stood in contrast to the apparently positive view that these workers had of their jobs, which they overwhelmingly regarded as good jobs for people like them.

This same pattern is found for seafarers. Whereas 88 per cent give a positive response to a question about whether the job is a good one for people like them (Table 4.4), nearly three quarters of them (73 per cent)

Table 4.4 Worker expectation and aspiration – workers in China, Taiwan, South Korea, Turkey and Brazil compared to seafarers

	Percentages agree/strongly agree					
	China	**Taiwan**	**S Korea**	**Turkey**	**Brazil**	**Seafarers**
Good job for someone like me	64	60	68	85	90	88
Not a job wanted for son/daughter	94	94	60	61	75	73

Source: Adapted from Nichols and Cam (2005: 208), Table 8.1.

Table 4.5 Would you like your son/daughter to do this job?

	Percentage saying No				
	Senior officers	**Junior officers**	**Petty officers**	**Ratings**	**All**
All seafarers (*N*=592)	51	66	90	83	73
Filipino seafarers only (*N*=293)	67	83	82	81	80

do not want their children to do it. Here as elsewhere in the world of the seafarer, however, rank makes a difference.

As can be seen in Table 4.5, nine out of ten of all petty officers do not want their children to follow them, nor do eight out of ten ratings. Less than seven out of ten junior officers take this view, however. And senior officers stand out from all other ranks: only five out of ten would not want their children to follow them. As the table indicates, senior officers also take a different and more positive view than those in all other ranks among Filipino nationals. To consider the other main national/regional groupings, in the Indian Ocean, Eastern Europe, Asia and the Rest of Europe, is to find that the picture is less clear cut but that, in all these cases, senior officers have a less negative view than ratings.

Among senior officers, a variety of reasons are advanced by those who say "'yes', they do want their children to follow them". In a few cases they simply say, 'It's the family tradition'; others refer to the challenging nature of the job and the chances of promotion and career prospects, including the possibility of using the training for a land-based job; several link these things to money ('good money and promotion opportunities'). Among the minority of ratings who favoured their children following

them, a few want them to do so because they could then 'understand my life better' or so they could help them. But most give reasons that once again relate to money and employment opportunity as compared to what is available in the Philippines, India, Myanmar or Bangladesh:

> Pay is better than land-based jobs in India (Indian fitter).
> It is easy to find this high paying job, compared to land-based jobs (Filipino motorman).
> Earn big money (Filipino O/S).
> It's difficult to find work in the Philippines (Filipino oiler).
> To have a job (Myanmarese wiper).
> You earn money (Bangladeshi O/S).

Here, then, is further confirmation of the importance of rank (and related national/regional) differences in the world of car carrier crews – evidence that there is an important sense in which everyone is not in the same boat.

5

Work and Working Conditions 1 – The Division of Labour, Contracts, Hours and Wages

This chapter begins with a description of the shipboard division of labour that will be readily recognised by seafarers, more or less irrespective of which country they come from or on which types of vessels they have sailed. Indeed, as we suggest below, for many of them it represents a 'normal', taken-for-granted order of things. Judged against land-based occupations, however, it looks very different and today there are several respects in which it probably looks more different, and less 'normal', than it did a quarter of a century ago. As we shall see, contracts, hours and wages are also subject to particular determinations and meanings which, although they may be taken for granted by seafarers, also differ from those commonly found in land-based occupations.

The division of labour

In the last quarter of a century, the land-based world of work has been subject to certain major trends. One of these has been lean production – a tightening of the production process and related reductions in crewing. As we have seen, the maritime car carrier industry is no exception and it has been directly affected by developments of this type that have taken place in the car manufacturing industry.

Another prominent trend has concerned 'flexibility'. In the social sciences and in management literature, flexibility has been contrasted to Taylorism or scientific management, which like its near neighbour, Fordism, is in essentials a system of organising work on the basis of a detailed division of labour and strict hierarchy. Discussion of so-called 'functional' flexibility has become inseparable from a number of other new managerial terms such as 'multi-tasking', 'multi-skilling' and 'polyvalence'. It relates to overcoming demarcation between jobs,

especially to reducing or eliminating established divisions between various skills and between skilled and other work. Usually thought of in terms of manual labour, it can also apply to white collar work and to management.

In land-based industry, work organisation has been increasingly represented as flexible rather than highly stratified and differentiated. The extent to which functional flexibility exists across all sectors is a matter for empirical verification and general statements need to be treated with caution but, even so, the hierarchical and differentiated division of labour that exists on board car carriers is difficult to recognise from this general picture. Writing in the 1950s, and viewing the social structure of ships (oil tankers) explicitly through the lens of industrial factories, Aubert made the point that the positions on board were unusually numerous relative to the total number of crew (Aubert 1982:276). Not only does this remain the case today, when the degree of stratification and differentiation appears yet more pronounced compared to many other work organisations but the lack of flexibility and degree of standardisation is such that seafarers can readily skip the following few pages: they will know, in some detail, what to expect.

The fundamental technical division of labour on board is between the deck, engine room and galley. The master, usually addressed as 'captain', is the owner's representative and in overall charge of the vessel. Each of the above three functions has its own hierarchy under his ultimate command. The captain will normally be a former deck officer. Apart from being in charge of navigation, he handles all communications between ship and shore (nowadays only rarely supported by a radio officer). He provides real-time reports to the company on the ship's operation and progress and monthly reports to the company on finance, maintenance, stores, accounts and other issues. He is always on the bridge to oversee critical operations, in particular berthing and sailing. He is responsible for the ship's safe, any cash payments and the ship's slop chest (any merchandise sold to the crew). He is also responsible for the galley, which is not headed by an officer, and for victualling. He keeps no regular watches, a task that falls to the chief, second and third officers.

The typical pyramid of positions for the deck is chief officer (often referred to as the 'mate'), second officer (or 'second mate') and third officer (or 'third mate'); then bosun, AB and OS (ordinary seafarer).

The chief officer keeps the 4 to 8 morning watch and the 4 to 8 evening watch. He is in charge of cargo plans and loading and discharge operations and also deck maintenance. He is the ship's security officer as defined by the IMO ISPS (International Ship and Port Facility) code. He keeps the record of working hours for deck crew and is usually in charge of the medical chest. The second officer keeps the 12 to 4 watch. He is in charge of navigation charts and chart correction. He is also in charge of port papers for immigration, customs and port health. The third officer keeps the 8 to 12 watch. He is in charge of safety equipment, lifeboats, fire extinguishers and so on.

The bosun is a petty officer who is in charge of ratings. When at sea he gets daily orders every morning from the chief officer. There are usually three ABs. They should work on the bridge as look-outs in adverse weather conditions and during the hours of darkness, on watch with one of the officers. This is in accordance with STCW (Convention on Standards of Training, Certification and Watchkeeping) Regulation 1995 (although as we shall see later, things are different in practice). During their time as look-outs, it is also the ABs' responsibility to check all cargo decks for loose lashings and any oil and petrol leaks from the cars. At sea they do maintenance work on deck – painting, chipping rust and old paint. The work of ratings is widely regarded as unskilled. As a Ukrainian chief engineer put it: 'For ratings it is impossible to develop their skills because they don't do skilled jobs. They either wash down or clean. But for Officers, you have to develop yourself'. Whereas the struggle against corrosion and the need for constant maintenance remains the same as it always has been (though better paints may mean better protection from the elements and less chipping and painting), the tools employed in this work have changed, with consequences for how ratings do their work. This is clearly evidenced by reflections on the seafarer's job past and present provided for a Wallenius Lines jubilee celebration in the mid-1980s (Box 5.1).

On most car carriers there is usually one OS. Sometimes he may be a cadet (a trainee officer). The OS does not work as a look-out as ABs do. They are day workers who work a regular eight-hour day plus overtime and they do only deck maintenance work. In doing this, like ABs, they work to a daily check list.

During manoeuvring the captain will be on the bridge, with a third mate, an AB (and possibly a cadet if one is on board) and a pilot. All the other officers and deck crew divide into two and handle ropes on the mooring decks aft and forward.

Filipino rating lashing cars (photograph WWL Archive)

Box 5.1 Reflections on the seafarer's job, past and present

The rust scraper and steel-wire brush were once two of the most widely used tools on board. Then as now, the fight against corrosion was unceasing. But compressed air has brought greater efficiency to this particularly enervating job. It has made it possible to deal with the huge areas encountered on modem ships in a minimum number of man-hours. Where in the past it was a major task with brush and paintpot to paint the hull of a 10000-tonne cargo ship, much larger areas are now quickly given an even coating with handy rollers, while just a couple of men can spray-coat hundreds of square metres with paint in a few hours.

The rickety wooden stages on which men worked in the past have now been replaced by much safer arrangements, affording better protection even at great heights. Safety-harnesses with strong clip-hooks provide extra security.

In most ships today there is unlimited fresh water, both hot and cold, from taps and showers. High-pressure water jets are used to clean paintwork on deck and in the engine-room. In the old days, "soogying" was a laborious job with swab and soda-bucket. Only saltwater was available for washing-down on deck, so that it was preferred to do this job in rainy weather, when nature provided a supply of fresh water.

The open bridge is now but a memory, like the unprotected helmsman. The autopilot saves man-power which can be better employed on maintenance work during watches at sea.
Source: Ohrelius 1984: 78–9.

In the engine room, the traditional hierarchy is chief engineer (officially the ship's second in command), second engineer and third engineer; then fitter, motorman, oiler or wiper. The chief engineer does not keep watch. He is in charge of the ship's engine room. He writes a monthly report directly to the company about scheduled and completed work, spare parts, and fuel and lubrication consumption. The second engineer serves on the same watch as the chief officer, the one on the bridge, the other in the engine room. He has a prime responsibility for the main engines as well as spare gear, stores and maintenance. He issues orders for the day's work. The third engineer keeps watch with the second officer. He is in charge of the ship's electrical plant (alternators). He also

assists with main engine maintenance. The fourth engineer keeps the same 8–12 watch with the third officer. He is usually responsible for fuelling and the daily monitoring of fuel supplies. The fitter is a petty officer, the counterpart of the bosun, and receives his orders from the second engineer. He also works occasionally on the deck to do welding, pipe-work and similar activities. He stands in a supervisory relation to the motorman and the oiler or wiper. There are usually three motormen, who work the same watch as one of the officers. They do engine maintenance and repair work. The oiler or wiper, of whom there is normally one or two, are day workers, like the OS. They do engine repair. During manoeuvring, the engineering officer on watch and the chief engineer and electrician will be in the engine control room. In addition, the electrical officer or electrician will serve the whole ship.

In the galley, the typical hierarchy is chief cook, second cook, mess man. The chief cook is in charge of the frozen and dry stores and fresh vegetables and fruit supplies. He prepares a monthly inventory and a weekly menu for the approval of the captain. He cooks for the officers. The second cook cooks for the ratings and assists the chief cook. The mess man or mess boy (of which there are normally two) serves the officers their meals, cleans their cabins, changes and washes their bed linen; he also cleans mess rooms and communal areas and washes up crockery and other things.

All crew have defined responsibilities in the case of emergencies, such as fire, piracy or searching for stowaways, and when the ship is in port there are further duties to be performed in addition to those outlined above. For the deck, these relate to cargo operations. The chief officer is in charge of cargo operations in port. He liaises with people on shore and holds a cargo operation meeting with the crew and port stevedores, who organise the drivers who will drive the cars on/off. After berthing he will lower the ramp and ratings will secure it and put any mats required underneath to prevent damage to the ramp. The second officer deals face to face with port officials – Port State Control, Immigration, and Customs. All the rest of the deck crew, including the ratings, are involved in loading/discharging operations and in monitoring the state of the cargo to check there is no damage to the cars. The ratings also keep security watch on the gangways and ramps as required by the ISPS code. If there are only a few cars to be loaded/discharged watches may change to a six-hour pattern, that is, six on, six off.

For the engine room, the port is the only place where the main engine is intentionally stopped and therefore allows the possibility of carrying out major repairs and maintenance. For those in the galley, work continues as usual.

Preparing the side-ramp for discharge, 2004 (photograph EK)

Many of those in the maritime industry regard the above distinctions as technically ordained and, indeed, part of the natural order of things. Many officers have no experience of other work and have progressed through the ranks step by step, which in effect means proceeding examination by examination, certificate by certificate. Starting as a cadet, it might take a decade to gain a master's certificate, longer to take up command. It remains the case today, as it was reported to be over a quarter of a century ago (and long before that), that for officers 'the hierarchical structure of each department is both a control device and a career ladder' (Perry 1974a: 566). Talk can still be heard of 'filling dead men's boots'. By contrast the job of AB tends to be a 'career' in itself – that is, not a career at all. A few ABs make petty officer but not many.

Some in the industry argue that the very rigidity of the task definitions that apply– which extend to duties being specified down to the level of AB1, AB2, AB3 – actually enhances flexibility because it means that any second mate, AB or captain can be taken on board any vessel and perform their duties in an efficient and predictable manner, an outcome that is predicated on the existence of an internationally recognised set of seafaring qualifications. The purpose of the STCW training regulations is to underwrite the validity of such qualifications and to ensure the reproduction of a certificated, standardised labour force. In principle, such a system allows employers to employ any seafarer with the requisite qualification to fill a specified position, for instance second mate. It does not ensure the flexible disposition of labour between different positions.

In fact, the allocation of duties is not quite as inflexible as is implied above. The position of fourth engineer may be dispensed with and nowadays often is. Similarly, it is now rare to have a fourth officer, though this would have been the case at one time. In addition, the emergence of the unmanned engine room has made for differences in the roles performed by engineers. If everything is proceeding smoothly, the machinery will be monitored by data loggers and the engineers will work on days with a designated duty engineer, who will have an alarm in his cabin to alert him to night-time emergencies. This does not alter the basic definition of roles in the engine room, however, only the time of day that duties are performed, and not all voyages proceed smoothly, nor are all ships in the same position. In particular, engine rooms are likely to be manned, even on the most modern vessel, in their first year of operation and older vessels, with apparently unmanned engine rooms, may require reversion to the traditional watch system as they age.

There has been no pronounced tendency to de-layering the management levels on board vessels but the objective that this is often thought to achieve – closing the distance between the top and bottom of the organisation – has been promoted with respect to the distance between shore management and ship's officers. Alderton et al. (2004: 22–3) claim the introduction of direct and immediate contact between ship and shore management has been one of the main consequences for ship's personnel of the introduction of satellite communications (the other being the abolition of the radio officer). Again, both developments have left the ship's hierarchy in place.

One small sign of the entrenched nature of status distinctions on board is that crew lists are always presented in the form that we followed above when describing various roles and duties. First, the master. then deck officers, by rank. Then engine room officers by rank. Then the bosun and deck ratings by rank. Then the engine room. Then the galley, by rank.

Shipping industry managers are apt to make much of ideas about the ship as a community. In practice, as we saw in Chapter 4, there are important differences of rank and nationality, the two tending to overlap. The markers of differences in rank are ubiquitous. Typically, officers wear uniforms, each with its own distinctive insignia. The captain has four gold braid rings; the chief engineer also has four; the chief officer and the second engineer, three; the electrician has two, as do the second officer and the third engineer. Ratings wear overalls.

Ratings call officers 'Sir': officers commonly address subordinates, not even by name, but by their rank – 'AB', 'Oiler', 'Cook' and so on. One Filipino seafarer has praised the treatment that he received as a TAP employee (Temporarily Employed Personnel) on a Swedish ship precisely because of what this offered in terms of respect and because it represented an escape from what he called 'the FoC mentality'. He notes that Filipinos are so accustomed to calling their officers by their rank – 'Yes Sir! Chief Mate, Second Mate, Third Mate' and so on – that he was himself surprised when upon greeting a Spanish second mate (untypically a woman), 'Good Morning, Second', she quickly replied that he should call her by her first name (Cruz 2001: 31). A report of a three month voyage on a Wallenius car carrier, which had Swedish senior officers, Myanmarese junior officers and Singaporean, Malaysian, Filipino and Myanmarese ratings, also notes how Asian crews came to appreciate the way that Swedish officers related to them (Du Rietz and Ljunggren 2001:188).

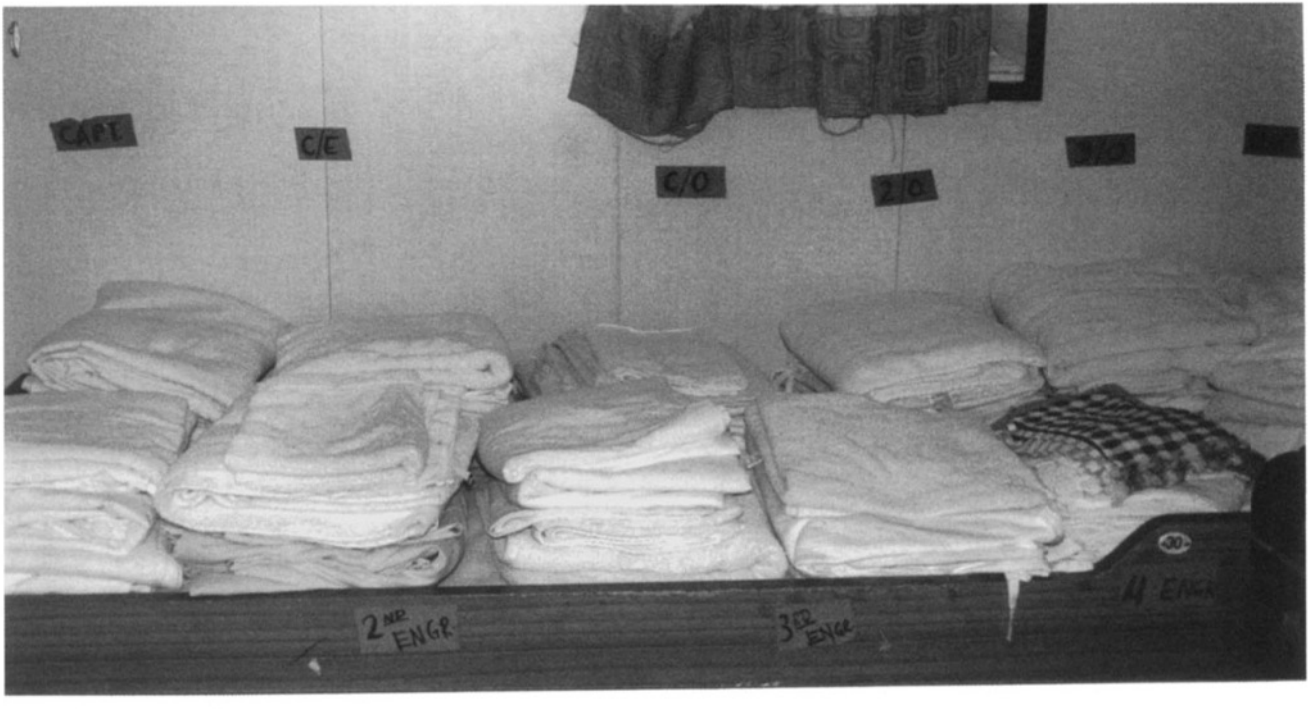
Officers have their own mess and recreation rooms, which generally have better facilities and are often larger, despite the fact that there are

fewer of them. As noted earlier, officers' food is prepared by the chief cook and served by a mess man. There are also different tables within the officers' mess. Senior officers sit at their own table. Junior officers sit at theirs. In some companies petty officers eat in the officers' mess but when they do so it is usually together with any cadets. Officers will usually have different and better crockery. On some ships bed linen is clearly labelled by rank prior to distribution to cabins. Officers generally have their living quarters in a different part of the ship, close to the bow-end. (The peculiar design of car carriers precludes the signification of rank by the vertical location of living accommodation, whereby ratings on many other vessels are clearly down below, officers up above). Officers have en suite cabins, with bedroom, living and working quarters. When there is a bar it is commonly in the officers' recreation room, which means that access is denied to ratings.

Ratings' food is prepared by the second cook. They serve themselves. In the ratings' mess room, tables are divided into deck and engine room. Ratings have much smaller cabins, sometimes sharing bathroom facilities. Such arrangements are far removed from the ideal of the single status car factory, with its common eating facilities and even sometimes standard forms of dress. Although the reality may be that the latter are not as widespread as often assumed, most car factories in Europe, North America and Japan now lack these many markings of hierarchy. So does much other land-based work.

Historically, the advent of the age of steam and with it the coming on board of engineers (often from lower social class origins than deck officers) had ruptured the then existing status order of the ship and still today a further division exists between engine room ('oil') and deck ('water') which, as the proverb has it, 'don't mix'. This often entails some banter. 'Do you know what the engine crew think the ship is for?' asks a deck officer. 'It's to take the engine from one port to another.' This is underpinned both by a difference of function and by physical separation. There are two breaks a day, often of 15 minutes each, during which time it is difficult for those in the engine room, who work below deck five at the bottom of the vessel, to make their way to the mess facilities on the top deck. Some Japanese vessels still lack lifts, which accentuates this difficulty. Even so, the main line of polarity is between officers and ratings.

Natural as all this may seem to many of those involved, there have been attempts to organise ship life differently. In the Chinese fleet under the planned economy, all crew shared the same kind of food, accommodation, recreation and other on-board facilities and, relatively



Bed linen lined up by rank, 2004, (photograph EK)

speaking, wage levels, although markers of status and wage differentials are now becoming evident (Zhao 2002). Then again, before the advent of the PCTC, in 1969, the Norwegian Hoegh Line had experimented with having only one dining room and a bar for all crew. It had also reduced the bosun's role in an attempt to give ratings greater independence and responsibility for their work, and stressed the importance of upgrading skill, attempting to break down the division between engine room and deck to increase variety in the ratings' work patterns. All of this is instantly recognisable from developments that have been fashionable in land-based industry and pre-dates moves in this direction in many land-based sectors, although the precise situation that pertained and how successful it was is open to some dispute (compare the various contributions in Schrank, 1983, and Thorsrud who emphasised flexibility, fluid boundaries and the emergence of 'an alternative logic' (1977: 223–4)).

What is not in doubt is the direction in which the Norwegian researchers, who included shipping as part of a wider programme to develop a version of industrial democracy, were trying to move. Testimony to this is a meeting that Thorsrud (1981: 322) describes having taken place to evaluate changes in work systems and ship culture. It was concerned, among other things, with changes 'from detailed to general ship-shore reports'; 'from office controlled to ship controlled maintenance plans'; 'from officer controlled to partly joint crew controlled work planning'; 'from supervisory to group control of work quality'; 'from mono-role and closed careers at sea to multi-role and new sea-land careers'; 'from segmented living territories to partly joint territories on board'; 'from hierarchical information systems to non-hierarchical'; 'from high level of turnover to majority of crew as "permanent"'; 'from segmented departments to integrated departments'. Such concerns appeared to have diminished with the rise of flagging out.

Something else that is not in doubt is that the small workforce that constitutes the crew on the modern car carrier – usually only between 16 and 20 people – continues to be ridden with hierarchy and status distinction and, in a variety of respects, social isolation. That there is social isolation in the actual performance of work can be seen from the officer stuck in front of his VDU screen, the rating working without another human being in sight on a deck that might measure 200 metres by 30 metres and by the electrician who usually works alone. Increasingly seafarers find themselves isolated from the ship's other functions as their top deck accommodation rises yet higher, often nowadays surrounded by cargo. Studies of car assembly line workers have sometimes referred

to the difficulties workers face in communicating with each other. But this in no way compares to the degree of social isolation from each others that can be experienced by seafarers on car carriers.

Interestingly, it is now over two decades since the Norwegian social scientists commented in their study of shipping that 'modern technology had reduced the size of the crew' and that this 'meant that some subgroups had become too small to function socially' (Thorsrud 1981: 219). Suffice it to say that on the modern car carrier social functioning remains severely restricted by the social distinctions of rank, cross-cut by differences in function, and by the watch system and of course by nationality.

When the hierarchical relations between officers and ratings are cross-cut by differences of nationality, perverse informal relations can result. Thus, on a voyage where there were British senior officers and Filipino junior officers and Filipino ratings, the Filipino junior officers were more likely to share eating and mess facilities with the Filipino ratings than with the British senior officers. Such cross-cutting, whatever the motivation behind it, serves to reinforce the separation between nationalities. Rank is the major determinant of on-board life but within Ranks there can also be separation. On another voyage, for example, Filipino ratings, knowing that Ghanaian ratings were to join the ship at the next port, took cutlery, plates and glasses out of the mess room, put their initials on them with gloss paint and took them into their cabins. Once the Ghanaians were aboard, they also discontinued their former habit of leaving their shoes outside their cabins. However, this was a highly visible manifestation of people socially distancing themselves, in this case on the basis of colour. The general pattern is for people to get on with the job, whoever they are working with, and to keep to their own kind, usually defined in terms of rank and nationality, in their social life, which is rarely richly textured.

Meals are often taken hurriedly; officers quite frequently eat in their own cabins. Ships are often dry, without bars and the social focus they can provide and although it is against the rules, solitary drinking may take place in cabins. DVDs are often watched in silence. Many hours can be spent watching TV channels in languages that only some, and sometimes none, of those present understand, the language depending on what signals can be received at particular locations. Time can drag when working and it can drag when not working too. Boredom and social isolation pervade much of the non-working day (another, yet more pronounced form of social isolation – isolation from family and friends at home - is considered in Chapter 7).

Differences in authority and material benefits also pertain in land-based work – without the presence of such pronounced status markers, including in potentially highly dangerous workplaces (nuclear power stations, for instance). To say these maritime status differences are 'traditional' may be correct but it is necessary to explain why they continue to be reproduced. Some of the reasons offered for this by those in the shipping industry lack credibility. For instance, the Barber International Ship Management Company's booklet welcoming seafarers aboard when they join a ship not only advises officers that 'wearing of clean and proper uniform helps in creating a good impression about the Personnel and the Company' (which may well be the case) but comments further, 'It also enables shore personnel to identify the appropriate person for conducting their business on board (Pilots, Agents, Stevedores, Charterers, etc)' (Barber International 1999: 8). On this basis, Agents, Stevedores, Charterers etc ought to wear uniforms too. Better arguments would seem to be, first, the general case that Aubert (1982: 285) advanced about the captain – that 'were he to let them [the crew] come close to himself, [this] would give the crew a strong expectation that he would look out for their interests, that he would be their spokesman'; and, second, that, in some respects, the comparison between life at sea and on land is misspecified. Eating, sleeping and a whole variety of social arrangements on land can generally, if not always, be conducted differently by superordinates and subordinates – it just so happens that, on ship, as in other workplaces that approximate to total institutions, they cannot get away from each other. Whether any of this means that such a high degree of social differentiation is necessary to run a ship is however a moot point.

Contracts, hours and wages

Car carrier crews are divided by function (engine room, deck, galley); by rank (captain downwards through the hierarchy); spatially (by the separation of engine room and deck personnel and by the distribution of work activities throughout the ship); and temporally, through the operation of watches. They are also differentiated by contract – by whether the contract is permanent or temporary; by agreements that specify the contract; and among other things by its duration.

Of the car carrier crews that we surveyed, 96 per cent of seafarers are on fixed term contracts; only a minority (usually senior officers) have permanent jobs. If we use the UK as a land-based comparator, the difference with car manufacturing workers could not be starker. In the

1998 WERS survey, 99 per cent of car workers were permanent, so too 97 per cent of those in manufacturing as a whole. (We use WERS here because at various places we cite attitudinal data from this same source. These data are however in line with other UK data, for example the Labour Force Survey.) Whereas a different picture would have resulted had we compared the situation of those on car carriers to those in some parts of the UK service sector, this degree of what on land would be termed 'temporary work' is still striking.

Another feature of the employment relation on car carriers is no less distinctive. For not only are the majority of these seafarers employed on fixed contracts, the employment of most Filipinos is regulated by different standard terms and conditions, which are set down in the POEA contract.

Filipinos hired through POEA are overseas contract workers and their contract specifies, among other things, that their employer is required to make allotment, payable once per month, to a designated allottee through a Philippines bank (POEA 2003 section 8a); that they must perform no more than 48 hours of regular work per week' (section 10a); that they must have reasonable rest periods in accordance with international standards (section 10c); and that 'the seafarer agrees to be transferred at any port to any vessel owned or operated, manned or managed by the same employer' (section 15). (This last clause is less constraining on the employer than the ITF Uniform 'TCC' [Total Crew Cost] Collective Agreement for Crews on Flag of Convenience Ships, which we will come to shortly. This stipulates that the seafarer may terminate employment if they were employed for a specific voyage on a specified ship and if the voyage is subsequently altered substantially, either with regard to duration or trading pattern and that, in any case, the second vessel must be engaged on the same or similar voyage pattern (ITF, 2005, sections 18.3 d and 18.5). Another difference when compared to the ITF contract, again to the disadvantage of the Filipinos, is that their contract permits a duration of 12 months, with further extension with the mutual consent of both parties. By contrast, the ITF Agreement states that a seafarer 'shall be engaged for nine months', which may be extended or reduced by one month for operational convenience.)

Few Filipinos in our sample had contracts as long as 12 months. Generally, though, they had longer contracts than the average for all seafarers, which was itself stratified by rank. Of those on fixed contracts, nearly eight out of ten ratings and petty officers were on contracts of nine months or a little longer whereas similar proportions of junior

officers were contracted for between seven to nine months and senior officers for six or seven months. In this respect (and because it is onerous to stay on board for longer periods) the industry inverts the usual land-based relationship whereby higher rank personnel have longer contracts.

A different situation again pertains in the case of one small group of Filipinos. These were employed as so called TAP employees by one of the Scandinavian lines. Under an agreement between the Swedish Ship Owner Employers' Association (SEA) and the Swedish Union for Service and Communication (SEKO) TAP employees have six-month contracts. They are automatically members of SEKO and they also enjoy other advantages, including a company bonus at the end of their contract and seniority-based wages. Comparatively good as these conditions are, for Filipinos, they do not compare well to those enjoyed by Swedes. Among other things, Swedish seafarers are permanent. They work eight weeks on and eight weeks off; and their monthly salary is the same whether they are at sea or on leave.

Recent years have seen increased interest by social scientists and the media in hours of work. It has become common to talk of a 'culture of long hours' and of 'presenteeism' (the practice whereby employees spend long hours at work because they think it is expected of them or because they think it shows commitment and presages well for promotion – or just because they fear losing their job). Hours of work have been a particular cause of concern in the US, where longer hours are worked than in Europe (or in the UK, where hours tend to be longer than in the rest of the EU). Some measure of the extent of differences in hours worked between countries is provided by recent research which indicates that in 2003 average hours in France were 39.6 per week, in Italy 38.3, in the UK 39.6, in Japan 42.2 and in the US 42.6 (Cowling 2005:2) There are of course differences between industries and with respect to the position held in them. But it has to be said that compared with the hours worked by the seafarers on these car carriers the hours actually worked in (land-based) jobs in the above countries are footling. Comparison with the 1998 WERS survey is helpful at this point. This found 100 per cent of British car factory workers and 77 per cent of those in manufacturing worked 48 hours a week or less, including overtime. On the car carriers over 99 per cent work longer than this. Among the seafarers we surveyed:

- Over a quarter work between 70 and 79 hours a week
- Over four out of ten work 80 and 89 hours a week
- Over one in seven work 90 hours a week.

The legal situation on the regulation of hours is itself by no means straightforward. All vessels are bound by STCW 95, introduced in 1995, which requires a minimum of 10 hours rest in any 24 hour period when on watch – allowing 14 hours duty or 18 hours duty for a maximum of 2 consecutive days as long as no less than 70 hours of rest are provided in a 7 day period. This therefore permits 420 hours of work per month or 98 hours per week. In addition to this mandatory IMO regulation, however, vessels of countries which have ratified ILO 180, introduced in 1996, and vessels that are registered in the EU are subject to a rule that permits either (a) a maximum of 14 working hours in any 24 hour period and 72 hours in any 7 day period or (b) a minimum of 10 hours rest in any 24 hour period and 77 in any 7 day period, which works out at a maximum of 390 hours of work a month or about 91 a week. However, only 17 countries have ratified ILO 180 (15 of them European flag states) and both this and the EU Directive allow exceptions.

It is very common in the shipping industry for employers to discuss hours of work exclusively in relation to fatigue (which we come to in Chapter 7) and then, in turn, to formulate the discussion of fatigue in such a way that it relates exclusively to 'accidents'. If accidents are seen not to rise over time or if a direct connection cannot be made between fatigue and accidents it is therefore implied that hours are not a problem. This deflects attention from the fact that, in any other industry, hours such as those worked by many seafarers, and as we have seen, certainly by many of those on car carriers, would not be tolerated. This is not because they should not be tolerated lest they lead to accidents: it is because they simply should not be tolerated. The fact is that the hours many seafarers work are extraordinary by land-based standards and should be recognised as such. Overall, those on car carriers worked an average of over 77 hours per week. Senior officers averaged 78.6 hours; junior officers 76.8; petty officers 80.4; and ratings 77.2. In each case, these hours exceeded the 72 hours in any seven-day period laid down in ILO Convention 180. Sixty six per cent of our sample worked in excess of 72 hours per week.

Highly pertinent to the major differences that exist between the commonly known data for land-based hours of work and the situation of car carrier crews is that nearly two thirds of car carrier seafarers regarded overtime as part of their job. This is compared to 15 per cent of those in the British car manufacturing factories surveyed by WERS 98 and 17 per cent of all those British manufacturing. In fact, car carriers run on overtime. The ITF 'TCC' Agreement specifies that 'at least 103 (one hundred and three) hours guaranteed overtime shall be paid

monthly to each seafarer' (ITF 2005 section 6.1). Things are better for TAP employees. Their guaranteed overtime is specified at 90 hours per week (ordinary hours for TAP are specified as 40 per week, compared to 48 in the ITF and POEA agreements). TAP employees also have a 12 hour maximum day.

It might be objected that comparative data about the average hours worked on car carriers are misleading – for example, it might be considered misleading to say that whereas 90 per cent of the car carrier crews work more than 60 hours per week only about five per cent of the EU-15 (land-based) working population do (Cowling 2005: 17, Figure 1) unless this was considered on a like-for-like annual basis. There is some small justification in this. Not all these seafarers are continuously at sea for 12 months. But some are. In other cases, as the earlier information presented on length of contract makes clear, they are at sea for considerable periods – and therefore working these long hours for considerable periods. In doing so, both officers and ratings may be trading work today for leisure tomorrow but in the case of ratings in particular, the extensive work performed at sea is a high price to pay for the limited period of leisure in the part of the year not taken up by their contract. The majority of their year is spent working very long hours.

In considering seafarers' pay it is useful to distinguish those on ITF-recognised contracts and others, the former being of particular significance for those on FoC vessels. The pay of those on ITF-recognised contracts has several components.

- First, there is the basic wage paid on the assumption of a 48 hour week. The pay of those seafarers who are not covered by ITF contracts also assumes a standard 48 hour week, as prescribed by ILO regulations which most countries have ratified (though this is lower for TAP employees, as noted previously).
- Second, there is fixed (that is, compulsory overtime) at 103 hours per calendar month.
- Third, there is further, 'excess' overtime. This is paid at an hourly rate.
- Fourth, there is leave pay. This is equivalent to seven days of basic wage per month (again TAP employees do better; their leave pay is equivalent to eight days per month).
- Fifth, there is leave subsistence to contribute to their living costs after their contract has been completed. This is paid monthly during their time at sea at an amount agreed with the ITF.

The ITF minimum benchmark contract is based on rank – not on nationality – though national unions may negotiate rates above this. Some owners have pay schemes that are also based on nationality. As a consequence of this, and also because national ITF affiliate unions may be able to negotiate above the minimum, it is possible to find seafarers who occupy the same rank on the same vessel who are paid at different rates, for instance a Filipino AB and a Chinese AB or counterparts such as an Indian chief officer and a Filipino second engineer. On one ship we found a 40 per cent difference in the pay of Filipino and Ghanaian ABs and third officers, with further differences to the advantage of the Filipinos in the lower number of hours worked.

Those not covered by ITF contracts also get leave pay but this is more likely to be for less than seven days per month. They do not get leave subsistence. There are various bonuses and allowances that may be paid on both ITF and non-ITF ships – 'owners' allowance' for example for cleaning the cargo hold or in the case of officers, a uniform allowance – but these are minor additions.

The ITF contract 'TCC' Agreement is called a 'Total Crew Cost' agreement because it was originally based on British national agreements and permitted deals of the type that a ship could employ, for example, 20 British seafarers, or 40 Indians at half the cost. The agreement endorses ILO and IMO regulations and conventions and provides additional conditions that employers must meet. It covers a wide range of conditions in addition to hours, basic pay, overtime and the other matters referred to above. It specifies that seafarers must not engage in cargo handling except with the prior agreement of the ITF dockers' union and unless adequately compensated; it specifies length of contract; it lays down minimum rest periods and the need to recognise national holidays; it specifies minimum crewing levels according to size of vessel; it sets out notice periods for termination of employment, the obligations of ship owners for the repatriation of crews, procedures for misconduct and requirements for sick pay and medical attention; it provides a schedule of compensation payments by severity and by rank; it specifies standards for food, accommodation, bedding and other amenities; it specifies required personal protective equipment and so on. (In 2004 the ITF introduced another type of agreement, the International Bargaining Forum (IBF). This is discussed in Chapter 8).

Pay levels for various ranks can be seen from the ITF 'TCC' for January 2005 (Table 5.1). It can be see that a Captain/Master will be paid over three times the amount of an AB and that excess overtime ('overtime rate')

Table 5.1 ITF uniform 'TCC' collective agreement for crews on flag of convenience ships 1 January 2005, $US

		Basic	Over time	Over time Rate	Leave	Leave Sub	Total
1	**Master**	**2,172**	1,613	15.66	507	126	**4,418**
2	**Chief engineer**	**1,974**	1,466	14.24	461	126	**4,027**
3	**Chief officer**	**1,402**	1,041	10.11	327	126	**2,897**
5	**1st engineer**	**1,402**	1,041	10.11	327	126	**2,897**
5	**2nd officer**	**1,123**	834	8.10	262	126	**2,345**
6	**2nd eng**	**1,123**	834	8.10	262	126	**2,345**
7	**RO**	**1,123**	834	8.10	262	126	**2,345**
8	**Elect eng**	**1,123**	834	8.10	262	126	**2,345**
9	**Chief steward**	**1,123**	834	8.10	262	126	**2,345**
10	**3rd officer**	**1,082**	804	7.80	252	126	**2,264**
11	**Electrician**	**966**	718	6.97	225	126	**2,035**
12	**Bosun**	**720**	535	5.19	168	126	**1,549**
13	**Carpenter**	**720**	535	5.19	168	126	**1,549**
14	**Fitter/ Repairer**	**720**	535	5.19	168	126	**1,549**
15	**Chief cook**	**720**	535	5.19	168	126	**1,549**
16	**Donkeyman**	**720**	535	5.19	168	126	**1,549**
17	**Pumpman**	**720**	535	5.19	168	126	**1,549**
18	**AB**	**645**	479	4.65	150	126	**1,400**
19	**Fireman/Motorman**	**645**	479	4.65	150	126	**1,400**
20	**Oiler/Greaser**	**645**	479	4.65	150	126	**1,400**
21	**Steward**	**645**	479	4.65	150	126	**1,400**
22	**2nd cook**	**549**	408	3.96	128	126	**1,211**
23	**Mess room steward**	**549**	408	3.96	128	126	**1,211**
24	**OS**	**480**	357	3.46	112	126	**1,075**
25	**Wiper**	**480**	357	3.46	112	126	**1,075**
26	**Deck boy**	**386**	287	2.78	90	126	**889**
27	**Catering boy**	**386**	287	2.78	90	126	**889**

Note: The guaranteed total overtime per month is 103 hours at the specified rate in column 4.
Source: ITF (2005 Annex 2).

is paid for a Master at $15.66 per hour compared to $4.65 for an AB; and that a chief officer or first engineer will receive over twice the amount of pay and excess overtime at $10.11 per hour compared to an AB's $4.65.

In reporting the pay of seafarers in our sample we will simplify matters by focusing on captains and ABs only. In addition, we will focus on basic pay. This is because total salary may contain various elements which can differ from one case to another, for example, uniform allowance, excess overtime and other forms of additional pay. As we shall see, though, even basic pay is not always as straightforward as it may at first appear. It is also sometimes subject to unscrupulous employers' scams and fiddles.

Captains in our sample received an average total monthly salary of $4,238 and an average basic pay of $2,303. The ITF rate for basic pay in 2004, which corresponds to the year in which data was collected, was $2,172. If we were to take the ITF rate as a benchmark this would suggest that they are paid above the minimum. But 17 out of 19 captains actually received less than this. This apparent contradiction is a function of the fact that Western European officers are paid considerably more than others. The Western Europeans among the Captains were paid a basic wage of between $5,100 and $6,500; no Filipino or Bangladeshi captain was paid more than $2,000.

Of 94 ABs, 91 provided information on their total salary. On average, ABs supposedly received a total monthly salary of $1,185. The ITF basic pay for ABs in 2004 was $645. Information on their basic pay was provided by 58 ABs (who tend to be better informed about their total than basic salary). Their average basic wage was $557 – about 15 per cent below the ITF rate. Only three ABs were paid $645. The rest were all paid less. Half were paid less than $560. In one case an AB was paid a basic wage of $400.

This is not the end of the story. The problem with wages goes beyond the fact that people are not paid the ITF basic rate, hence our use of the term 'supposedly' above when describing the pay that is received. In the three cases where ABs were paid the basic wage at $645 – all three were Filipinos on a vessel with an ITF contract – several factors contributed to this being a considerable exaggeration of what these seafarers actually got.

- The first time their salary was paid it had $375 deducted and recorded as a 'cash advance' – which they did not in fact receive
- Further sums of $75 were cut in the following months of their contract.
- Their leave pay, which should be calculated on seven days of their basic wage, was in fact paid on the basis of only four days.
- Their leave subsistence, which according to the ITF contract should have been paid at a rate of $126 per month for every month, was in fact paid for one month only.

The on-board paperwork showed none of this short-changing. The cuts in these Filipinos' pay were made by the crewing agency in Manila, which in this case was run by the company. The company simply paid less money into the seafarers' bank accounts – a procedure that was in fact a condition of the seafarer being employed in the first

place. A 'double contract system' meant that the seafarer agreed to one contract (the real one) and signed another, in which everything appeared above board. Such conditions of employment were accepted because, as we saw in the last chapter, Filipinos are desperate for such work. Resistance to such conditions at a later point is effectively blocked. The agency holds all the cards and the seafarers are in a vulnerable position:

> We trade between Spain, Italy and Slovenia. Spain is our home port and we load 2,800 units. We do all the lashing and unlashing – sometimes we work as long as 28 hours with just meal breaks. We don't get any additional money for lashing. I accept this. I've no choice. Our crew agent in Manila will not give us a ship [if I complain]. The crewing agent takes our passports, seamen's books and training certificates. Without handing these in you cannot take your leave pay. They take them so that you cannot be transferred to another company without their knowledge. Despite these conditions many seafarers want to work for them. (One of the Filipino ABs referred to above who supposedly received $645 basic pay.)

> My leave pay should be $127 a month but I receive $82. They pay it only for four days instead of seven. My leave subsistence is also $127 and I should receive it every month but I receive it just for one month. If you complain about this they would give you your money but you won't be able to get any more work. I accept this because of our future. The crewing agency also takes $75 a month. So I get $245 less a month. (Another of the Filipino ABs who was also supposedly received $625 basic pay.)

Other forms of short-changing also exist (for example in cargo handling, discussed below).

The above examples are, to the best of our knowledge, largely confined to the Filipino and Bulgarian nationals in our sample (the latter's wages are commonly cut by 20 per cent) and are a speciality of one particular crewing agency. However, five out of the nine major shipping companies (there are also several smaller ones) whose crews we surveyed substantially or partially employed labour on their vessels under these conditions, either as direct owners or through chartering agreements.

The ITF 'TCC' Agreement for crews on FoC ships is explicit that crew should not be required or induced to carry out cargo handling, including lashing and unlashing, without the prior agreement of the ITF Dockers'

Union or other unions concerned and unless they volunteer to carry out such duties and are adequately compensated (ITF 1 Jan 2005, section 3.1). It also specifies that such work should be compensated at overtime rate (section 3.3). Yet increasing numbers of seafarers are seduced or pressured into handling cargo (Kahveci 2005).

The traditional mutual support and solidarity enjoyed between dock workers and seafarers is being challenged by cargo handling on board ships. This practice creates issues for both parties, to do with employment rights, welfare and health and safety at work. Although there are no concrete international regulations relating to port work and cargo handling, the traditional understanding is that cargo handling is done by dock workers. This tradition is also supported by some national laws and regulations. At an international level, there are two International Labour Organisation conventions: ILO 152 Occupational Safety and Health (Dock Work) Convention 1979; and ILO 137 Dock Work Convention 1973. Article 3.2 of the ILO 137 Convention states that registered dock workers shall have priority of engagement for dock work. However, implementation of these conventions depends on ratification by nation states and, so far, ILO 152 and ILO 137 have been ratified by only 22 and 25 countries respectively.

One AB reported:

> We have a very short trip and do all the lashing and unlashing. ... It was very hard in the first few months, but I've got used to it. Last month I got $400 from cargo work. Lashing takes six to eight hours because the vessel only carries 400 units. Lashing is not included in normal working hours. We still do maintenance work and keep watches.

As this account suggests, seafarers generally receive an additional payment for cargo-handling. The going rate in the industry is $1 per car for lashing and $0.50 for unlashing and, after various cuts, an AB could earn as much as $500 a month. This income is generally termed in the portage bill as an additional earning. As the crew are paid separately for the cargo handling, the hours they work for cargo handling are not included in their working hours. In a sense they are subcontracted to handle the cargo.

Despite long working hours and adverse consequences, the system provides some extra cash for the crew and there are seafarers happy to do this sort of work. It is also more profitable for the shipowner/operator. So there will always be pressure on the crew to perform this sort of task. At

the same time, on some ships there is a very clear incentive for the officers to keep this cargo handling system. They reward themselves disproportionately out of the monies that the company pays for lashing and unlashing. The captain gets 10 per cent of this. The chief officer, second officer and third officer get another 5 per cent each. A further cut is made for the ship's entertainment budget to purchase items (DVDs and the like) for common use. Only then do the bosun and ratings get their (equal) share. On some vessels, mainly owned by small companies operating around the Adriatic and the Aegean Sea, ratings are excluded from the share-out altogether.

This system of getting ratings to lash and unlash vehicles speeds up port operation. For example, seafarers can start unlashing cargo before approaching the port. A senior manager of a shipping company stated that in his company seafarers handled the cargo, but the additional amount paid to seafarers was comparable to that paid to dock workers. He emphasised that the advantage of seafarers handling the cargo was that it speeded up port operations and seafarers were available to handle the cargo whenever needed.

Not all companies operate in this way. It is more common in short-sea trades and the work involved can be extensive. This is clearly evident from a record of the frequent port calls and related lashing activity of a short-sea trade car carrier on which observation was carried out (Table 4.2). The crew on this European merry-go-round lashed and unlashed 45,003 units, a matter of a minimum of 180,012 separate operations (with at least four operations per vehicle) on the 46 port calls that they made in a period of 96 days. But it is a matter of importance in its own right that whether the crew lashed or unlashed depended on which port they were in. In France (Le Havre) the crew did no lashing or unlashing. In Germany the crew did all the lashing and unlashing at Bremerhaven but stevedores lashed in Emden. In Holland (Flushing) the crew did all the lashing and unlashing. In Spain (Vigo) the crew did nearly all the lashing. In Portugal (Setabul) the crew and stevedores lashed and the crew did all the unlashing. In Belgium (Zeebrugge) the crew did lashing and unlashing and stevedores some lashing. In Ireland (Dublin and Cork) the crew did all lashing and unlashing. In the UK the crew did all the lashing and unlashing at Hartlepool, Sheerness, Southampton, Teesport and Portbury.

Some ports do not permit cargo handling by seafarers (notably, in Europe, ports in France where the dockers are strong), but, as the above suggests, it is very common all over Europe. It is a feature of the deregulation process that has been under way worldwide that port

authorities may decide to use non-union or casual labour. Faced with increased competition, new port developments and private port terminals in particular are tempted to lower their labour conditions to make their ports more attractive for the shipping lines. Some ports bring in agency workers (as was the case at Newcastle in Table 5.2), and in many cases these are much cheaper than dock workers or seafarers. The mainly 17- and 18-year-olds employed at Newcastle were on the minimum wage.

Some seafarers fear this additional work will be detrimental to their long-term health. As an AB reflected: 'I get about $500 a month extra [for cargo work] but it is back-breaking work. I'm sure all this money will go to doctors in the long run'.

Other risks now result from the increased desire of owners to carry H&H. H&H vehicles which operate on caterpillar tracks can easily damage the floors of cargo decks. To prevent this, ratings are asked to put down mats and old mooring ropes. The hectic insertion and removal of these from under what are often massive moving vehicles, with as many as six drivers all working at the same time and under conditions of restricted vision, is another source of danger, and one for which no additional payment is made.

Another twist to the pattern whereby seafarers are not paid for work they have done occurs on charter ships. The cargo operator, to whom the ship is chartered, pays money to the shipowner or crew management company to pay crew for additional work that arises from shifting vehicles in port. Such work arises from the need to shift vehicles out of the way when they have been parked on ramps or otherwise placed where they block access, this being a consequence of the pressure to fill the ship to the maximum extent. In several different such cases, the owner failed to pay the crew for this work.

The literature of industrial sociology has a fair number of accounts of 'fiddles'. Nearly always these refer to the tricks played by those in subordinate positions to make more money or to ease their work load. It is no coincidence that the departures from the formally declared way of doing things that we have described above all stem from those in superordinate positions. Seafarers generally are in a weak position, and this is no less so of those on car carriers. Moreover, there are several respects in which their position has remained remarkably unchanged compared to land-based work in the economies in which the major companies are located. Relevant here is that over three decades ago it was not only being said that changes in the on-board status system were necessary because of the lack of a viable social life for seafarers but that another

Table 5.2 Port calls and lashing on a short-sea car carrier

Date	Port	Crew		Stevedores	
		Lashed	Unlashed	Lashed	Unlashed
18.03.03	Bremerhaven	0	1,334	0	0
19.03.03	Zeebrugge	0	678	0	0
20.03.03	Flushing	1,958	0	0	0
22.03.03	Hartlepool	0	1,958	0	0
25.03/03	Vigo	1,720	0	452	0
28.03.03	Sheerness	2	1,178	0	0
30.03.03	Bremerhaven	0	996	0	0
07.04.03	Vigo	1,829	0	380	0
11.04.03	Zeebrugge	0	658	200	0
12.04.03	Sheerness	195	752	0	0
14.04.03	Bremerhaven	0	1,199	0	0
16.04.03	Zeebrugge	0	0	582	0
19.04.03	Setubal	3	579	1,031	0
21.04.03	Vigo	960	4	0	0
24.04.03	Zeebrugge	0	822	49	0
25.04.03	Southampton	263	462	0	0
26.04.03	Sheerness	345	266	0	0
28.04.03	Bremerhaven	0	1,101	0	0
02.05.03	Vigo	2,136	0	0	0
06.05.03	Sheerness	175	504	0	0
08.05.03	Bremerhaven	0	1,815	0	0
10.05.03	Flushing	680	0	0	0
12.05.03	Hartlepool	0	680	0	0
16.05.03	Vigo	2,492	0	0	0
19.05.03	Zeebrugge	86	768	0	0
20.05.03	Sheerness	2	336	0	0
21.05.03	Bremerhaven	0	1,477	0	0
23.05.03	Flushing	0	470	0	0
24.05.03	Teesport	0	470	0	0
28.05.03	Vigo	2,621	0	0	0
01.06.03	Zeebrugge	0	1,030	118	0
01.06.03	Sheerness	0	525	0	0
03.06.03	Bremerhaven	0	1,184	0	0
07.06.03	Vigo	1,181	0	0	0
09.06.05	Sheerness	5	0	0	0
11.06.03	Bremerhaven	0	779	0	0
13.06.05	Emden	0	0	749	0
14.06.03	Zeebrugge	7	0	356	0
17.06.05	Portbury	301	747	0	0
19.06.03	Dublin	72	220	0	0
20.06.03	Cork	0	960	0	0
23.06.03	Vigo	2,009	0	0	0
26.06.03	Sheerness	0	489	0	0
27.06.03	Bremerhaven	0	1,520	0	0
29.06.03	Newcastle*	0	0	1,000	0
01.07.03	Le Havre	0	0	1,228	0
Total		19,042	25,961	6,145	0

*Agency labour contracted by Nissan.

reason for the so-called democratisation of work relations was that 'the labour market was rather tight' so that employers faced recruitment difficulties (Thorsrud 1981: 219). Looked at from this perspective, the contracts, the hours of work and the persistence of status divisions onboard cannot be considered separately from the way that shipping companies solved the recruitment problem. As we saw in previous chapters, this was by doing the nautical equivalent of 'going off-shore'.

In the next chapter, we provide more detail on labour control and related issues; make further comparisons with land-based work; and discuss some of the differences that exist between different companies, a discussion that takes on a special resonance in the light of some of the points made above about hierarchy.

6

Work and Working Conditions 2 – Consultation, Compliance and Labour Control

Consultation with employees is something about which there has been little research in the maritime industry. Still less has there been research that compares the situation in the industry to the situation on land. In an attempt to make some contribution to this we have compared some of the results we arrived at for car carrier crews and those arrived at in the British WERS 98 survey from which we took some of our questions. Several comments are in order about this.

First, it can be seen that the general pattern of response for seafarers is that the amount of consultation reported is a function of rank; the results for land-based employees in Britain also tend to follow this pattern (Table 6.1).

Second, by far the most frequent consultation for seafarers concerned health and safety issues. This makes sense in view of the hazardous nature of the industry and the prioritisation of health and safety issues following the high profile disasters that occurred in the 1980s. It needs to be noted, though, that ratings did not report being consulted more frequently than employees in a variety of land-based occupational groups. If, therefore, health and safety is the issue about which there is most consultation on car carriers, the extent of this is not exceptional by land-based standards. There is a further need for caution. It is testimony to the degree of formality that exists on-board that one senior officer was of the opinion that 'We have never been consulted because we are given certain instructions all written in company manuals and we have to follow them.' (Another slant on this is provided by an electrical officer who pointed to the limitations of formal compliance with health and safety regulations: 'This Company likes rules and regulations,' he said. 'If they pass [scrutiny] this is enough for them.')

Table 6.1 Consultation on various issues by rank with some comparisons to employees in British industry and to those in British car factories

	Percentage saying consulted 'frequently' or 'sometimes'			
	Crewing/ staffing issues	**Changes to work practices**	**Pay issues**	**Health and safety**
Managers and senior administrators	69	83	52	73
Senior officers (*N*=117)	55	63	27	91
Professional	43	72	25	64
Associate professional and technical	32	68	24	66
Personal and protective services	30	62	23	68
Clerical and secretarial	26	62	22	56
Junior officers (*N*=132)	24	48	20	78
Petty officers(*N*=49)	27	29	20	78
Ratings (*N*=282)	24	27	23	63
Craft and related	21	54	30	67
Sales	18	53	25	57
Plant and machine operators and assembly	17	49	29	59
Plant and machine and assembly in car factories	18	64	18	65
All employees	29	61	27	63

Source: Data for UK derived from WERS (1998) Employee Relations Survey; data for car companies are for two establishments only.
Note: Data for car carriers are in italics.

Third, few ratings were consulted with any frequency on crewing/staffing issues or on issues related to pay. But nor were many employees in what can be broadly considered to be analogous land-based employment.

Fourth, the sharp difference between ratings (and petty officers) and land-based occupations relates to consultation on changes to work practices. These seafarers were less likely to be consulted on work practices than land-based clerical, sales, machine operating and assembly-line workers or those of the latter in car factories or indeed British employees considered as a whole. This again reflects the extent to which shipboard procedures are subject to a high degree of formalisation and is all of a piece with the highly stratified nature of ship board life to which we referred in the last chapter. This was summed up for us by one rating who claimed to be consulted 'hardly ever'. He explained that this was

not necessary. As he saw it: 'There are working procedures. We have to be familiar with them and have to follow them.'

Hierarchy and influence are of course positively associated in most work organisations. It is worth noting, therefore, that comparison with the WERS data for employees in Britain provides some systematic evidence to suggest that influence is more tightly nested in the upper reaches of the authority structure for seafarers – or at least those on car carriers, who concern us here – than it is in any land-based occupation.

WERS provides evidence on the amount of influence that those in different positions perceive themselves as having. In Table 6.2, we have presented results for those employed on car carriers in some detail side by side with results for employees in Britain who work in different occupational groups. The table suggests that captains and, somewhat below them, senior officers, occupy positions in a league table of perceived job influence somewhere between the land-based 'managers and senior administrators' and 'professional' categories. This is probably what most people would expect. Perhaps less obviously, those in the engine room tend to perceive themselves as having more influence than others of equivalent rank.

The bottom part of the table suggests, however, that junior and petty officers do not appear to be in a particularly robust position when compared to associate professional and technical workers or, for that matter, when compared to craft and related workers. And ratings of all types do not stand well when compared to plant and machine operatives and assembly workers. If anything, ratings are less likely than car workers who are engaged in land-based operative and assembly-type work to think they have a lot of influence and they are more likely to perceive that they have none.

At a finer level of detail, about three quarters of ABs think themselves to have little or no influence on the summary measure of perceived influence constructed by Cully et al. (1999) (and followed here) and there is no result comparable to theirs, in terms of lack of influence, for any of the land-based occupational groups in the WERS 98 survey. ABs fare no better on three separate constituent measures of perceived influence. Asked about how much influence they had on the range of tasks they did in their job, how much influence they had about the pace at which they worked and about how much influence they had over how they did their work, the great majority replied that they had only a little or none.

Cully et al. (1999: 168–9) found a sense of job influence to be closely related to job security and the general pattern they discovered is also to be found for those who work on car carriers at least at the extremes. Of

Table 6.2 Perceived job influence and occupation with some comparison to employees in Britain

	Level of job influence (% of employees)			
	A lot	**Some**	**A little**	**None**
Managers and senior administrators	58	35	6	0
Captains only (N=31)	55	39	6	0
Senior officers' engine room(N=61)	46	38	15	1
Senior officers' deck (N=57)	37	37	23	3
Professional	33	49	16	1
Associate professional and technical	30	50	17	2
Clerical and secretarial	28	45	21	6
Craft and related	28	45	21	6
Personal and protective services	26	43	25	6
Sales	26	40	25	9
Junior officers' engine room (N=68)	23	34	34	9
Petty officers' deck (N=32)	22	28	31	19
Junior officers' Deck (N=64)	14	48	31	6
Plant and machine operatives and assembly	22	39	27	12
Plant and machine operatives and assembly in car factories	19	30	22	30
Ratings' galley (N=32)	13	22	44	22
Ratings' engine room (N=113)	10	33	25	33
Ratings' deck (N=136)	6	22	33	39
ABs only (n=93)	7	19	31	43
All employees	30	43	21	6

Note: Data for seafarers on car carriers are in italics and restricted to categories with more than 30 cases each. Other data are for employees in workplaces with 25 or more employees and is from Cully et al. (1999: 142, Table 7.2), except for data on car factories which are calculated directly from WERS 98.

those ratings who agreed that their jobs were secure, 73 per cent thought they had a lot of influence and only 15 per cent thought they had none. Of those ratings who disagreed that their jobs were secure, less than five per cent thought they had a lot of influence; 75 per cent thought that they had none.

Generally, ratings on car carriers perceived themselves to be less secure than operatives and assemblers in the WERS car factories. 50 per cent of them agreed that they felt secure in their jobs compared to 64

per cent of the latter (and 59 per cent of operatives and assemblers in all industries): 39 per cent of them disagreed they were secure compared to only 7 per cent of the latter (and 21 per cent of all operatives and assemblers). Such a greater sense of job insecurity among the ratings – even in 2004, which was a boom year for car carriers – makes good sense in the light of their very considerable dependence on short term contracts compared to British car manufacturing workers.

Officers on-board ship and land-based shipping office personnel tend to underplay the lack of consultation in their industry or to excuse it in terms of special conditions that they claim to apply, and it is not uncommon for conversations about such matters to turn to discussion about the character of the seafarers employed – and in particular the character of Filipinos. Somewhat paradoxically, Filipinos are praised and criticised for much the same thing. On the one hand, praise is to be heard for the 'Filipino mentality' (Mitas 1992: 90-91). As a Bulgarian second engineer put it:

> Working with the Filipinos in the engine room is very good. Whatever I order, they say, 'Yes Sir'. It would have been different if they were Ukrainians. Ukrainians would say, 'Oh, Sir. It's not necessary to do that.' Or 'Shall we do it later, Sir?' It is problematic to work with Ukrainians. But when you work with Filipinos they get on with their orders. I like working with Filipinos.

A Ukrainian chief engineer underlined the point:

> Working with Filipino ratings is easy. When you request something, they just do it.

The other side of this is that criticism is sometimes directed at the lack of critical engagement shown by Filipino crew. This is epitomised by the idea of what is sometimes referred to as the '"Yes, Sir" Filipino culture'. What such criticism fails to appreciate is that Filipinos have their reasons to behave like this. 'You have to be humble when you are on ship,' a Filipino third officer said. Others made much the same point in their own way:

> They are officers and we are just ratings. So we are here to follow their orders. They are good as long as long as you work good. We are afraid to lose our jobs. This is our profession. In this job you have to have plenty of patience. You have to bring sacks of patience [with you]. (Filipino AB)

> This kind of job is very difficult but I just work for money. Officers sometimes say things that are not good. Some bad words, you know. They call you names. But I am happy. I can send money to my family. They [officers] can say what they like. (Filipino motorman)

Such comments are compatible with the insights offered in an influential handbook for masters and officers, *Understanding the Filipino Seaman:*

> Deep rooted values should be understood more clearly by Westerners who manage Filipino seamen. Work to most Filipino seamen is only a means to an end. Their ultimate achievement imagery is knowing that their respective families are enjoying some luxuries while they work on board and they look forward to a changed social status.

These words, offered in a chapter entitled 'How to Make the Filipino Tick and Click' (Andries 1991: 12) do not however stretch to recognition of the Filipino seafarer's political and material situation, which is simply taken for granted. A phrase that is often to be heard aboard is 'In this job, your first mistake can be your last'. Filipinos are eager not to step out of line.

Whatever is formally recorded in health and safety regulations, many Filipino (and other) ratings feel themselves to be so vulnerable that officers can make demands on them, even if it exposes them to risk. In one instance, witnessed on a voyage, a piston cracked. If it was taken out of action, the ship would fall behind schedule. In order to keep to schedule, the piston was not removed and two Filipino motormen were ordered to stand by the engine with fire extinguishers at the ready in case the engine exploded, causing a major fire. They just did what they were told.

The Filipino's employment situation is precarious. Blacklisting has been described as the scourge of seafarers in the Philippines. On one estimate over 10,000 of them are blacklisted. 'Watchlists' exist which bear the personal details and photograph of the seafarer named. It is reported that the most common offence listed on one such list was 'ITF Involvement', which is likely to have referred to crew members seeking assistance from the ITF to collect unpaid wages (ICONS 2000:50). Recently, the position of the Filipino seafarer has weakened further. In 2003 the POEA issued the new, more comprehensive *Rules and Regulations Governing the Recruitment and Employment of Seafarers* (POEA 2003). On the one side, these lay down a system of licensing for crewing

agencies and related issues. On the other, they lay down disciplinary rules for seafarers. The penalties attached to the two aspects of seafarer recruitment and regulation – the crewing agency side and the seafarers' side – are far from commensurate.

In the case of crewing agencies, the *Rules and Regulations* makes no mention of blacklisting and watchlisting as punishable acts. Other acts such as failure to deploy a seafarer without good cause and coercing a seafarer to accept prejudicial arrangements result in only a reprimand for first time offenders. In the case of seafarers, the penalties are altogether harsher. Not only does inciting others to insubordination or concerted action to breach contracts lead to loss of employment but so too does showing disrespect to superior officers (section B 4e) and destroying harmonious relationship with the company or the good name of the company or the vessel (B 13). As a Filipino seafarers' support organisation has observed, the new *Rules and Regulations* makes clear that the mere filing of a complaint to the POEA against a seafarer immediately disqualifies the seafarer from further employment (Parola 2004: 2). The POEA make light of this. In admitting that the POEA had a watchlist (difficult to deny in that its website has a search tool for watchlisted persons) its deputy administrator, Lorna Fajardo, protested, 'But this does not mean that seafarers in the watchlist will never be allowed to board ships.' She added, 'Once they are cleared, then their slate is clean and they can board ships again' (Marino 2000).

While Filipinos need to keep a clean sheet with the POEA, they, together with other seafarers, are also subject to crew evaluation procedures. At the end of their contract a form is filled in by a senior officer detailing performance with respect to competence, health and safety awareness, teamwork, English proficiency, wastage of materials and other issues. This goes to the company main office or the crewing agent and can affect future employment.

The disciplinary record of all seafarers is further reported in their seafarer book. This goes with them wherever they go. It details their record of employment and constitutes part of their ID, together with their passport. It will be inspected by any potential employer or agency and has to be handed in upon joining a vessel, whereupon it is deposited in the ship's safe. It is stamped upon discharge from the ship. The history of many seafarers is now also kept on the very large databases held by ship management agencies – containing information, which employers can access electronically, on age, qualifications, personality, employment history and so on (though those with poor disciplinary records are unlikely to get onto such databases in the first place).

The captain deals with disciplinary issues on board ship. Lacking any on-board trade union representation (see Chapter 8), the seafarer is additionally disadvantaged by the fact that the company will often be holding some of their wages. This adds credence to the threat of being dismissed and forfeiting monies to pay for transport home and even having to pay for the transport costs of their replacement. Such sanctions are clearly more powerful than those that confront many land-based workers. Management is also more invasive of personal life. It is common for a captain to inspect cabins and it is not unusual for emails to come in and go out through an account to which only the captain has direct access.

As we have seen, car carrier crews have contracts which keep them tied to their place of work for many months at a time and they remain at their place of work even when they are not working. In this, their situation differs sharply from that of most land-based workers who can 'leave the job behind' when they are not working. It is a basic social arrangement in much of modern, land-based society that the individual works, sleeps and plays in different places, which are often inhabited by different people who are subject to different authorities. In the case of the seafarer, as sociologists have been long wont to observe, and as we had cause to note in the previous chapter, the individual inhabits a 'total institution'. In this sense, the position of the individual on the ship shares something in common with that of those who inhabit mental institutions, TB hospitals, concentration camps, boarding schools, monasteries, and of course, prisons. In Goffman's formulation (1961: 5–6) the key structural characteristics are that all aspects of life are conducted in the same place under a single authority; that each phase of the inmate's daily activity is carried out in the immediate company of a large batch of others; that all phases of the day's activities are tightly scheduled, 'the whole sequence of activities being imposed from above by a system of explicit formal rulings and a body of officials'; and that 'the various enforced activities are brought together into a single rational plan purportedly designed to fulfil the official aim of the institution'. Goffman's reference to a 'large batch' of others does not fit ships very well (as pointed out by Perry 1974b, who was familiar with the shipping industry) and there are other difficulties. But the circumstances under which seafarers on car carriers find themselves at least approximate in important respects to those of inmates in an ideal typical total institution (as do those of other seafarers as classically described by Aubert 1982: 236–58) – and in such circumstances it is difficult to get work off your mind, all the more so because interaction is limited to a small

number of people. Compared to the general run of employees in land-based British industry, the car carrier crews that we surveyed fail to do so. 47 per cent of them reported that they worried about work a lot outside working hours. This compares to 15 per cent of employees in car factories; 20 per cent of employees in British manufacturing; and 23 per cent of all employees in all the industries in the WERS survey (seafarers were actually asked about worrying 'in resting hours'). Those in the galley were most pressured in this way, 62 per cent reporting that they worried a lot compared to 48 per cent of those on deck and 42 per cent in the engine room.

Widespread as this difficulty of disengaging is, it is not a function of place in the hierarchy, such that the higher the position the more worry. If anything, worry is inversely related to position in the hierarchy – 30 per cent of senior officers reportedly worried a lot; 42 per cent of junior officers said they did so, as did 52 per cent of petty officers and 55 per cent of ratings. Many of those in the management of the car carrier industry (who have nearly always previously been officers, but not ratings) will probably be surprised by this inverse pattern. So, too, may some specialist maritime researchers (most of them have been officers too). These findings about the incidence of worry are a loose proxy for the *level* of psychological tension, however. They say nothing of *changes* that have occurred over time.

Many of the technical changes that have occurred on car carriers have had an incremental effect and have affected the car carrier fleet unevenly and over several decades. It would not therefore be expected that seafarers would report sharp recent changes in their experience of work. Even so, some general trends are reported by seafarers over the last five years – namely, that there has been an increase in responsibility for taking decisions; that workload has worsened; and that stress has also worsened. What is interesting here is not only the general direction of such changes but the different extent to which they are reported by those of different rank – and that, this time, it is the senior officers who have fared worse (Figure 6.1).

As we have seen, the life of the ratings who work on car carriers is a far from easy one but their work has probably undergone fewer, not more, changes in recent years than that of officers and especially senior officers. A captain who had been at sea for nearly a quarter of a century reflected that when he first went to sea 'they were using Morse. Now you can pick up the phone or use email or you can fax immediately anywhere in the world – you can reach any point'. These new communications technologies have meant senior officers taking over the now

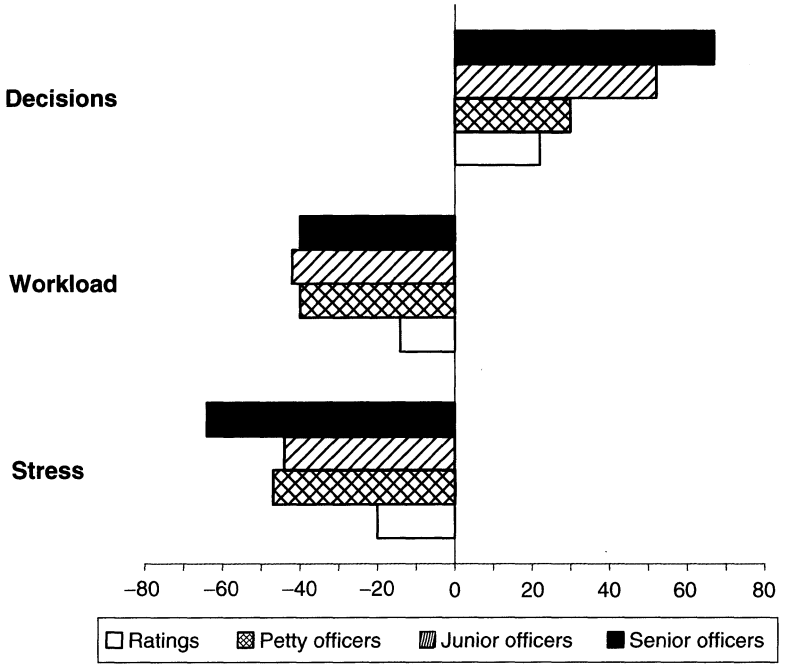


Figure 6.1 Perceived changes in the last five years (percentage balance of 'better' minus 'worse').

displaced role of the radio officer – who was not only in charge of the radio but who also might in odd cases have corrected charts, taken inventories and done other paperwork, all of which has now fallen to senior officers.

The new communications have also made possible closer monitoring from the shore, allied to the introduction of systematic management practices by ship management companies. In a significant further development, increased international regulations – for example, concerning environmental pollution (MARPOL); safety at sea (SOLAS); terrorism (ISPS); and certification of crew (STCW) – have added further to the senior officers' burden. The resulting pressure is such that it sometimes results in mere paper compliance. Procedures that have not been followed are recorded as if they have been and meetings are recorded that have not taken place. Records of hours of work that are necessary to run the ship on tight crewing are falsified, and so too are records of rest periods. Whereas 'fogging the log' is nothing new in the

maritime industry, the key fact is that senior officers have had to pay for their increased responsibilities, which often stem from an attempt to compensate for the decline in national flag states through the growth of international regulations and further bureaucratisation.

The company factor

So far we have written as if the particular company for which seafarers work is of no importance. In a sense, the stress within the industry on how the same jobs are performed in a similar fashion on ships everywhere reinforces this impression, but it is also the case that views exist in the industry about some lines being better or worse than others. So: does ownership matter? There is reason to think that it could. National regulatory regimes and the regulation of seafarers' labour markets and conditions through collective bargaining have both been weakened by the recruitment of seafarers from a global labour market and by the related rise of FoCs and second registers; but these same tendencies, in removing common elements, have allowed more space for individual owners and ship management companies to develop their own practices.

Altogether the seafarers in our survey worked for 15 different companies. Some of these were sparsely represented, so that six companies were represented by only 56 seafarers. Clearly, whereas this afforded a necessary measure of spread across the industry, these particular companies cannot be subjected to separate analysis. A number of companies also have small numbers of ABs – the occupational group that is commonly used in international and other comparisons of hours of work and pay (cf. the ITF wages data in Table 5.1 for example). Bearing this in mind, and also the contribution that particular companies make to our survey overall, we have restricted our investigation of company-related differences in pay, hours and other matters in Table 6.3 to six companies – AyeCo, BeeCo, CeeCo, DeeCo, EeCo and also EfCo, despite its small number of ABs. In what follows, after some basic information has been presented, including information related to hours and pay, we have generally examined these companies on the basis of the more numerous ratings' responses in an attempt to control for occupational differences. Information on the occupational composition of all the different companies, including ABs and ratings, is provided in Appendix 2.

Some companies own nearly all their ships; some have nearly all their ships on charter from other owners; and some follow a mixed strategy.

Table 6.3 Characteristics of companies

	AyeCo	BeeCo	CeeCo	DeeCo	EeCo	EfCo
Ownership						
Own nearly all ships			•	•	•	•
Size of fleet						
Large or medium		•	•	•	•	•
Voyage cycle						
Deep sea		•	•	•	•	•
At least some training for ABs last 12 months				•	•	•
AB contracts of less than 9 months					•	•
AB average pay per hour US$	3.4	3.3	3.1	3.3	5.3	4.1
AB average weekly hours	81.3	86.5	83.9	80.6	64.1	68.0

Note: AB average pay per hour calculated on the basis of total monthly earnings by total monthly hours.
Average monthly hours calculated on the basis of total weekly hours divided by 7, multiplied by 30.

Of the six companies, four – CeeCo, DeeCo and EeCo and EfCo – own nearly all their ships. AyeCo operates a mixed strategy and BeeCo charters nearly all its vessels. There are further differences between companies that relate to the size of fleet and voyage cycle. As far as size of fleet is concerned, all operators except AyeCo may be considered medium or large. As for voyage cycles, AyeCo is a short-sea operation whereas all the other companies are deep sea. CeeCo is 'deep-sea intense'; its vessels may sail from Japan for a month, and then visit six or seven ports in as many days. DeeCo, EeeCo and EfCo are 'deep-sea mixed', so that as well as having deep-sea intense voyages, they may have deep-sea voyages that have only one or two port calls.

The above differences are presented in Table 6.3 as is some further information. It can be seen for example that EeCo owns nearly all the ships it operates, is mainly engaged in deep-sea voyage cycles, has a large to medium fleet and also employs some ABs on contracts of less than nine months (the ITF standard maximum for FoC ships), which, apart from EfCo, is not the case for any of these other companies. By contrast AyeCo has none of these attributes and the other companies occupy an in-between position. In addition to this, EeCo crews work the lowest average weekly hours and they get the highest average pay per hour, followed by EfCo. Of course, we are dealing with small frequencies

here but EeCo and EfCo do stand out and the question arises whether crew who work for these companies – and at the other end of the spectrum, those who work for AyeCo – regard them differently.

If we look over our shoulder at land-based work, is not a long step to the conclusion that, from the standpoint of employees, EeCo and EfCo are characterised by a beneficent constellation of characteristics. Land-based workers would be well advised to go for bigger companies, which manage their own workplaces themselves and which employ people on longer contracts. Subject to the proviso that, at sea, the idea that shorter contracts are likely to be worse needs to be reversed, this would seem to fit both EeCo and EfCo.

In exploring this idea – what we might call the 'social democratic option' – we can again make use of some standard questions that come from an established body of land-based research, in the shape of WERS 98. This survey asked three questions which concerned commitment: Did employees agree with the statements 'I share many of the values of my organisation'? 'I feel loyal to my company'? and 'I am proud to tell people who I work for'? We asked the second and third of these questions.

In the WERS sample 64 per cent of all employees (excluding managers) in workplaces with 25 or more employees agreed or strongly agreed they felt loyal to their company and 55 per cent that they felt proud to tell people who they worked for. It can be seen that ratings on car carriers have a higher average positive percentage response than this but more pertinently in the present context it can also be seen that on both questions the ratings employed by EeCo display particularly high levels of commitment, closely followed by EfCo (Table 6.4).

It is much the same story with respect to what is sometimes called the WERS 'climate' question: 'How would you describe relations between managers and employees here?' (we modified this to refer to 'officers' and 'ratings') and a further question that we asked with reference to relations with the company. Overall, the results for ratings on 'climate' are considerably higher than the 51 per cent for all non-managerial employees that Cully et al. (1999) found to rate it 'very good' or 'good', although when the top lines of Tables 6.5a and 6.5b are compared it can be seen, as has been found to be commonly the case with land-based managers, that officers are overwhelmingly likely to rate it positively, which is compatible with Cully et al. (1999: 277). However, it can also be seen that EeCo and EfCo attract the highest evaluations from both ratings and officers.

Officers and ratings not only have relations with each other on-board ship; they also have relations with the company. In considering answers

Table 6.4 Aspects of ratings' commitment to the company

	Per cent strongly agree/agree						
	AyeCo (*N*=23)	**BeeCo (*N*=32)**	**CeeCo (*N*=39)**	**DeeCo (*N*=42)**	**EeCo (*N*=38)**	**EfCo (*N*=25)**	**All ratings (*N*=297)**
I feel loyal to my company	57	91	69	83	97	92	80
Proud of who I work for	30	69	64	76	95	92	72

Table 6.5a Ratings' evaluation of relations between officers and ratings and of relations with the company

	Per cent very good/good						
	AyeCo (*N*=22)	**BeeCo (*N*=31)**	**CeeCo (*N*=37)**	**DeeCo (*N*=40)**	**EeCo (*N*=37)**	**EfCo (*N*=26)**	**All ratings (*N*=270)**
How describe relations between officers and ratings on board	23	68	70	68	95	81	68
How describe relations with the company	50	77	61	74	92	85	71

Table 6.5b Officers' evaluation of relations between officers and ratings and of relations with the company

	Per cent very good/good						
	AyeCo (*N*=17)	**BeeCo (*N*=27)**	**CeeCo (*N*=32)**	**DeeCo (*N*=37)**	**EeCo (*N*=29)**	**EfCo (*N*=21)**	**All officers (*N*=251)**
How describe relations between officers and ratings on board	59	93	94	78	100	100	89
How describe relations with the company	75	85	69	84	90	91	82

to our question about these, officers again seem more positive than ratings (compare Tables 6.5a and 6.5b) but in most companies officers are perhaps somewhat less sanguine about their relation to the company than they are about on-board relations (compare the two rows in Table 6.5b). It is after all from the company that their orders come. As far as particular companies are concerned, the responses for EeCo and EfCo again come out highest for both ratings and officers.

Earlier on, we looked at the incidence of employee involvement in workplace decision-making with reference to issues such as pay and health and safety (Table 6.1). A more general possible indicator of 'the social democratic option' comes from the support that seafarers, in this case, ratings, see companies to give for employee participation. The WERS 98 survey found that managers are best at keeping their employees informed of proposed changes as opposed, that is, to providing them with the chance to comment on proposed changes or responding to suggestions that they make (Cully et al. 1999: 175): According to ratings, their officers also do best at keeping them informed of proposed changes – a process that neither requires nor necessarily invites any actual input from them. They generally do less well at giving them a chance to comment or to respond to their suggestions (Table 6.6). Looked at on a company basis, though, it is clear that EeCo and EfCo score well on all three dimensions and, if anything, the difference in the scores for keeping employees up to date (a practice that may be performed unilaterally) and the other two activities is more pronounced in the other companies. It is consistent with this that ratings employed by EeCo and EfCo perceive themselves to have more influence than those in the other companies.

We have already made a comparison between the amount of influence that those at different points in the ship's hierarchy perceive themselves to have and how this compares to some analogous land-based occupations. One of the implications of this was that ratings probably lack influence compared to land-based operatives and assembly workers; indeed, that they lack influence. But among ratings, those who work for EeCo at least appear to be less likely to perceive themselves as entirely lacking influence (Table 6.7). In this company and in EfCo, few ratings think that they have no influence. In some of the other companies, with AyeCo again being prominent, substantial proportions think just this.

A batch of other indicators point in the same direction as those introduced so far (Table 6.8). There are of course particulars that catch the eye, for example the positive response to the amount of pay at BeeCo, which may be a function of long hours as well as the rate of pay, but

Table 6.6 Ratings' evaluation of support for employee participation

	Per cent good/very good						
	AyeCo (N=23)	**BeeCo (N=29)**	**CeeCo (N=34)**	**DeeCo (N=42)**	**EeCo (N=38)**	**EfCo (N=24)**	**All ratings (N=267)**
Keeping everyone up to date about proposed changes	36	59	55	66	97	92	67
Providing everyone with the chance to comment on proposed changes	22	31	51	57	92	88	55
Responding to suggestions from employees	26	21	53	52	90	88	54

Table 6.7 Ratings' perceptions of influence by company

	Per cent						
	AyeCo (*N*=22)	**BeeCo (*N*=33)**	**CeeCo (*N*=40)**	**DeeCo (*N*=44)**	**EeCo (*N*=39)**	**EfCo (*N*=25)**	**All ratings (*N*=280)**
A lot	5	0	5	14	10	16	8
Some	0	6	23	30	51	64	27
A little	27	52	18	30	33	20	31
None	68	42	54	27	5	0	35

generally these data reinforce the idea that, from a rating's point of view, EeCo and EfCo are better places to work than AyeCo, whether the issue is pay or a sense of achievement or respect from supervisors or physical working conditions or encouragement to develop skills or job security – and this is in addition to the several matters considered already.

In the case of EeCo, many of these results can be traced back to the TAP agreement which has delivered better conditions for Filipino seafarers, conditions that approximate the social democratic option – not only better hours and better pay, but better treatment by the company. But there seems to be some more general effect at work, as if seafarers have considered the company to provide a better deal all round. It is this same consideration which would seem necessary to explain the results at EfCo, which was represented by no TAP employees but which

Table 6.8 Various further assessments of companies by ratings

	Per cent very satisfied/ strongly agree or satisfied/agree						
	AyeCo	**BeeCo**	**CeeCo**	**DeeCo**	**EeCo**	**EfCo**	**All ratings**
Amount of pay	38	77	52	56	90	93	67
Sense of achievement	54	69	56	73	95	96	68
Respect from supervisors	29	39	58	61	95	96	68
Physical working conditions	32	37	41	51	93	96	56
Encouragement to develop skills	18	35	62	61	97	96	64
Job security	17	21	42	55	80	92	50

again had notably shorter hours and a better rate of pay. A host of differences apply – sometimes apparently trivial to the outsider, but not to those forced to live on-board night and day for months on end. EfCo's vessels, like those of EeCo, are well maintained and are put in dry dock more often (which limits the heavy work that seafarers in some other lines may be called upon to do). Crews on EeCo and EfCo ships clean their cabins in working hours, not as extra unpaid work. There is equal access to sauna and sports facilities and email, which makes for less pronounced segregation between officers and ratings. By contrast, AyeCo, which owns a smaller proportion of its ships and which has a smaller fleet, although it pays as well as four of the six companies and does not have exceptionally long hours compared to them either, would appear to lack training provision and to run on longer rather than shorter contracts – in other words it is the furthest removed from the long-term investment strategy followed by EeCo and EfCo, a strategy that would seem to extend to labour.

The social democratic option is not of course a free-floating one. In the maritime car carrier industry, it favours companies that have well-established relations to vehicle manufacturers, a trading pattern skewed to high value rather than low value items – more expensive cars, more H & H vehicles. However, the fact that it exists does show that a 'race to the bottom' in terms of seafarers' conditions of work and how they are treated is not inevitable.

7

Work/Life Balance, Fatigue and Isolation from Family and Friends

It was seen in Chapter 5 that despite much concern in advanced industrial societies about long working hours, these paled into insignificance compared to the hours worked by car carrier crews. Hours of work are only one indicator of work/life balance and in this chapter we consider a number of related issues – the chance to get ashore during what, especially for ratings, are long periods contracted to going to sea; the impact of different voyage cycles; how easy it is to get shore leave; the extent to which crews get sufficient rest from their duties; problems of pressure of work, long hours and fatigue; and finally, social isolation on-board also having been considered in Chapter 5, problems of isolation from family and friends.

The chance to step ashore

Theoretically, if being on-board ship is like being in prison, arriving at land should be a relief from this. In practice, this is often far from the case. Generally, as we saw in Chapter 3, the industry has been driven by changes in car manufacturing and the resultant pressures put on it by these. Of fundamental importance here is that changes in the car manufacturing industry towards just in time delivery and tighter control over the supply chain have impacted on car carriers, accentuating the drive to reduce turnaround time and to meet tight production schedules.

Some manufacturers now specify fixed days for loading and discharge but in any case the pressure has been on to reduce turnaround and increase vessel utilisation. An operational manager comments:

> When I started in 1975 it was different. We had a longer stays in port ....It has become more intense in all ports. I mean, discharge is faster, loading is faster, the turnaround of the vessels has become faster and faster, and the number of crew has decreased.

When the ship docks there is much to be done. Dock-side observers report:

> As soon as the gangway is down the Immigration, Customs, Department of Agriculture, Department of Health, Port State Control Inspection and other agencies come to visit the ship. The seafarers in one way or another are involved in discharging or loading cargo, they do maintenance work, or they work in the engine room. (an ITF inspector)

> When the ship is alongside the workload increases. Sometimes you're loading and unloading, re-equipping, servicing, replenishing, re-crewing – lots of things happen when a ship is in port. Also the old idea that you don't work in port at night is not the case any more. Twenty-four hours working. Oil terminals always worked 24 hours but now the other cargoes are joining in which means that demand is high and pressure only begins to ease when the ship is at sea. (A chaplain of the Mission to Seafarers)

Of course, seafarers are not the only workers to suffer from short turnarounds. Aircraft cabin crews are another case in point but as an Australian ex-officer who had worked on car carriers points out:

> You might say that the cabin crew of an aeroplane do something similar, but a seafarer might go from – for example I've done runs from say Singapore to the Philippines to New Zealand and back to Western Australia, so for maybe fifteen weeks you get no mail, you do not go ashore, and by the end of it there's a certain madness that attacks some crew. Very small things become very big things.

The reduction in turnaround time means that crews now find that they have little time to 'see the world' and the actual free time that they have in port is often very limited.

A number of specific innovations have reduced the time crews spend in port and impoverished their experience of this. On long-haul routes there is increased use of hub ports, which allow vessels to stop off once instead of several times, local ports being served from the hub by feeder vessels. The consequence of this is that the long-haul crews spend more time at sea and less on land (for their part of course feeder crews typically spend disproportionate time loading and unloading).

The redesign and relocation of ports, often away from centres of population, has also left crews less able to engage in any purposeful activity when they do get to land. For many car carrier crews, 'shore leave'

means nothing more than the chance to make a phone call home. Modern car carrier ports need lots of space for their car parks and access facilities, so cheaper land is sought – which means it is further from residential and shopping areas. They are unlike many traditional ports, which were near to city centres. Automated and sparsely populated, they can look deserted, and are vast machines geared up for speed, not the satisfaction of human wants.

Ports have been denuded of their facilities, cafes etc. Generally, they lack public transportation. If crews are off their watch they may have two or three hours that they can spend on shore but because of the port location it may take them most of this time to get where they want to go and back. Unless they can afford to make a trip by taxi, there is a good chance that they will be dependent on the goodwill of one of the local seafarers' missions. 'I took some of the Filipino crew [from a car carrier] to the nearest motorway service station',a worker at an Apostleship of the Sea (a Catholic seafarers' organisation) told us. 'They spent less than half an hour in the service station to make phone calls to their homes and bought some papers and confectioneries. Before Bristol they were on board for 43 days without any shore leave'.

Old seafarers can wax lyrical about what ports used to be like. For example, an old Swedish Wallenius Lines seafarer reflects:

> [I]t must be frustrating to sail across the oceans for weeks and then be denied closer acquaintance with the exotic places at which the ship calls. In that respect, at least, the seafarer's life was somewhat better half a century ago. Voyages often took longer – but it was undoubtedly a pleasant compensation to be able to spend a few evenings ashore in a foreign country.(Ohrelius 1984: 79)

A Bristol ex-seafarer, Harry Higgins, to whom we talked, sees things in much the same way (Box 7.1). Such changes have affected seafarers in most maritime sectors. It is important to see, therefore, that the turnaround times on car carriers are among the shortest in all maritime sectors and that it is this feature, above all others, that their crews deem to be worse than on other types of vessel.

We asked seafarers how they thought working on car carriers compared to working on other vessels. In all cases – whether the issue was shore leave, living conditions, workload, pay, social life, crewing level or social space – the balance of their responses was consistently negative (Table 7.1). A very clear difference emerges with reference to shore leave,

Box 7.1 Port life as it was

In 1943 I started as a deck boy. Their breed is long gone. It was a hard job as a general dog's body. It was a tugboat. The work was from sun up to sun down.... After the war, in 1946, I went to deep-sea.

Port times, with bulk cargo you would never be in port for less then 2 months, especially with coal and phosphate. In some ports there were no cranes. I remember in one Chinese port people discharged cargo in baskets. They built scaffolding beside the ship and put up planks and runways. We seemed to be there for weeks and weeks. The ship was 10,000 grt, about 55–56 crew members on board. In those days in a European port you wouldn't be there less than a week. The deep-sea ships had to be at least 3 weeks. If it was a general cargo it would be much longer.

In the old days you would have pubs around the docks, girls, night life. Ports have changed, dock areas have died. In the ports you would smell spices, orange, coffee beans. The most noticeable things about the ports now is that they are silent and clean, nothing's lying about. Steam trains used to go in Bristol, you could hear cranes working. There was character. There are now less dockers. I couldn't get over going to Bristol and the dockers having disappeared. There were people talking all around. There were laundries. There were ship stores. The utter silence of the docks hit me.

Today one ship carries what five ships would carry in the old days. It is also a different life. You can go to the most exotic places of the world, you wouldn't see what's going on at the shore. That seems like a little world. Your life at sea doesn't change. The only way your life can change is at the port.

Recollections of Harry Higgins, Bristolian retired seafarer.

however. Whatever their rank, crew were overwhelmingly inclined to rate car carriers worse than other vessels in this respect.

Adverse comparison about shore leave was yet more pronounced for seafarers on deep-sea light voyage cycles. Such cycles combine considerable periods at sea, with only a few port calls and thus limited opportunities for shore leave. Of all seafarers, 96 per cent on such cycles thought car carriers worse.

Table 7.1 Seafarers' comparisons of conditions on car carriers and other vessels by rank

	Percent 'Better' minus 'Worse'				
	All	**Senior officers**	**Junior officers**	**Petty officers**	**Ratings**
Shore leave	−78	−87	−71	−90	−78
Living conditions	−29	−25	−36	−52	−25
Workload	−21	−40	−26	−34	−10
Pay	−14	−8	−25	−38	−8
Social life	−22	−33	−16	−22	−17
Crewing level	−12	−12	−16	−33	−9
Social space	−12	−17	−17	−14	−6

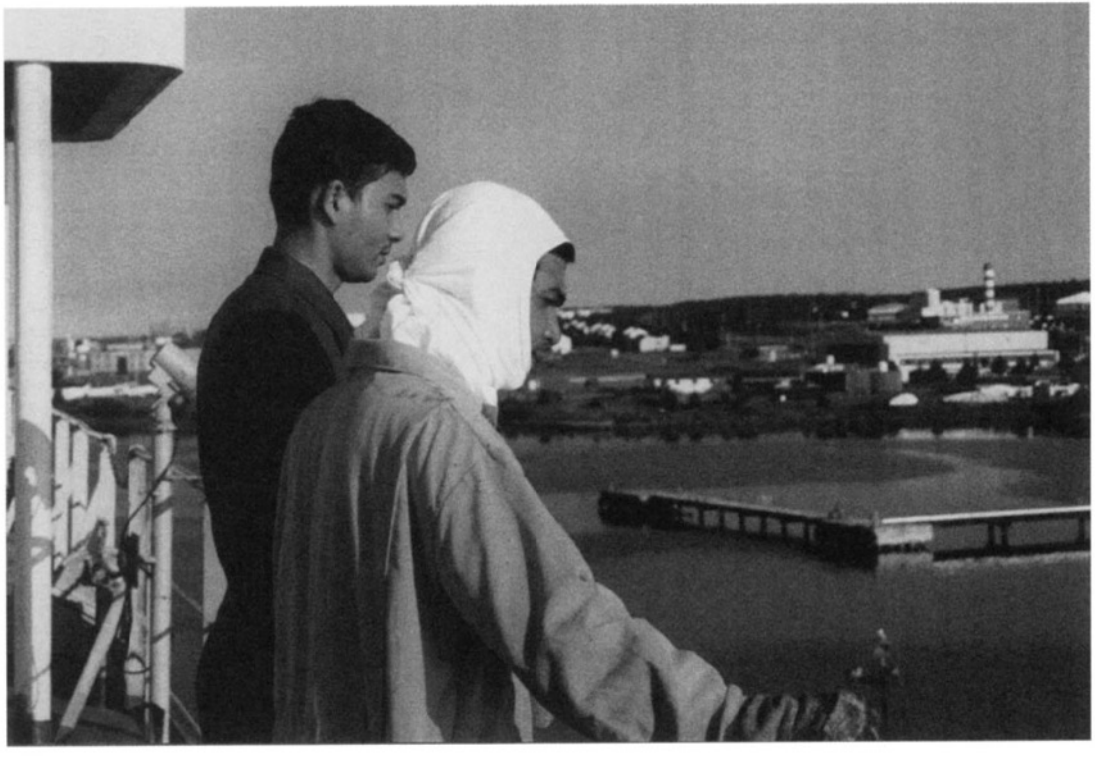
Table 7.2 Time at sea and time in port

	Case A (Short sea)	**Case B (Deep-sea intense)**	**Case C (Deep-sea light)**
Percentage operation time at sea	72	82	89
Average turnaround time (hours)	13	11	16
Average cargo operation time (hours)	8	7	10
Average non-cargo operation time (hours)	5	4	6

Source: Appendix 3.

The different impact of voyage cycles on time ashore can be seen from three sets of data collected during on-board observation (a summary is provided in Table 7.2; a full account is provided in Appendix 3).

Case A concerns a short-sea voyage conducted between 1–29 June, 2003. During this period of the voyage (cars had already been picked up at Vigo) the ship made 15 port calls around Europe, loading 7261 cars and unloading 9332. As part of this, the ship made port calls nearly every other day. Even so, 72 per cent of the ship's operation time was spent at sea and seafarers had very little free time when in port. Two members of the crew reported that they had never set foot on land since signing on respectively three and five months before. Of those who had, only three had got further than the port gate. Most had used the limited time available to make phone calls from within the port facilities.



Arriving at Halifax, Canada, after crossing the Atlantic, 2004 (photograph EK)

Case B concerns a deep-sea intense voyage, conducted between 12 February and 17 May 2004. There were lengthy sea passages between Europe and the Middle East (for instance 11 days at sea between Le Havre and Jeddah) and from there to the Far East. In each region, the long passages were then punctuated by port calls almost every day. In the time period reported there were 37 port calls, with 11840 vehicles loaded, 9942 unloaded (many of these H & H, including cement lorries, earth movers, fork lifts and buses). On this ship, 78 per cent of operation time was spent at sea and, again, seafarers had very little free time when in port. Eight crew members had never stepped ashore three months after joining the vessel on her maiden voyage. Those who had been ashore had done little more than, as one put it, 'bought phone cards and had some fresh air'.

Case C concerns a deep-sea light voyage conducted between April 5–11 June 2003 There was a long voyage from Japan to North America with 3244 cars, a journey back to Japan to load another 3480, and in all eight port calls. This time, 89 per cent of operation time was spent at sea, boosted by the long voyages between Japan and North America, again with limited free time for the crew. Nine crew members had never stepped ashore four to five months after joining the vessel.

Note, too, that in all these cases, the free time available to crew in port was further constrained when the vessel arrived in the early hours of the morning, which is not unusual.

Pressure of work and fatigue

We argued in the last chapter that seafarers on car carriers were more likely to compare adversely to land-based workers on one common indicator of work-related stress, namely worrying about work outside working hours (or more precisely, in the case of our seafarers, worrying about work in 'resting hours'). This was attributed to the difficulty they experienced in escaping their work and in particular to those aspects in which it approximated those of a total institution.

Two other aspects of work that social scientists have used to measure work-related stress are whether employees perceive their job to require them to work very hard and whether they feel that they never have enough time to do their work. Questions on the latter two aspects of work-related stress were used in the WERS 98 survey. Comparison with these results suggest that, if anything, seafarers are slightly less likely to agree strongly that their work requires them to work very hard (20 per cent compared to 26 per cent for all WERS employees) and less likely to strongly

agree that they do not have enough time to do their job (four per cent compared to 14 per cent in WERS). These differences disappear if the responses for strongly agree and agree are added together, in which case 43 per cent of seafarers took this view compared to 40 per cent in WERS when asked about not having enough time to do the job, and 79 per cent did so compared to 76 per cent in WERS concerning the question about hard work (results for all WERS employees are provided by Cully et al. 1999:17, Figure 8.2). On the whole, then, in these respects, there is little evidence to suggest that those employed on car carriers are any more or less stressed than those employed on land. But the major stress-related determinants for these seafarers lie elsewhere, most particularly in relation to the prolonged and highly exceptional hours that they work. This brings us to the question of fatigue.

Overall, 64 per cent of seafarers reported fatigue to be a problem. As we saw in Chapter 4, many work exceptionally long hours, and, as might well be expected, the more hours that seafarers work, the more likely it is they report that fatigue is a problem. Not surprisingly, nine out of ten seafarers who worked 90 hours and over a week were of this view (Figure 7.1).

Pressures on seafarers differ according to the age and condition of vessel. But the type of voyage cycle is a major determinant. Whereas a not inconsiderable 53 per cent of deep-sea crews report that fatigue is a problem, 78 per cent of those on short-cycle voyages do so.

Frequent port calls figure prominently in explanations that car carrier crews advance for fatigue, as do quick turnarounds, and those on short-cycle voyages have a greater exposure to these.

The impact of fatigue on safe working is not to be underestimated. On one vessel intense port calls led to a situation in which all three watchkeeping deck officers admitted to falling asleep when on duty on the bridge. The other side of the long hours worked, which result in fatigue,

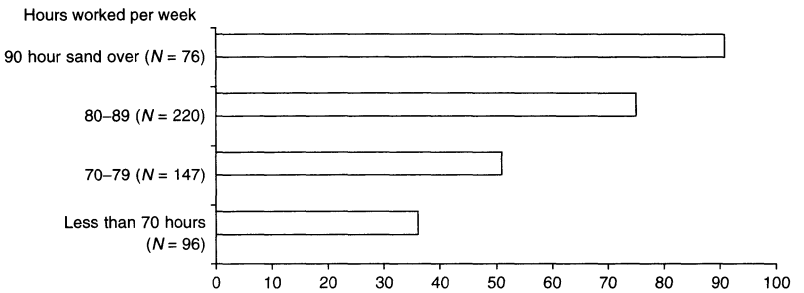


Figure 7.1 Is fatigue a problem on car carriers? (percentage who say 'yes')

Table 7.3 How often do you get six hours uninterrupted rest?

	N	**Percentage**
Everyday	83	14
Most days	262	45
Half the time	129	22
A few days	83	14
Never	28	5
Total	585	100

is that there is widespread undercrewing. This leads to further dangerous practices. For example, on three of the six vessels on which observations were conducted there was no look-out on the bridge during hours of darkness. Like some of the hours worked, this is against international regulations. The practice was engaged in so that ratings could be used for other duties, including maintenance and cargo handling.

International regulations specify that seafarers should have at least six hours uninterrupted rest with each period of 24 hours. But for many of these seafarers this, too, is not the case (Table 7.3).

Of all seafarers, 86 per cent report that they fail to achieve this, irrespective of rank.

Several conclusions to be drawn from this research are consistent with those from a recent programme of research into fatigue in the shipping industry conducted by Smith et al. (2003). For instance, a survey of members of NUMAST (a British seafarers trade union for officers) found that 50 per cent of those surveyed worked in excess of 85 hours a week; that longer working hours were significantly associated with increases in perceived job stress and fatigue; and that two thirds of them reported that extra crewing was necessary in order to reduce fatigue (Smith et al. 2003: 127–28, 200). Related research, largely based on UK seafarers who were employed in short-sea and coastal trades on a variety of vessels in Northern Europe, found 13 per cent of them worked 94 or more hours a week, and that 75 per cent did not regularly have the opportunity to benefit from six hours rest in every 24 hours, as is legally required. They, too, took the view that shorter hours would be very useful to reduce fatigue (Smith 2003: 200–1, 205).

Social isolation and communication with home

Asked what they regard as the worst thing about being a seafarer, the great majority of all responses fell into two categories. The first was being away from family and friends (45 per cent); the second, which

also related to this, was loneliness and isolation (16 per cent). When asked specifically about whether they thought that social isolation was a problem on car carriers, 61 per cent of seafarers endorsed this view. This response was particularly pronounced among those on deep-sea light voyages who experience considerable periods at sea combined with a limited number of port calls of short duration (Figure 7.2). The distinctive feature of their situation is amply underlined when it is considered that 44 per cent of the short-sea seafarers, mainly from the UK, researched by Smith et al. (2003: 201) reported that the job reduced the time they would like to spend with their families a great deal even though almost 75 per cent of them were on board for 21 days or less – very considerably less than those on car carriers.

Filipino seafarers are not known for talking overmuch to their children about how they feel when at sea. An account from the son of seafarer who did so is instructive. 'My father once told me that out there at sea it's very, very lonely', he said. He continued:

> It's a very, very cold world. They don't have a family, they don't have anybody to talk to when it comes to pains, angers or whatever. It's a trying job, it's a lonely place and maybe a lot of sacrifice.... All the time he is there without a family, without anybody who loves him to care for him. Out there he is on his own. He keeps on thinking that he's got somebody here, he's got people here to care for, he's got people here who depend on him. So it's a lonely world for him (Kahveci 2001).

Seafarers are likely to suffer the social isolation from their families for the sake of those very families. We asked them whether they sent

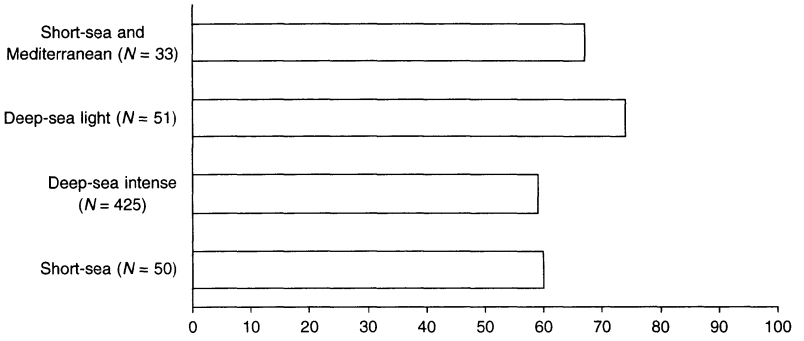


Figure 7.2 Is social isolation a problem? (percentage who say 'yes')

remittances home and if so what amount they paid per month. The great majority were happy to provide this information. It suggests that the seafarers on car carriers sent home an average of $1,230 per month (with a median of $990) but this average is skewed by a few who send home considerably more than this and in fact two thirds of all seafarers send home less than this amount. The amount sent home is partly a function of country of origin and partly of rank and of the relation between them (for instance Filipinos are less likely to be officers; seafarers from the rest of Europe are more likely to be so). Even so, in all cases, the amounts sent home are substantial. Even those with the lowest average remittances in Table 7.4, the Filipino ratings, send home about $US600 per month and as noted earlier, seafarers make a substantial contribution to the Filipino economy.

The seafarers' dilemma is that they go to sea in order to enhance their families' well-being but by virtue of doing just this they become isolated from their wives and children. Their concerns about this take many forms. These include worries about money. Filipino seafaring families, for example, may feel better off than their non-seafaring neighbours but even so a recent survey of seafarers' wives found that 80 per cent of them had had to pawn some of their belongings to make ends meet, mostly their wedding rings and gold jewellery (Kahveci 2001). Seafarers have other worries about adultery and their relations with their wives. Such are the irregularities of their lives – away for considerable periods, then home, then getting ready to go off again – that some wives say their lives feel more 'normal' when their husbands are at sea. An Australian study of seafarers employed in coastal trades and in the oil and gas industry reports findings that are consistent with this – that tension builds during the week before these seafarers leave home, and that,

Table 7.4 Money sent home by regional origin and rank ($US per month)

Region	**All ranks of seafarer**		**Ratings only**	
	N	**Average ($US)**	***N***	**Average ($US)**
Philippines	271	741	182	597
Indian Ocean	133	1,545	51	852
Eastern Europe	76	1,986	12	879
Asia	39	1,395	20	858
Rest of Europe	23	2,406	7	1,438
All	543	1,230	272	698

after returning home, seven to ten days are required in some cases to wind down and readjust to the presence of the seafarer again (Parker et al. 1997: 87).

Car carrier crews worry about the progress of their children at school. They regret their own absence from family occasions such as birthdays, religious festivals and no less so the ordinary round of family life. Seafarers may for example give their children lavish presents on their return home but this is not the relation that either they or their children really want. In the words of a Filipino chief engineer's daughter:

> I can appreciate the presents that my Dad gives me like new shoes but then happiness is not all about material things. If you share some fun it's totally different because it never ends. It will always be with you, not like shoes that will be disposed of (Kahveci 2001).

We saw in Chapter 4 that the majority of seafarers do not want their children to follow them in their jobs. Prominent among the reasons they gave for this were the enforced isolation spent away from their families:

> Because I realise now that there is no family life. If the family needs you, you can't be there. You are away from society. You are a misfit in the world
>
> I don't want my child to experience the hardship I have had onboard, especially the loneliness of being away from your family.
>
> I know how much you're away from your family. I think you miss the shore life, miss your friends. Your family affection is not much.
>
> Working at sea is only good for a single man or woman.
>
> Seafaring is a lonely life. I was once taken to hospital in Japan for three weeks. Nobody came to visit me.
>
> It's a stupid life. You don't see your kids grow up.

Not being there for births, marriages and deaths and in cases of family illness can prove cause for considerable concern and it is not easy to get time off to attend personal events such as a wedding or a funeral. Over one in four told us flatly that it was impossible to get time off. A further six out of ten reported it was difficult or very difficult (Figure 7.3).

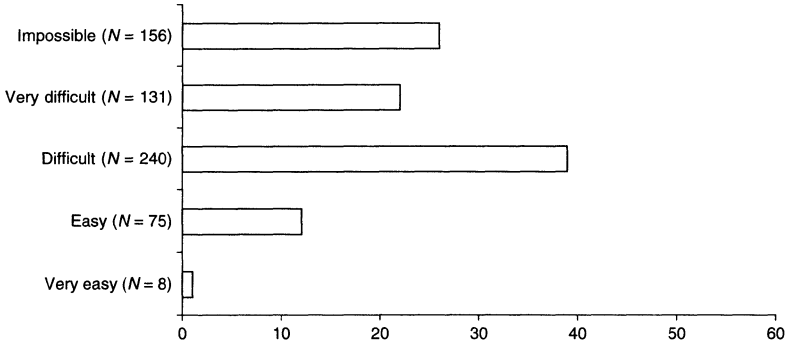


Figure 7.3 How easy is it to get time off to attend personal events? (percentages)

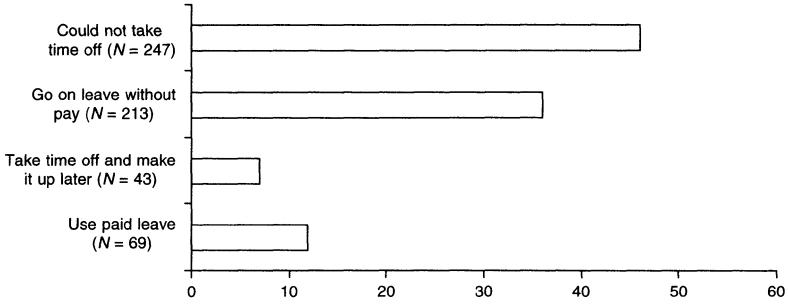


Figure 7.4 If you need to take time off, how would you usually do it? (percentages)

Just how difficult it is to get time off is made clear by the response to a further question: 'If you needed to take time off at short notice, for example to look after a sick family member, how would you usually do it?' Faced with this more specific question, an even higher percentage of seafarers, nearly half of them, responded that they could not get time off (Figure 7.4). Most of those who thought it was possible replied they would take unpaid leave. But this was not the end of their difficulties. Their options were restricted in various ways. One pointed out, 'You have to be repatriated on compassionate grounds and have to wait for your relief to come onboard'; another explained, 'I can take leave without pay but I have to pay for my own fare'; others reported they would simply have to break their contracts and go. There was also the company hierarchy to cope with. 'I have to write to the company and give it to

the Captain to be forwarded', said one. 'It depends on the response from the company. It could be accepted or rejected'.

These things are true for most seafarers but the problems are exacerbated for those on car carriers because fast turnaround times and a high proportion of time spent at sea means that they have limited opportunities for any kind of contact with home.

99 per cent of seafarers, communicate with home when they are away but the ways in which they do so differ, which, as we shall see, provides some further interesting insights into the system of stratification on board. The cost of communicating with home is not to be underestimated and money is at the bottom of these differences. For whereas these seafarers spend an average of $82 a month on communicating with home, senior officers spend $122, junior officers $105, petty officers $78 and ratings $58. This means of course that the cost to ratings is proportionately more.

Senior officers communicate twice as much with home as ratings do (ten times a month compared to five times) but spend a smaller proportion of their total salary (3.5 per cent compared to 5.3 per cent). Not only are they helped by the fact that their salary is on average 3 to 3.5 times greater then that of ratings but a substantial part of their communication home is by email which comes to them free of charge.

As can be seen from Table 7.5, about a quarter of petty officers and ratings communicate by letter, junior officers are less likely to do so and senior officers even less likely. The reason is not that ratings have higher levels of literacy. It is that letters are 'old technology'. They are cheap and they can take a long time to arrive.

In their various ways, satellite phones, mobile phones and email are all 'new technology' but in each case they are disproportionately used by senior officers. The primary reason for this, with the exception of email, is expense, but this is not the only reason. Although email is cheap for an employer to provide, most companies restrict its use on board to officers (further increasing the relative cost to ratings of communicating with home). Typically the email facility is situated in the captain's office, which limits privacy, and other limitations may also apply with reference to the length of message that is permitted.

The use for port phones goes against the general pattern. The reason is clear enough – for in this case, new technology, in the shape of the prepaid telephone card, has cheapened communication. Indeed, Vertovec argues that the phone card has 'impacted enormously and variously on many kinds of transnational communities' and that it serves as 'a kind of social glue connecting small scale social formations across the globe' (2004: 220). His comment is highly pertinent in this context.

Cards are sold by port chaplains, ship visitors and seafarers' centres. Arrangements exist whereby seafarers can be sent pin numbers for their cards from home or from port chaplains which they can pay for later and it is to telephones equipped for card use that seafarers head when they get to port, the rates typically being cheaper than for mobiles, especially for long distance calls home.

Similar differences apply to communication to seafarers from friends and families. Senior officers are considerably more likely to receive communication from friends and family than other ranks are. Only 13 per cent of senior officers did not receive such communication compared to 24 per cent of ratings. Moreover, they were much more likely to receive email communications than ratings, more likely to receive mobile phone calls and messages and less likely to receive letters. On the other hand, ratings' friends and families make disproportionate use of fax and telephone to ship services, which unlike mobiles can be used irrespective of the time or the ship's position – an expensive option, the need for which would be removed if all crew had access to email (Table 7.6).

Table 7.5 Form of communication with family and friends

	Percentages			
	Senior (*N*=120)	**Junior (*N*=134)**	**Petty officer (*N*=50)**	**Ratings (*N*=297)**
Port phones	39	66	72	74
Satellite phones	80	79	64	55
Mobile phones	76	46	50	48
Email	42	19	12	5
Letters	7	13	24	26
Postcards	3	0	4	3

Table 7.6 Form of communication from family and friends

	Percentages			
	Senior (*N*=120)	**Junior (*N*=134)**	**Petty officer (*N*=50)**	**Ratings (*N*=297)**
Fax or telephone to ship	10	6	26	21
Mobile phones	55	38	44	42
Email	48	22	12	8
Letters	18	25	26	34
Postcards	4	0	6	4

'Up until now', Robert Taylor writes in a recent overview of the subject, 'the public discussion on work-life "balance" has concentrated almost exclusively on its gender dimension, to how working mothers and fathers can rear their children while performing paid work effectively. To a lesser extent, we have also seen an increasing public concern on how to reconcile the "balance" between paid work and the time off required to deal with family emergencies or to care for elderly and dependent relatives' (Taylor 2002: 6). There is nothing wrong with this summary of land-based research but, as should be clear by now, the preoccupations of such research – whether for example there are flexible working hours, compressed hours (fitting the working week into fewer days) and job sharing schemes and whether the employer provides a company nursery or help with the cost of child care and so on – are far removed from that part of the labour force that is hidden from public view and which is engaged in transporting many of the cars driven by those who debate these matters.

We have seen that the seafarer's problem is not only related to the very long hours worked, though these are exceptional by land-based standards. Apart from the sheer number of hours worked and what this signifies for fatigue, the length of time at sea, the rapidity of ship turnaround times, the cost of communication and the consequent social isolation from family and friends constitute particular problems which have few, if any, parallels on land – and, with respect to turnaround time are at the top end of those found at sea.

The fact that working hours are sometimes beyond the legal limit is no bar to their existence in practice; so too with the illegal failure to comply with international requirements for agreed hours of rest. Legal interventions on behalf of seafarers are difficult to enforce, a matter that we return to in the next chapter.

Some companies already hire ratings on six-month contracts with regular contract renewal. Whereas this might not always be a complete solution to the seafarer's work-life balance (since less work might mean less money) it would allow ratings more opportunity to go home. What is unquestionably the case – and again some companies have already instituted this – is that social isolation from family and friends would be very considerably improved by the addition of a few extra terminals for email access. This would go some way towards ameliorating some of the exceptional problems that car carrier crews face in their relations with their family and friends – in fact, with the 'life' part of their work/life 'balance'. Vessels are already online. The cost of a terminal is negligible compared to the $50 million or more for a car carrier.

8
Trade Unionism

Seafarers, other than those tied closely to their home port and their home country, face problems that differ considerably from those experienced by most workers in land-based industries. First, in the case of FoC ships, they effectively lack the protection of the laws and regulations of their own state. Second, even if they are members of their national trade union, for much of the time they are physically out of touch with it. These conditions mean that seafarers will tend to have only a remote relation to their trade unions, even supposing that employers will not block their membership in them. But of fundamental importance is the problem that occurs when there is a difference between the nationality of the seafarer and the flag under which a vessel is registered. As we saw in Part I, such separation, brought about by the mechanism of the FoC, is now a major fact in seafarers' lives. In this context, national trade unions are very poorly equipped to defend their member's interests.

International regulations, such as those of the ILO, do of course exist but it is far from always the case that they will be ratified by the flag state. If they are so ratified a national union has limited leverage to ensure compliance with them and will have insufficient resources to effectively communicate with ships that may operate under different employers and in several different parts of the world. As an American national union officer reflected:

> When I went to sea, I was on American ships. There were other Americans. The crew was American. There was an American company. If I had a problem with the company, when I got back home I could grab somebody by the neckties. That's not available anymore. The crews have never been in the country of the owner of the ship.

> As a consequence, that ship's national government has nothing to do with the crew. Governments of nations that are usually thought of as being reasonably benevolent have absolutely no interest in these people. They have no interest in the crews. They just exist in the air.

It is considerations such as these that underline the importance of the ITF's FoC campaign.

The FoC campaign

The ITF is a federation of national unions. In 2005, it had 195 seafarer union affiliates in 94 countries, representing in the region of two thirds of a million seafarers. The ITF provides many services to and on behalf of seafarers. It seeks to improve wages and conditions and among many other functions it provides legal assistance to recover unpaid wages and for compensation in cases of injury or death; it campaigns against unfair practices such as blacklisting; it provides a network of ITF inspectors who monitor conditions on-board FoC vessels; it makes representations to international bodies and has the status of a 'social partner' with voting rights in the ILO; it helps seafarers who have been abandoned by shipowners; it operates a hardship fund; it supports related welfare organizations such as those above. Central to the activities that the ITF engages in on behalf of seafarers, however, is its FoC campaign.

As stated in the ITF publication, *Message to Seafarers 2004*, the aims of the FoC campaign are:

- the elimination of the FoC system and the establishment of a regulatory framework for the shipping industry based on the concept of a 'genuine link' between the flag a ship flies and the place where it is beneficially owned and controlled;
- to attack sub-standard shipping and seek ITF acceptable standards on all ships irrespective of flag, using all the political, industrial and legal means at the ITF's disposal;
- to protect and enhance the conditions of employment of maritime workers and to ensure that all maritime workers regardless of colour, nationality, sex, race or creed are protected from exploitation by their employers and those acting on their behalf; and
- to individually strengthen affiliated unions, in all organisational aspects, so as to ensure the provision and delivery of a greater degree of solidarity in waging the campaign. (ITF 2004b)

From the standpoint of seafarers in the advanced capitalist countries FoC ships represented a threat to employment. This is what provided the initial impetus to the ITF's FoC campaign which had the declared objective of returning FoC ships to their national registers and which dates back to 1948. Over time, however, the ITF leadership has developed a coalition among seafarers' trade unions in high wage and low wage countries to regulate the FoC sector rather than to eliminate it.

It is often said that the shipping industry is an industry with a global labour force. We ourselves have said as much in earlier pages in this book. We do not intend to go back on that now – the industry is such that employers can and do access labour from many parts of the world and combine it in accordance with their own requirements. In this sense, the labour market is 'global'. However, the ITF strategy has been to regulate competition in the maritime industry and to prevent it operating as a completely open global labour market. It is the function of trade unions to intervene against the operation of 'free' labour markets and the ITF has found an original way of doing so.

The FoC campaign system, described by Koch-Baumgerten (1998) as a 'regime' intended to limit inter-union competition for members, distinguishes three labour markets:

- first, the labour market that consists of industrialised country flags;
- second, that which consists of international flags; that is, of seafarers working on ships under FoC and international second registers;
- third, that which consists of developing country flags, where the shipowner, ship and seafarer share the same nationality and where although shipowners can sometimes pay wages lower than FoC shipowners, competition with the FoC sector is limited by lack of capital.

The ostensible goal of the ITF campaign is to prevent ships from moving from the first and third of the above markets to the second market, that is, from becoming FoCs. In reality, though, as Lillie puts it: 'Despite the formal declaration of the objective as the "elimination" of FoC ships, most campaign activity focuses on supporting bargaining in the FoC labour market, and very little on preventing ships from changing flags' (2004: 60). There are some open registers (for example NIS) which the ITF does not oppose. Essentially, though, its practice is to declare whole registers FoC on the basis of certain criteria (notably that they make it easy for non-nationals to register a vessel) and then to demand that vessels that operate under the flags of these registers pay at least TCC wage rates.

The ITF's FoC campaign is generally regarded as uniquely successful among global union federations (Anner et al. 2006). In 2004, the year of our car carrier survey, ITF statistics suggest that of nearly 21,000 vessels around a third, just under 7,000, had ITF Agreements (Llewellyn 2005). The lack of publicly available data for the FoC sector makes it difficult to gauge the extent of the union mark-up on wages that the ITF has achieved but one estimate, derived from studies conducted by employers, suggests this may be in the region of 60 per cent (Lillie 2004). This would be an impressive achievement especially since some shipowners pay at or near the ITF rate to keep it off their ships.

If the economic outcome is impressive, the organisational and political skill that has gone into arriving at agreements with employers and national unions is no less so. The ITF's FoC campaign has depended on gathering the support of different national trade unions, each with their separate jurisdictions and interests – including in some cases an interest in attracting contracts with shipowners by accepting wages that, judged by the ITF standard, are low. It has also required coping with the emergence of new entrants onto the world market, most notably thus far the emergence of Russian and Eastern European seafarers in the 1990s who the ITF stepped in smartly to bring into their orbit (China has yet to come).

Such is the complexity and difficulty that confronted the ITF that the way it has overcome these deserves an extensive treatment (such a treatment is provided by Lillie 2003; 2006). Here, because our specific context is given by the car carrier sector, we attempt to do no more than to note briefly some of the distinctive features of its FoC campaign, the mechanism whereby the ITF has sought to impose a minimum wage rate for seafarers.

The first distinctive feature of the FoC campaign derives from the occupational composition of the ITF's union membership. The ITF's origins go back to 1896, when Rotterdam dock workers were on strike, and British maritime union leaders answered their call for support by organising an international trade union body that co-ordinated practical solidarity with the strike. Founded by seafarers' and dockers' unions in Europe, the ITF currently claims to represent over 600 trade unions with five million workers in over 140 countries. The important point here is that these are *transport* workers and that the ITF is, as the name implies, a federation of international *transport* unions. The success of the ITF's FoC campaign for seafarers was initially, and to a significant extent still is, predicated on the fact that, as a *transport* union, it also organises other workers – including port workers – who can exert leverage on shipping employers. The possibility that shipowners might face boycotts and disruptive action if they

could not produce a 'blue card' (evidence that they had signed up to the FoC campaign) proved sufficient to persuade many of them to comply. As noted earlier, fast turnaround is vital to shipping economy.

Support such as that provided to seafarers by dockworkers is not available to most global trade union federations or to international trade union campaigns, none of which, to the best of our knowledge, have succeeded in establishing minimum wage rates. That such inter-trade union cooperation has worked in the FoC sector is a tribute to both the non-sectional solidarity of dock workers and the willingness of the ITF centrally to protect and support them. But work it has, and it stands out as an important historical example of one group of workers using their industrial muscle for another. Examples of such support continue to occur (see for example Box 8.1).

In principle, this relationship could work the other way around, with seafarers providing support for dock workers, and there is a clause in ITF Agreements to the effect that cargo handling should be left to dock workers. But as a former chairman of the ITF Dockers Section has commented, while the clause is a step in the right direction 'a seafarer working on an FoC vessel doesn't stand much of a chance in refusing a Captain who insists that he, the seafarer, loads or unloads cargo' (Connolly cited in Johnsson 1996: 331).

A second, interesting feature of the FoC campaign, in addition to the support provided to seafarers by port workers – and again, an innovation when compared to other attempts at international trade unionism – has been the appointment of the ITF FoC inspectors. Formally employed by national affiliate trade unions, inspectors check that ITF Agreements are adhered to; they attempt to negotiate agreements with visiting FoC vessels that lack ITF Agreements; they liaise with dock workers' unions about appropriate action that may be taken; and they provide a range of services for seafarers. In 2005 there were 129 inspectors located in 43 countries. They sometimes cover huge areas. But in the absence of some such inspection system it would not be possible to establish international conditions and minimum rates of pay in what, by definition, in the case of FoC vessels, is not a nationally based industry, and in which, in any case, for much of the time, seafarers are at sea. All global union federations (GUFs) have to find ways to work in a supra-national way. The inspectors have been one part of the ITF's solution to this.

Another part of the solution has been the way in which, through developing its own organisation and coverage, the ITF has been able to work through a variety of international organisations – the ILO, the IMO and the OECD. No less relevant, as we shall see shortly, is that the

Box 8.1 An example of solidarity action

German port workers' solidarity action wins wage deal for seafarers

Dockers in the German port of Rostock have helped seafarers on board a flag of convenience cargo vessel to secure an ITF agreement and a substantial wage hike.

A routine inspection by ITF inspector Harmut Kruse on the arrival of Belize-flagged POL Euro 1 in port at the end of January revealed sub-standard employment conditions on board the ship. This left the seven Polish and 14 Indian crew members on earnings well below the international recommended minimum wage.

When the master and shipowner failed to respond to persistent attempts by the ITF to negotiate improved conditions, local stevedores – members of ITF affiliate Verdi – expressed their solidarity. Spurred on by a second attempt to liberalise European ports, which could see dockers' jobs carried out by lower paid crew members, the port workers were keen to support their seafaring colleagues.

Five days later, the company agreed to negotiate an ITF agreement that led to seafarers receiving a guaranteed salary of US$1,075, a US$700 increase.

Source: ITF *News Online*, 24 February 2005.

ITF has arrived at a point where it is able to negotiate with IMEC (the International Maritime Employers' Committee), an organisation representing shipowners that it succeeded in bringing into existence as a bargaining agent in 1993.

A highly unusual feature of the way that the ITF has operated is the levy that it imposes on shipowners for its welfare fund. Certainly, this money, which has to be paid for every seafarer aboard an FoC ship with an ITF Agreement, has been a 'cause of great concern to shipowners' (Chapman 1991: 90) but as David Cockroft, ITF general secretary, points out: 'welfare services should really be provided by other institutions in the industry but they are not' (cited in Johnsson 1996: 374–5). In fact, the burden of provision has fallen upon Christian charities. The ITF supports these charities through its Seafarers' Trust. In 2003, the Seafarers' Trust awarded grants to the value of over £5 million (down from over £8 million the previous year because of the effects of the

stock market crash on its investments). Of this still substantial total, roughly £400,000 went to Western Europe, £1.6 million to Central and Eastern Europe, £200,000 to North America, about the same to South America, £150,000 to Asia Pacific and about the same to Africa. These monies were for capital projects – buildings, equipment, mini buses and so on. A further £2.5 million went to international projects (ITF 2004a). The ITF's close relation with port chaplains, whose operations often depend on awards such as these, provide it with useful information from crew members, not least from ports where the ITF is forbidden to operate and on non-ITF ships. (The provision of port-based welfare services and the role of the Christian charities is examined in Appendix 4.)

The establishment of global networks is an important part of the ITF's activities. The ITF Seafarers' Trust also finances the International Seafarers' Assistance Network (ISAN). Beginning in 1999, it approved a grant of £1.7 million to provide a link between seafarers and the organisations that provide services for them. Its aim is to help seafarers and their families with any problems or questions they may have and ensure that they receive quick and helpful advice. To do this, ISAN provides a free telephone service which is available to any seafarer from any country in the world. Free calls can be made from a growing number of countries (26 in September 2005) and a free call back service is available from any country. Calls can be made 24 hours per day, 365 days per year.

Advances in information and communications technology promise much for seafarers and in 2001 the ITF launched Crewlink – a world-wide-satellite-based telephone service based on dedicated terminals accessed via prepaid cards distributed through Seafarers' Welfare Centres, missions and shipping companies. The equipment enabled seafarers to phone almost anywhere in the world for their own social purposes and to do so at a single price with a plan to subsequently add email capability. The CrewCall prepaid value card was a disposable card that could be used on any ship participating in the scheme. In this particular case the unions' attempt to innovate came to nothing. Another initiative, the attempt to provide a banking card for seafarers, was dashed by tighter banking regulations introduced by the US government following the terrorist attack on 11 September 2001. This would have removed the risk of keeping money on-board for extended periods, prevented unscrupulous shipowners from forcing seafarers to surrender back-pay that the ITF had won for them, provided them with world-wide access to funds and made debit card facilities available to their families.

The ITF has not lacked for other innovations, however, and – to get back to this now – the ITF's FoC campaign provides several examples of a

highly innovative approach to establishing an effective international trade unionism in the maritime industry. There is the use of the dockers' industrial muscle. There is the inspector system. There is the fee charged for seafarers' welfare. But there is something else – an unfolding strategy that seeks to go beyond resort to disruptive action and boycott – tactics which, though they may cause shipowners to sign up to an ITF Agreement, provide no guarantee that such agreements will be effectively implemented. This other strategy has to be seen partly in the context of the decline in the power of the dockers – a consequence of the privatisation of dock work and, as in the UK, of the legal prohibition of secondary trade union action in support of other groups (one of the changes to industrial relations law instituted by Margaret Thatcher in her 1980 Employment Act to weaken labour and strengthen capital which subsequent political administrations have left on the statute book). Outside the industrialized countries resort to the muscle of dockworkers is in any case made more difficult by differences in living standards. In India, for example, Indian seafarers who are on foreign-flagged vessels may earn ten times more than dockers. In the Persian Gulf there are many dockers from India, Bangladesh and Sri Lanka on two-year contracts, working 12 hour days, living in compounds and earning $200 a month. Here, and elsewhere in the world, the reigning politics also seriously impede industrial action.

The first manifestation of this other strategy was a two-tier wage system according to which employers who signed up voluntarily to a TCC Agreement got a cheaper deal than the standard one (the so-called 'Standard Collective Agreement'), the latter being demanded when it has been necessary to invoke industrial action. As David Cockroft dryly observed of this: 'If a shipowner comes to us of his own accord, you can say that the TCC Agreement is the discount, or bonus, he receives for good behaviour' (cited in Johnsson 1996: 365). Since 2004, a further step has been taken in this direction in the shape of the International Bargaining Forum (IBF) Agreement.

IBF Agreements have been built on the back of the relationship that the ITF forged with IMEC and in particular its Joint Negotiating Group (JNG). They now figure prominently in the ITF's portfolio. By September 2005, the ITF had 86 Standard Agreements, 3,863 TCC Agreements and as many as 2,419 IBF Agreements (Krznaric 2005).

The IBF Agreement, couched in the language of 'partnership', consolidates the ITF's place at the bargaining table. It achieves considerable economies of scale for trade union organisers, both by instituting a system of two year agreements and by shifting the emphasis to signing up whole fleets rather than individual vessels. Among other things, it introduces a

disputes procedure. Shipowners, for their part, benefit in several ways: they have less paperwork; they obtain 'green certificates' (as opposed to the blue ones for TCC vessels), which put their vessels into a low priority inspection category. They have a margin of flexibility of plus or minus five percent on that part of the settlement that goes to officers' as opposed to ratings' pay. They now have a joint say in the allocation of five per cent of the levy made for seafarers' welfare (the maximum percentage of the total wage packet which can, by local agreement, be allocated to social, educational or training benefits now having been increased from 10 to 15 per cent). They also pay only $230 instead of $250 per seafarer into the ITF's separate Welfare Fund each year.

Some shipowners and their allies are wont to make much of the corrupt nature of some national unions in underdeveloped countries (and elsewhere), and to hint darkly about misuse of the Welfare Fund. They become apoplectic at the thought of the ITF providing resources to enlist and maintain the support of dockers or to compensate national seafaring unions that are adversely affected by the pursuit of its larger policy objectives. Yet to the extent that such practices can be found, they have come about in an industry in which, on both sides of the Atlantic, seafarers' national trade unions in the wealthier countries were traditionally inward-looking, and, with regard to the so-called 'yellow peril', sometimes racist. On this front, ITF practice marks an important step forward. And, in the absence of the FoC campaign, owners of FoC fleets would have held unfettered sway since national unions patently could not counter them, least of all those from poorer countries.

Lillie has correctly stated that 'The International Transport Workers' Federation Flag of Convenience campaign is one of the very few bright spots in a dark period for the global labour movement' and that it 'is the only case in which unions have developed a sustained, effective transnational strategy on a global level' (2003: 1.2). But there are of course problems that remain, even when vessels are covered by ITF Agreements. Three such problems concern: ensuring that Agreements are complied with; the issue of under-crewing; and the involvement of national affiliated unions and their members. These are discussed one by one below.

The problem of ensuring compliance with agreements

The problem here can be briefly stated. It is far from unknown for hours of work and pay to be falsely recorded. For most of the time, ships are at

sea. Even in port, inspectors cannot inspect everywhere and all the time. And many crew are vulnerable, especially those from poorer countries.

Under-crewing

The very long hours that seafarers work, including those on car carriers, are often discussed exclusively with reference to fatigue. They are in fact the result of under-crewing. ITF Agreements specify minimum hours of rest and that ships shall be competently and adequately manned and in no case at a lower level than in accordance with relevant international laws. The falsification of records most certainly makes for difficulty in ascertaining the true state of affairs but this is a side issue – because even if international law was followed and even if everything was arranged in a legal manner this would still not be satisfactory. International regulations on crew size are intended to ensure safe navigation – not to enhance the quality of life of seafarers. Very occasionally, a voice emerges from the shipowners' side to the effect that 'good owners recognise that minimum crewing levels are inadequate' but one of them who said just this to a recent ISF Manning and Training Conference was soon firmly dismissed by a member of the UK's delegation at the IMO on the grounds that 'It is not sensible to regulate globally a matter that is best determined locally' (*Fairplay Daily News* 2005).

From the standpoint of most shipowners, increased crew levels mean increased labour cost. From the standpoint of the ITF there are also difficulties (other, that is, than gaining agreement for increased crewing from shipowners). Both the ILO 180 Convention and the 1999 EU Organisation of Seafarers' Working Time Directive allow exceptions, and National Union TCC Agreements may well contain clauses that some national unions can deploy to attract shipowners. In many cases, national trade unions in poor countries have precious little other advantage to bargain with.

In addition, since seafarers are at sea – or as some of them put it, in 'prison' - for months on end, they may well reason that there is little else to do and they may as well get paid for it. In such cases they may not always be as receptive to reductions in hours, and related increases in crewing, as might be thought. Indeed, as we saw in Chapter 5, the TCC Agreement specifies 103 hours of guaranteed overtime. As judged by the quality of life of the crew however, the inadequate level of crewing remains a problem for seafarers and for their global union federation.

Involvement of national trade unions and members

Involvement of affiliated national trade unions with the ITF and most especially of members with their national trade unions is a further

underlying problem. For although ITF strategy is developed by ITF officials together with national union leaders, national trade unions tend to be left with little power. Their members are often also left with little sense of union identity – the prospect of the latter developing being all the less likely in so far as it is dockers, not seafarers themselves, who are the active agents of struggle.

The situation in which the dependence of national unions on the ITF and the latter's centrally co-ordinated strategy make for little involvement by seafarers in their own national unions is exacerbated by an absence of shop stewards or similar systems of representation on-board. There is reason to believe that seafaring unions have always been 'centralised, staff driven, and service oriented' (Lillie 2003: 45). In the case of the UK, it took a bitter struggle against union officialdom in the National Union of Seamen to secure on-board representation in the shape of the Shipboard Liaison Scheme of 1965. But this did not challenge established shipboard authority, it gave no additional protection to the seafarer from the possibility of arbitrary justice from the master and the major functions of the liaison representative were of a 'co-operative and consultative nature' (MacFarlane 1970: 16–17). Furthermore, Article 1.1 of the 2004 IBF Framework Agreement explicitly reinforced established shipboard authority. It stated 'nothing contained in this Agreement is intended or shall be construed as to restrict in any way the authority of the Master.'

Although it is undoubtedly the case that the ITF's FoC campaign has been beneficial to seafarers, the combined effect of several of the features outlined above – plus the effects of the short contracts held by many seafarers, which makes them a transient population which is difficult to organise, as does the limited number of seafarers per ship – suggest that a less than active and committed trade unionism will be found on most vessels. Another practice – the collection of union dues by the employer through the so-called 'check-off' system – also points to this conclusion. Nowadays, when it is difficult to recruit members, few trade unions would baulk at the prospect of employers collecting their dues for them. In some cases, though, ITF Agreements are made in which employers do not even subtract members' trade union dues out of their pay but do so directly so that members see no sign of the process.

Seafarers included in our investigation on car carriers belonged to over 40 different national unions – a fact which itself underlines the importance of some sort of global union to ensure common conditions of employment and the difficulties faced in working towards this. Altogether 57 per cent were classified by us as members of a (national) trade union but seafarers often found the apparently simple question – 'Are you a

member of a trade union?' – difficult to answer. Several thought they were members but did not know the union's name. 'I think I am a member but I don't know the name', they said, 'someone else can tell you'. In another case, a lack of certainty was excused on the grounds that 'the name was given me by the company'. That people did not know whether they were members or not – or did not know whether they were still members having been so once – is not difficult to understand given the way that their dues were sometimes collected. What is quite clear is that few were active union members.

Seafarers often complained of their lack of connection with their national unions. 'Yes I am a member', a Portuguese engine room rating complained, 'but I am obliged to join otherwise the company would not employ me. I've never had a paper, letter, or a membership number, and I pay one per cent of my salary every month.' Others made the point that being in the union meant no more than paying membership dues: 'I've never been there [to the union]', an Indian chief engineer said, 'I only pay fees. The company forces me to pay the dues but after that they are not bothered.' An Indian third officer on another vessel, who complains that he pays $12 a year in fees, says just the same: 'The union is so ineffective. They don't achieve anything. The name is there. Nothing else.' As a Ghanaian motorman puts it: 'OK, we have a seaman's union but it's not effective. It's not very effective, because for the past three years I have never even seen one of them with my eye, but I contribute every time I come on board. But we don't know where the money goes. So, OK they [the company] said there's a union. We accept that, but we don't see the union.' Many others made clear that their membership was only 'on paper'. Generally, seafarers did not expect their national union to help them. They felt that they had (literally) little time for the union when they were ashore and that, as an Ukrainian chief engineer put it: 'If anything happens on board I can't get any help from them. The only help I can get is from the ITF.'

Looked at more systematically, of those who thought they were union members, 17 per cent described their relation to their national union as 'poor' or 'very poor'; 36 per cent described it as 'good' or 'very good'. But 45 per cent, the largest proportion, described the union in non-committal terms, as 'neither good nor bad'.

Filipinos, the largest national group among those we surveyed, fit this general pattern. 'I can't figure out about the unions in the Philippines', a Filipino AB confessed, and his confusion was understandable. There are six seafarer unions in the Philippines, with a combined membership of 80,000 (or 38 per cent of the 209,953 Filipino seafarers who were

active in 2002). The biggest and most influential seafarers' trade union in the Philippines is the Associated Marine Officers and Seamen's Union of the Philippines (AMOSUP). It is an ITF affiliate, claims 55,000 members and provides an extensive range of services for its members including, among other things, hospitals, a maritime school and training centre, a hostel, housing projects and a retirement provident fund. On the other hand, Captain Gregorio Oca, the president of AMOSUP, has maintained his leadership of the union since he first organized its precursor, the Associated Marine Officers' Union of the Philippines (AMOUP), in 1960 (Amante 2004). The union is not famed for its democratic practice.

Of course, the problem for seafarers is not simply that they have little effective relation to their national unions. Some companies are hostile to unions and have clear anti-ITF strategies. As the present General Secretary of the International Ship Managers' Association once told an International *Lloyd's Ship Manager* Ship Management Conference:

> For years now we have made sure that foreign masters and chief engineers working with Filipinos are given long training sessions in the Filipino mentality .... The end result is that we have Filipino-crewed vessels which enter the most hostile ITF ports, and despite the repeated temptations and overtures from ITF we have no reservations or worries. We *know* that we shall not have any problems (Chapman 1992: 90).

Generally, though, there is a marked lack of membership engagement in the national trade unions. The ITF is making some attempts to rectify this problem through its recently instituted Seafarer Union Development Programme which seeks to strengthen and develop independent national seafarers unions throughout the world and to encourage democratic and transparent practice. On the other hand, it is difficult to see the present separation between members and their national trade unions being readily bridged.

It is a standard criticism of the currently fashionable 'partnership' approach to trade union practice, which is an important element in the new IBF Agreements, that this does little to engage the membership. Whereas the pursuit of partnership is only one strand in what for the ITF is a multi-stranded approach, it remains to be seen whether a membership signed in this way, in what for the shipping industry are time of exceptional prosperity, will survive a downturn. However, the spatial, ownership and management characteristics of the modern global

shipping industry are such that the development of an active rank and file is much more difficult than in most other industries.

Meanwhile, the ITF leadership retains a key eye for strategic advantage. It seeks to keep onside those employers who comply with its agreements – an ITF information booklet for members telling them, for example, 'There *are* good [FoC] ship owners' – and is seeking to form a long-term bargaining relation with them. In recent years it has also developed a campaign team with the remit of developing a proactive approach, which implicitly recognises the decline in the power of dock workers and, at the same time, the rise of logistics, and which seeks to utilise networks of influence that extend to charterers, other companies owned by target shipowners and NGOs such as Greenpeace and the WWF (World Wide Fund for Nature).

Faced with problems that at first sight many people would regard as insurmountable, the ITF continues to innovate and to broaden its approach. It is commonly observed that during the 1950s and 1960s, the ITF engaged in political and industrial efforts to stop FoC ships from operating and that since the 1970s the campaign has taken on a more directly industrial focus, with unions trying to force shipowners to sign ITF collective agreements (Lillie 2006: 4; Johnsson 1996: 44–51; Koch-Baumgarten 1998: 448). The validity of such observations should not be allowed to obscure another aspect of recent ITF strategy, however, which in its own way represents a resurgence of the political. This partly takes the form of an attempt to proceed other than exclusively by force, or the threat of this, and it partly entails attempts to secure a position of institutional centrality. The IBF Agreements are an important recent expression of this, representing as they do an attempt to deliver closer long-term relations with the shipowners and ship management companies. However, the ITF has been quite open that it has sought to develop a wider circle of influence than this – to practice what might be termed partnership writ large. As Cockroft put it in a 1998 speech on how the ITF saw its role developing in the future millennium: 'We need to change the maritime industry and that involves lots of people, owners, managers, P & I clubs, class societies, maritime labour, the bankers who lend the money, and above all the charterers who use the ships' (Cockroft 1998: 25). Indeed, Cockroft regards the Consolidated Maritime Labour Convention, due in 2006, as a fruit of this type of activity – and as something which, because it has widespread employer and state support, has the chance of being 'the first enforceable ILO Convention' (Cockroft 2005). The hoped-for implications of this for improved compliance are obvious enough.

Developments of this sort – seeking a position of institutional centrality with major ship management companies and shipowners in the IBF and also seeking to form circles of influence beyond this - might be taken as evidence of the 'maturing' of the ITF as an organisation. In one sense this is certainly the case since such relations take time to develop. But our point is that, today, the ITF campaign is, in important respects, more sophisticated than an attempt to lever up the position of seafarers by utilising dockers' muscle, important as the threat of this remains. The downside is that whatever the ITF's good intentions or its achievements, it largely operates over the heads of seafarers, who are the ones it ultimately seeks to serve.

Does it matter, then, whether seafarers sail under national flags or on FoCs with ITF Agreements or on FoCs without these?

Seafarers aboard national flags and FoCs with and without agreements

As we reported earlier, of all those vessels that are FoC the ITF estimates that about 30 per cent have agreements. Trade union officials are of the view that because car carriers have high value cargo and run on such tight schedules they are likely to have a higher percentage of FoCs which have ITF Agreements. This is confirmed by the vessels in our sample. Whereas 60 per cent of them are FoC, which is in line for other data for car carriers (SIN 2004), the percentage of these FoC vessels that have union agreements is more than twice as high as the ITF estimate for all vessels. Of all our FoC car carrier vessels 62 per cent have TCC Agreements, 9 per cent have IBF Agreements (which only came into force in 2004) and only 28 per cent have no ITF recognised agreement. There are no vessels with ITF Standard Agreements (in effect the punitive agreements that the ITF has managed to force shipowners into).

The question arises of what if any difference the presence of national flags and the different types of agreement make. In now turning to consider this we focus on ratings only, in an attempt to minimise an obvious source of occupational bias, and we have checked the distribution of our largest national group, the Filipinos, against the categories we employ – national flags, FoCs with either TCC or IBF Agreements (these two being taken together because of the low number of the latter) and FoCs without agreements. We have also checked on age of vessel. The results do not suggest any marked imbalance. Average vintage of the vessels on which these ratings served differed by only four years – for national flags (predominantly those of Sweden, Norway and Italy) 17

years; for FoCs with Agreements 15 years; for FoCs without Agreements 13 years. The highest concentration of Filipino ratings in our sample was in national flag vessels (71 per cent, followed by 68 per cent in FoC vessels with agreements and 59 per cent in vessels without agreements).

The comparison of ratings working aboard national flags and FoCs with and without ITF Agreements suggests a number of differences (Table 8.1). There are differences in seafarers' views on their relation to trade unions according to whether they work under national flags or on FoC vessels and to some extent between those who work on FoCs with Agreements and those without. Such differences are also reflected in perceptions of shipping companies' attitudes towards unions. What is impressive, however, is that such differences permeate a whole number of aspects of shipboard life and working conditions. As can be seen, ratings working under national flags are more likely to positively evaluate relations with their company and crewing agency (which in the case of national flags are usually company-specific) than those working on FoC vessels with Agreements and these are much more likely to do so than those on FoCs without Agreements. There is no such difference with respect to the assessment of relations between officers and ratings between those ratings on national flag ships and those on FoC ships with Agreements (ratings on FoC ships with Agreements seem just as satisfied as those on national flags). In all the cases considered, however, there is a clear difference between those under national flags and those under FoC vessels without agreements.

We asked seafarers some standard questions about their pride in and loyalty to their companies. The same pattern eventuated. To the extent that respondents might have thought it prudent to give positive responses to such questions, they still did so in a differentiated manner. Moreover, this pattern of response equates to certain objective differences in, for example, the provision of welfare benefits for retirement and health care.

With reference to the data for pensions and medical benefits in Table 8.1, it should be noted that there are certain lacunae in the ITF Agreements. Owing to the contractual nature of employment in the industry, the TCC does not cover pensions. Outside of Singapore, most seafarers from Asian countries have no retirement pension contribution from their employer and this is also rare for those from Indian Ocean and East European countries. These agreements are similarly silent on the provision of medical care when on leave. When on leave, Filipinos – again focused on because they are our largest national group, though one that is distributed evenly across national flags, and the different

Table 8.1 Experience of ratings aboard national flags and on FoC's with and without ITF Agreements

Percentage who agree	**National flag**	**FoC with TCC or IBF Agreement**	**FoC without agreement**
Relation with union			
Very good or good (*N*=177)	64	33	18
Perception of shipping companies' attitude to unions (*N*=189)			
In favour	27	17	7
Neutral	57	45	21
Not in favour	16	38	72
Relation with company, crewing agency and officers – very good or good With the company (*N*=265)	82	67	48
With the crewing agency (*N*=266)	84	55	42
Between officers and ratings (*N*=273)	70	71	54
Company loyalty and pride who they work for – strongly agree and agree			
I feel loyal to company (*N*=279)	86	78	72
Proud who I work for (*N*=277)	74	56	41
Social welfare provision – yes			
Retirement plan with employer (*N*=276)	68	28	20
Medical insurance on leave (*N*=277)	74	56	41
Training and skill			
Training provided by the company over the last 12 months (2 days and over) (*N*=279)	67	40	10
Encouraged to develop skills (*N*=272)	84	51	40
Hours			
Have 6 hours uninterrupted rest every day (*N*=277)	27	8	2
Work over 72 hours a week (*N*=272)	43	84	80
Evaluation of officer performance – very good or good			
Keeping you up to date (*N*=268)	85	59	42
Providing chance to comment (*N*=272)	79	41	24
Responding to suggestions (*N*=270)	77	42	27
Dealing with crew problems (*N*=267)	81	53	42
Treating employees fairly (*N*=269)	80	53	47

(*Continued*)

Table 8.1 (*Continued*)

Percentage who agree	**National flag**	**FoC with TCC or IBF Agreement**	**FoC without agreement**
Consultation – frequently or sometimes			
Crewing issues (*N*=282)	38	13	9
Change to work practices (*N*=280)	38	20	9
Pay issues (*N*=284)	34	15	7
Health and safety at work (*N*=281)	68	63	42
Influence – a lot or some			
Range of tasks (*N*=285)	56	36	20
Pace of work (*N*=289)	57	21	13
How you do your work (*N*=289)	61	25	15
Job intensity, work related stress and job security – strongly agree or agree			
My job requires that I work very hard (*N*=287)	62	79	85
I never seem to have enough time to get my job done (*N*=283)	34	57	62
I worry about work during my resting hours (*N*=284)	34	68	80
My job is secure (*N*=290)	70	37	29
Satisfaction with pay and physical conditions – very satisfied or satisfied			
Pay (*N*=290)	82	73	40
Physical working conditions (*N*=282)	78	44	30
Working in pain – half the time or more Worked with physical pain or discomfort (*N*=276)	9	23	24

types of FoCs - have medical health coverage for a maximum period of six months and it is mandatory for them to contribute to a medical insurance system. Seafarers from Indian Ocean, East European and Asian countries are less fortunate, the great majority – 95, 100 and 72 per cent of those surveyed, respectively – have no such benefit. (ILO Convention 165, which relates to social security provision for seafarers, has been ratified by only three countries.)

Similar patterns to those reported on already characterise ratings' views on matters related to training and skill development and to hours of work and rest. Such responses go hand in hand with ratings' evaluations

of their officers' performance, as judged by how well they keep them informed, treat them fairly and similar indicators. Here again, those working under national flags are more likely to make positive evaluations than those under ITF-recognised agreements and these again to be more positive than those on FoC vessels which have no agreements.

Ratings' views on various dimensions of work experience follow the same pattern. They are to be seen in ratings' perceptions of how well they are consulted and of the influence they perceive themselves to have over how they work. They relate to how hard they work and issues related to stress and job security; and to further important aspects of work – their satisfaction with pay, physical working conditions and the extent to which they report having worked in physical pain or discomfort.

Overall, it is clear that ratings who work on FoC vessels that lack ITF Agreements are the most disadvantaged. Among other things, they are less likely to be encouraged to develop their skills or to feel that their jobs are secure or to be consulted on crewing, pay, health and safety and other issues and they are less likely to feel they have any influence over their work. Not surprisingly, they are less likely to take pride in who they work for. Although the majority of ratings on car carriers lack six hours uninterrupted rest a day, those on vessels that lack ITF Agreements are more likely to do so. They are also more likely to feel they work very hard, to feel pushed for time and to worry about their jobs during their rest hours. In future, too, they will be more likely to lack free email communication home because they will not be covered by a new ITF Agreement that comes into effect in 2006, which includes the provision of funding for this on each IBF ship. The slogan 'The union is the members' may have a hollow ring in the trade unionism practiced on car carriers – and probably elsewhere in merchant shipping (and not only there of course) – but the message for those wanting to go to sea on car carriers is clear enough and can be summed up by another slogan: 'Go for the national flag of a traditional maritime nation; failing that an FoC with an ITF Agreement'.

9
Conclusion

It is well over a century since Karl Marx trenchantly declared in volume three of *Capital* that three cardinal facts of capitalist production were: (1) concentration of means of production in few hands (2) organisation of labour itself into social labour and (3) creation of the world-market (Marx 1981: 375). All of these processes can be seen to have been at work with a vengeance in the shipping industry generally, as well as in the maritime car carrier sector.

As far as concentration is concerned, the shipping container industry, which we looked at in Chapter 2, has undergone a progressive concentration of ownership, culminating in the merger of its two largest components capitals in 2005, AP Møller-Maersk Group and P&O Nedlloyd, each the product of yet earlier mergers. In the car carrier sector, which we considered at industry level in Chapter 3, the same process has been at work. Only half a dozen companies now account for nine tenths of the vehicles handled and stand face to face with a car manufacturing industry that itself is increasingly concentrated and in which half a dozen companies account for around three quarters of worldwide vehicle output. The massive costs entailed in the maritime car carrier business make it difficult for newcomers to break into the market as does the need to demonstrate to car manufacturers that a reliable service will ensue and also the various interconnections that exist between those already in the industry which extend to chartering space on each other's ships.

As far as the organisation of labour into social labour is concerned, no industry has probably gone further than shipping to develop a world division of labour. Car carrier crews are drawn from around 50 different countries, motivated largely by the desire of shipowners to hold wages below levels that would be demanded by labour in the more prosperous countries.

As for the world market, it was precisely to serve the different continents and countries of the world that the modern car carrier sector developed. The resort to FoCs is, as we have argued, the industry's functional equivalent to capital export or the importing of migrant labour in land-based industry – and shipping generally has been subject to a degree of deregulation beyond the dreams of many neo-liberal governments.

Recent years have seen little discussion of Marx's three cardinal facts and a lot of discussion about post-Fordism. Quite what is signified by this term is often unclear and the assumption that all industries were once Fordist is itself manifestly untenable (Beynon and Nichols 2006) but some of these ideas have found their way into contemporary discussions of shipping and logistics.

Notteboom and Winkelmans (2001:72), who make use of the terms 'Fordism' and 'post-Fordism', follow the common practice of setting up a series of opposites. Among other points of comparison, with reference to competitiveness, they contrast economies of scale based on basic production factors in Fordism (capital, land, labour) to economies of scope based on advanced production factors (know-how) in post-Fordism. With respect to the nature of products, they contrast standard products, extended life-cycles and low-lead time to large product variety, short life-cycles and short time-to-market. With reference to environment they contrast stability, limited insecurity and existing markets and products to dynamism, high insecurity and new markets and products. With reference to organisation, they contrast the integrated firm, standard procedures and processes and in-house production ('make') to incident management and outsourcing ('buy').

Notteboom and Winklemans were particularly concerned with logistics, ports and port management but recently some partly overlapping ideas about the supposed movement from Fordism to post-Fordism have been set forth specifically in relation to shipping by Selkou and Roe (2004:184–7). With reference to the labour process they emphasise the importance of flexibility – something which they claim to have been inherently missing from the Fordist model where management control, state interference and economies of scale dictated a rigid and limited approach. In this connection they draw attention to the view that a post-Fordist structure promotes the prospect of a multi-skilled labour force operating in a less hierarchical work environment. They see the introduction of micro-electronic technologies and communication systems as fundamental and related to the demand for a highly educated workforce. They further summarise that changes in the skills required by seafarers, notably advanced computer competence and

greater inter-departmental flexibility, will probably lead to a future breakdown in the difference between officers and ratings. Also introduced as a trend is the development of supranational 'super ports' (such as Singapore and Rotterdam).

With reference to accumulation regimes, Selkou and Roe refer to a permanently innovative form of accumulation, the model being characterised by flexibility to allow adaptation to market demands in order to facilitate continued accumulation. We are told that flexibility in supply-chain management is now the most significant driving force in logistics as markets become increasingly sophisticated in their demands. These authors consider yet further dimensions which supposedly characterise post-Fordism but as is often the case in the Fordist/post-Fordist literature, it is unclear at various points how far their analysis relates to historical fact and how far it relates to what would eventuate were some of the features which other writers associate with models of post-Fordism to be found, in this case, in the shipping industry.

Some of the features Selkou and Roe attribute to the post-Fordist labour process do resonate with some of the changes we reported in Chapters 2 and 3. For instance, among other things, they point to changes in the vessels used and in port equipment, to the increase in the number of registries adopted by shipowners, and to the variability of crew nationality (2004: 185). However, some other features – or aspects of models, which were in any case developed initially with an eye focused on land-based industry – are difficult to find at all in the maritime car carrier sector and others actually coexist with what might be regarded as discrepant elements. For example, in so far as Selkou and Roe themselves consider that a multi-skilled labour force has come into existence which operates in a less hierarchical work environment, it must be said that such a description does not fit well the labour forces to be observed on-board car carriers. Whereas at least the rhetoric of contemporary land-based management does indeed make much of polyvalence, multi-skilling and less formal and hierarchical work environments, it is the absence of these very features at sea which is likely to impress the land-based observer. As we have shown at considerable length, the car carrier maritime sector remains extremely hierarchical, with clear status demarcation between officers and ratings. Shipboard operation is characterised by high degree of formalisation, which must count as 'Fordist' if by that is meant the rigid rather than flexible definition of duties; and it is remarkable how strongly defined the division between Deck and Engine Room persists. Then again, on-board ship organisation lacks the supposed social characteristics of the 'high

commitment workplace' and is marked by a significant lack of consultation on work practices. Such examples are sharply at odds with some fashionable prescriptions and (probably often quite unfounded) descriptions of the land-based 'post-Fordist work place'.

If Marx's three 'cardinal facts' are deeply inscribed in the operation of the maritime car carrier sector, its particular dynamics have been closely affected by those of the industry that it serves, car manufacturing. This is most obvious of all with respect to trade routes. The rise of Japan and the export of capital from that country in the shape of car transplant factories, which were a product of its very success in the export market, changed the trade routes that car carriers sailed, leading to the development of cross trades. More recently, the Korean car industry has affected the picture as has the practice of European and other manufacturers to relocate their plants, with consequent diversification of trade routes. In the coming years China may well change the picture again.

Generally the car carrier maritime trade has increased with manufacturing car output. Whether this continues to be the case over the next decade or so will depend on how long it takes China, which is likely to be a new and major player in world car production, to satisfy its home market and make a significant contribution to car exports and the ocean going trade. On the other side of the equation, it will also depend on the growth of production sites around the world, such as Brazil in South America, South Africa in Africa, Turkey in Europe, Thailand in Asia and so on. What is certain, though, is that the maritime car carrier sector has been powerfully affected both by the growth in vehicle production and by the location and relocation of production sites.

Those who speak of post-Fordism tend to stress the allegedly new practices associated with outsourcing. It is true that the practice of outsourcing is highly developed in the shipping industry in general and in car carriers in particular. A whole variety of different functions are not uncommonly contracted out – recruitment of crews, technical and operational management, training, monitoring of regulatory compliance and so on. Yet whether or not such services are provided in-house or bought-in, the fact remains that today very large sums of capital are invested in ships, and often also in port and related facilities, and this puts pressure on those who run ships to utilise them as fully as possible – shipowner or ship management company, the pressures are the same.

If the need to utilise ship capacity to the full and to keep ships in operation for the maximum time possible applies whether functions are outsourced or not, it is also the case that the worldwide weakening of labour, which has coincided with increased outsourcing, has permitted

the development of a number of practices quintessentially associated with, and indeed directly driven by, the land-based car industry and lean production. These take the form of a tightening of the screw of accumulation – faster and more predictable delivery of goods, increased pressure to sweat assets and to intensify labour – and most dramatically, the reduction in turnaround time, which is to car carriers what the reduction in unproductive time in the factory is to car manufacturing. The demand by some car manufacturers that cargo be discharged at a particular port at a specific time makes for an equivalent pressure on car carriers to the JIT pressures that apply in the factory.

The drive for profit in the maritime car carrier sector has led to improved labour output ratios as smaller crews have worked on bigger ships. It has led to a number of technological innovations – bigger ships, adjustable decks, the removal of internal columns on decks to increase space for more cargo, different sorts of ramps and so on. However, despite the apparently 'modern' or 'advanced' strategy to substitute capital for labour, and despite also what many would regard as a post-Fordist move towards mixed cargoes (the attempt to attract H&H vehicles), the industry also relies on a strategy of subjecting its labour force to long hours of work, which, never mind post-Fordism, is as old as primitive accumulation. Other practices such as the denial of email facilities to seafarers, the short contracts to which they have to work and the lack of training provision by some companies all underline the absence of 'modernity' in the functioning of this undoubtedly capital intensive and global industry. No more to be celebrated is that since the 1970s, increased resort to flagging out has meant the erosion of a hitherto nationally based port welfare system and the increased reliance of seafarers on charitable provision during their time in port.

It would be wrong to characterise all companies as engaging in blacklisting, falsifying wages and hours or forcing seafarers to handle cargo. As we saw in Chapter 6, a social democratic option is favoured by some employers and, as we have also seen, seafarers would appear to appreciate the training, longer employment contracts and shorter hours of work that go with this. Differences between companies are rarely investigated, if at all, in the maritime literature and therefore deserve special mention here. In particular, the industry might do well to take note that some companies would seem to command more loyalty than others and a greater sense of pride among their employees. In our estimation, these outcomes are a function of the manner in which employees are treated. The 'social democratic option', as we have called it, may have certain material underpinnings – a cargo mix that brings with it a higher rate

of profit for example, which would more easily permit shorter hours of work, shorter contracts, more training and better pay per hour – but it extends also to the way in which seafarers are treated – less formality and less status segregation. And, as we have seen, there are ways in which the lives of crews, and their families, could be improved significantly sometimes at minuscule cost to the employer, free access to email being a glaring example of this.

Recently, the ITF, to turn briefly to this now, has managed to obtain an agreement through the employers and ship management companies with which it negotiates to provide email facilities on their ships. This feature of the 2006 IBF Agreement will certainly make for an improved quality of life aboard ship. Moreover, the position of the ITF might itself be thought to be strengthened by another feature of the 2006 Agreement, whereby joint negotiating committee members agreed that they would recommend to their principals that they should not use stevedoring services which do not comply with main ILO Conventions on the freedom of association and the right to organise. However, how far the recent successes of the ITF will endure and flourish may depend on the extent to which employers and ship management companies will want to adhere to agreements that they have made in times of high demand when the world economy turns down. Clearly, too, if the ITF is to retain its leverage it will be necessary for seafarers to keep the dockers – who have been widely subject to privatisation and re-casualisation – on side. It is partly to this end that in 2006 the ITF will launch a Port of Convenience Campaign. In 1978 enforcement of the SOLAS was extended to port states in an attempt to overcome the problem of lax standards and non-enforcement of existing legislation by flag states. But in 2002 the average detention rate varied between 2.7 per cent to just over 9 per cent, giving an average detention rate of around six per cent (Alderton 2005:73) – hence the term 'ports of convenience'.

This ITF initiative, fuelled in part by the attempt to offer something from seafarers to dock workers can also be seen as part and parcel of the Federation's attempt to innovate and to gain further scope and institutional centrality. In parallel with the thinking of car carrier companies, the ITF is also giving serious consideration to the nature of the evolving logistics industry. On the one hand, this promises an increased membership base, subject of course to the interest of other unions and union federations. On the other hand, the tightening of the logistical chain, and in the case of car carriers in particular the effects of door-to-door delivery service, provides it with more pressure points to bring about compliance from employers.

Early on in this book it was noted that we had been influenced by the idea that the car industry itself might require re-definition. It was suggested that it might make sense for it not to be conceptualised as composed of assembly-line workers or car manufacturing plants but also, for example, in terms of those engaged in the sale and repair of vehicles. This book sought to push this line of thinking further. It focused on the sector that transports the finished product – cars and other vehicles - to the global market by sea. In doing so, it hoped to compensate for an absence in another theoretical development, chain analysis. Chain analysis manifestly goes beyond the factory, but it tends to pay scant attention to the mechanics of the transportation system that links the chain together or to the consequences of its operation for workers (who we come to shortly).

However, as we have proceeded, it has become increasingly apparent that those who run the maritime car carrier companies often do not see their future in the car carrier sector pure and simple but in a more diverse and extensive industry: logistics. Car carrier companies have outsourced several functions – crewing, training, operational management, sometimes maintenance and so on. Yet at the same time that they have got 'thinner' by divesting themselves of these functions, they have got 'fatter' by extending their operations in the logistics field. In effect, they are increasingly merging with, buying and co-operating with other providers of logistics services – ports, providers of storage space and track and trace services. They are also running vehicle processing centres and are thus in the business of custom fittings, putting in radios and so on; providing anti-corrosion treatment; rectifying defects; waxing and de-waxing and so on. Such economies of scope (which were pointed to by Notteboom and Winklemans) represent a form of product bundling. They represent an attempt by car carrier companies – or at least some of the leading ones – to get a bigger slice of the surplus and provide an opportunity to tie-in the car manufacturer through the provision of factory to buyer ('total transport') solutions. Looked at another way, they are an attempt to make sure that the savings made at sea are not lost on land and (to borrow a term pioneered with reference to car manufacturing) they make for an increasingly *lean* transport system. The opening this makes for an industry-based logistics trade union to emerge is obvious. Of course, it will have to have a global reach, like the logistics/maritime giants. Interestingly, in the shape of the ITF, it happens to exist already.

Meanwhile, the rise of flagging out and the decline in national regulation has led to a situation in which international agencies seek to

achieve a measure of regulation over the shipping industry. In car carriers as elsewhere the new battery of international regulations – MARPOL, SOLAS, STCW, ISPS – has meant increased pressure on senior officers which has been met in part with increased hours of work (itself fuelled by enhanced land-based control) and in part too by mere paper compliance. The increased pressure on senior officers is however matched by a continuing pressure on lower ranks.

Ratings experience a level of worry about their work that is not readily matched in the land-based world nor among their officers. This is heightened by their vulnerability – exemplified in our account by the position of Filipinos who can be exposed to blacklisting and other threats to re-employment, which themselves go a long way to account for the so-called 'Filipino "Yes Sir" mentality'. It is reinforced by the closed nature of shipboard society.

The idea that the ship is like a prison is one that is heard from members of all ranks from time to time and it is a stock-in-trade of sociologists that ships are 'total institutions', but closure, as we understand it here, has several dimensions and it differs in degree between ranks. Officers have limited experience of land-based work; authority on-board is highly centralised and formalised; and compared to much land-based work, the low levels of perceived influence for those in lower positions also represent another form of closure/exclusion. Then again, although all those on-board are subject to social isolation, in the form of social isolation from family and friends, this also impacts more on ratings than on officers – very clearly in the fact that they have longer times at sea, more subtly because of differential access to means of communication.

A further dimension of closure is evident in the barriers to social interaction on-board that again have the effect of excluding ratings. Such barriers, which, as we saw in Chapter 5, were considered a problem by Scandinavian researchers almost half a century ago, take on significantly greater meaning in the context of today's smaller crews. A decade and a half ago, a report produced by the US National Research Council at the request of that country's Coast Guard noted the 'sociological impacts' of the use of smaller crews and envisaged that 'new social structures will be necessary' given 'the breakdown of some of the traditional distinctions between the deck, engine and steward's department' which it presumed to have been pioneered in Europe and Japan (National Research Council 1990: 34, 44). These traditional distinctions remain well in place on car carriers, despite their reduced crew sizes and the 'social integration of officers and crew and the rearrangement of living and working spaces to encourage interaction' is notable by its

absence. The fabric of shipboard social interaction is thinner still because there is generally a lack of social interaction between those of different nationalities, Japanese tending to mix with Japanese, Filipinos with Filipinos, Poles with Poles and so on.

The most basic form of closure is of course being closed off from the land on which the great mass of humanity lives – and in this respect there is little doubt that those who work on car carriers are among the most adversely affected of all seafarers. It will be remembered that we asked our seafarers to compare working on car carriers as opposed to other types of vessel. All ranks compared working on car carriers adversely to working on other vessels on a range of criteria – living conditions, workload, pay, social life, crewing level and social space. Arguably, this might be a function of a tendency to assume that others fare better than ourselves but even supposing this might be the case, nothing matched the magnitude of the difference claimed with respect to shore leave, which was clearly seen to mark out working on car carriers from working on other types of vessel. As other data we have provided makes clear, this adverse assessment of their lot by car carrier crews is no figment of their imagination and it results directly from the short turnaround times that these vessels are driven to achieve. In fact, six out of ten seafarers on all these types of voyage regarded social isolation as a problem, three out of four doing so on deep-sea light voyages which combined the worse possible cases, long voyages and few port calls. In addition, a further dimension of social isolation comes into play – that once on-board it can be very difficult to take time off for family problems and events such as births, deaths and marriages.

The time spent at sea, and the other aspects of 'closure' indicated above, combine to make the lives of these 'other' car workers very different from those of the 'typical' car worker who is employed in manufacturing, and from those employed in most other land-based jobs and indeed from those employed in air transport who rarely experience the same length of separation from home. A consequence of making explicit comparisons between those who work on car carriers and car workers in manufacturing and other land-based industries is that it underlines some of the problems faced by seafarers generally. For in many though not all respects the conditions experienced by car carrier crews are similar to those of other deep-sea seafarers. The long hours and consequent fatigue; the time spent away from family and friends; and over the last few decades, decreases in crewing levels are not features of car carriers only. Car carriers do however experience some of the fastest turnarounds and the experience of living on a floating car park, only to

fleetingly set foot on land at another car park, which is denuded of social facilities and at times any sign of human life, is difficult to rival for its bleakness.

In the Introduction to this book we quoted Robert Blauner, who did much to form the contemporary impression of the car manufacturing worker, saying that automotive production represented the industry where the combination of technological, organisational and economic factors resulted in the simultaneous intensification of all dimensions of alienation. In the maritime car carrier industry, the combination of technological, organisational and economic factors has been no less potent. The speed of the assembly-line and the injunction that 'the line must not stop' has its complement in the car carrier sector in the speed of the ship, the imperative to keep it working at sea at full capacity and the further imperative to minimise time spent in port. And if there is little to choose, on the measures we have employed, between the extent to which seafarers on car carriers and workers in British car factories feel that they work hard or are pushed for time to do their jobs, there is a massive difference in the hours of work. On car carriers overtime comes as part of the job and the hours worked are greatly in excess of those of the car workers who work on manufacturing assembly-lines – on average, those who work on car carriers work 11 hours a day, every day, Monday to Sunday, often at unsocial hours and in an unsocial and in many respects closed environment.

Cheap labour is of fundamental importance to the maritime car carrier industry but in some respects this is not a straightforward matter. Arguably, for example, the labour of assembly workers in car factories in Mexico, South Africa, Turkey and elsewhere is 'cheap' by the standards of the advanced capitalist countries in which the ownership of these operations is often located but the wages paid are not necessarily inferior – and are often superior – to those on offer in the local economies in which these workers live. This is true for those on car carriers who come from the main labour-supply countries, too. It is a familiar refrain of the managers in car carrier companies that this is so and they are right. The seafarers from many nations who make up the crews of these vessels would not dispute this – to them, relatively good money is why they are at sea. But there are other things to be considered. For one thing, the strength of their attraction to such work is a measure of their vulnerability and in world terms, disadvantage. For another, a distinctive feature of the car carrier (and the wider maritime) industry is that crew of different nationalities can work side by side but be paid at different rates. This system breeds resentment on the part of those who are paid

lower wages, just as it would be likely to do on dry land, though there of course it would be regarded as scandalous. It can also breed insecurity, because those from currently favoured labour-supply countries know that employers and their agents are always on the look out for yet cheaper sources of labour. Nonetheless, the notion persists in the industry that the recruitment of mixed-national crews not only keeps down the price of labour but is no barrier, in Lane's words, 'to forming a cohesive shipboard society'. This probably deserves more critical inspection than it usually gets. Not least the argument that 'if one is to be cooped up with a small number of people for a long period' it is better 'to have familiars who are also strangers' (Lane 2001: 4) begs the question of what sort of 'society' this is. The answer, probably, is not one in which most people would want to live unless they had to.

It is perfectly true that examples of mixed nationality crews can be found in earlier centuries but there is no doubt that the stimulus to them in the modern period can be laid at the door of FoC vessels, to which many owners resorted to reduce labour costs and escape the restrictions imposed upon them by their national flags. As far as car carriers are concerned, and we assume this to be true more generally, there are still many advantages to sailing on vessels with national flags. Seafarers themselves rated them as better with respect, among other things, to pay and physical conditions; to social welfare provision; for training; and for hours of work. They were also rated higher on measures of job intensity, work related stress and job security; on consultation and influence. Officers on FoCs were also rated more highly and there was more likely to be loyalty and pride in the company. As we put it when discussing the issue of FoCs at greater length in the last chapter, those wanting to go to sea on car carriers should first go for the national flag of a traditional maritime nation; failing that an FoC with an ITF certificate.

The 'all in the same boat' idea runs through much discussion of ships and the shipping industry – which, lest we forget, is as profit-oriented as any other; as class-based as any other (in terms of labour-capital relations); and, if anything, more 'class-ridden' in the ordinary sense of status differentiation. Against this, we have been driven to emphasise that seafarers on-board car carriers do not inhabit one world, but several. This is so at the point of entry into work – consider, at one extreme, the entry into work of those few European officers for whom this is the continuation of a family tradition and, at the other, the desperate and often demeaning struggle undergone by many Filipino seafarers. Taking a less extreme example, consider also that while working on car carriers may

Filipino cook in his 'eatery', Cebu, Philippines, 2002 (photograph EK)

be properly termed a 'career' for officers, it is not so for the great majority of ratings. There is no cause for wonder that Filipino ratings – disadvantaged as they are – are more likely not to want their children to follow them than senior officers are.

In Europe, there is considerable concern about difficulties with the recruitment and retention of (European) officers. But most people want to get out at some point – though their aspirations differ. For senior officers, there is sometimes the prospect for some of a land-based job in the industry, for others the talk is often of catching up with social life, of spending more time with family and friends and on hobbies. For junior officers, there may be the prospect of further advancing their careers. For ratings, the options tend to be different. Among the Filipino ratings, for example, the idea is often to save as much as possible for their family and in particular for their children' education; to purchase land or to build a house (generally made of bamboo, thin sheets of wood or tin); and in many cases the dream is to set up a small business, on land – as a taxi driver, in the form of a small grocery (a 'sari sari store') or an 'eatery', a repair shop, or to become a small farmer or fisherman. Only those with a total lack of compassion could fail to wish them the very best of luck.

Appendix 1
Flagging Out and World Tonnage 1939–2003

Year	FoC grt millions	World total grt millions
1939	0.80	69.44
1940	*	*
1941	*	*
1942	*	*
1943	*	*
1944	*	*
1945	*	*
1946	*	*
1947	1.99	*
1948	3.04	80.29
1949	3.47	82.57
1950	4.12	84.58
1951	4.71	87.24
1952	5.11	90.18
1953	5.96	93.35
1954	7.11	97.42
1955	8.69	100.57
1956	10.40	105.20
1957	12.49	110.27
1958	15.27	118.03
1959	17.01	124.94
1960	16.01	129.77
1961	15.65	135.96
1962	15.28	139.98
1963	16.29	145.86
1964	19.76	153.00
1965	22.86	160.39
1966	26.13	171.13
1967	28.39	182.10
1968	32.17	195.15
1969	36.25	211.66
1970	42.11	227.49
1971	47.68	247.20
1972	56.17	268.34
1973	66.29	289.93
1974	74.70	311.32
1975	88.66	342.00
1976	99.78	372.00

(*Continued*)

Year	FoC grt millions	World total grt millions
1977	109.52	393.68
1978	111.52	406.00
1979	114.60	413.02
1980	114.78	419.91
1981	111.86	420.83
1982	113.29	424.74
1983	113.41	422.59
1984	126.20	418.682
1985	130.33	416.269
1986	133.15	404.910
1987	145.59	403.498
1988	151.16	403.406
1989	155.49	410.481
1990	158.93	423.627
1991	173.86	436.027
1992	195.42	445.169
1993	208.05	457.915
1994	223.63	475.859
1995	243.90	490.663
1996	263.37	507.873
1997	284.11	522.197
1998	297.50	531.983
1999	310.63	543.610
2000	325.46	558.054
2001	341.65	574.551
2002	349.84	585.583
2003	361.54	605.218

Source: 1939–1983 Metaxas 1984: 17, Table 1.5; 1984–2003 Lloyd's Register Statistical Tables.

Appendix 2
Distribution of Rank by Company

Percentages	**AyeCo (*N*=48)**	**BeeCo (*N*=65)**	**CeeCo (*N*=81)**	**DeeCo (*N*=96)**	**EeCo (*N*=73)**	**EfCo (*N*=61)**	**GeeCo (*N*=40)**	**JayCo (*N*=48)**	**KayCo (*N*=44)**	**Six other companies (*N*=56)**
Senior officers (*N*=118)	12.5	18.5	18.5	14.6	20.5	14.8	22.5	27.1	25.0	25.0
Junior officers (*N*=134)	22.9	23.1	22.2	25.0	19.2	19.7	27.5	22.9	22.7	14.3
Petty officers (*N*=49)	8.3	4.6	4.9	13.5	2.7	8.2	7.5	12.5	9.1	8.9
Ratings (*N*=294)	52.1	50.8	53.1	45.8	53.4	47.5	42.5	37.5	43.2	48.2
Cadets (*N*=13)	2.1	0	1.2	1.0	4.1	8.2	0	0	0	3.6
Other (*N*=4)	2.1	3.1	0	0	0	1.6	0	0	0	0
	100	100	99.9	99.9	99.9	100	100	100	100	100
Number of ABs (*N*=93)	(12)	(12)	(13)	(15)	(12)	(6)	(3)	(4)	(5)	(11)

Appendix 3
Turnaround Times and Voyage Cycles – Three Cases

Port	Arrival	Departure	Stay in port (hours/ minutes)	Cargo operations (hours/ minutes)
Case A: Car carrier with short sea port calls				
Zeebrugge	01-Jun-03	01-Jun-03	9.54	7.10
Sheerness	01-Jun-03	02-Jun-03	12.00	3.50
Bremerhaven	03-Jun-03	04-Jun-03	10.00	8.42
Vigo	07-Jun-03	07-Jun-03	11.12	4.45
Sheerness	09-Jun-03	10-Jun-03	17.54	3.00
Bremerhaven	11-Jun-03	12-Jun-03	18.00	7.20
Emden	13-Jun-03	13-Jun-03	8.36	5.50
Zeebrugge	14-Jun-03	15-Jun-03	21.00	17.45
Portbury	17-Jun-03	17-Jun-03	5.20	2.00
Dublin	19-Jun-03	19-Jun-03	14.18	4.30
Cork	20-Jun-03	20-Jun-03	13.00	9.00
Vigo	23-Jun-03	24-Jun-03	18.48	16.15
Sheerness	26-Jun-03	26-Jun-03	8.12	2.30
Bremerhaven	27-Jun-03	28-Jun-03	16.54	15.30
Newcastle	29-Jun-03	29-Jun-03	7.06	4.55
Case B: Car carrier with deep sea and intense port calls				
Gothenburg	12-Feb-04	13-Feb-04	15.00	5.00
Amsterdam	14-Feb-04	16-Feb-04	28.00	17.30
Bremerhaven	16-Feb-04	17-Feb-04	8.20	7.30
Hamburg	18-Feb-04	18-Feb-04	9.40	7.30
Southampton	20-Feb-04	20-Feb-04	19.30	7.30
Le Havre	21-Feb-04	21-Feb-04	13.00	10.00
Jeddah	02-Mar-04	03-Mar-04	18.30	17.00
Port Sultan Qaboos	08-Mar-04	08-Mar-04	8.00	7.00
Mina Saqr	09-Mar-04	09-Mar-04	5.30	4.00
Dubai	09-Mar-04	09-Mar-04	8.12	5.24
Abu Dhabi	10-Mar-04	10-Mar-04	2.35	2.15
Doha	10-Mar-04	11-Mar-04	15.00	5.30
Bahrain	11-Mar-04	11-Mar-04	2.25	1.20
Dammam	12-Mar-04	12-Mar-04	9.25	7.42
Kuwait	13-Mar-04	13-Mar-04	9.00	6.00

(*Continued*)

Port	Arrival	Departure	Stay in port (hours/ minutes)	Cargo operations (hours/ minutes)
Shangai	26-Mar-04	26-Mar-04	4.00	3.10
Kanda	29-Mar-04	29-Mar-0	7.12	5.30
Yokohoma	31-Mar-04	31-Mar-04	4.31	4.00
Kawasaki	01-Apr-04	01-Apr-04	8.30	7.12
Hitachinaka	02-Apr-04	02-Apr-04	4.38	3.50
Nagoya	03-Apr-04	03-Apr-04	4.30	3.20
Kobe	04-Apr-04	04-Apr-04	11.26	10.30
Sakai	05-Apr-05	05-Apr-05	9.25	7.15
Kunsan	07-Apr-04	08-Apr-08	10.11	8.30
Larnaca	25-Apr-04	25-Apr-04	4.30	3.05
Limassol	25-Apr-04	25-Apr-04	5.30	3.30
Livorno	28-Apr-04	29-Apr-04	5.30	3.40
Barcelona	30-Apr-04	30-Apr-04	14.50	10.24
Southampton	04-May-04	05-Apr-04	11.24	8.30
Newcastle	06-May-04	06-May-04	13.50	13.00
Amsterdam	07-May-04	08-May-04	13.45	12.05
Zeebrugge	09-May-04	10-May-04	11.50	5.50
Gothenburg	10-May-04	11-May-04	18.13	8.30
Hamburg	12-May-04	13-May-04	22.34	8.05
Bremerhaven	14-May-04	14-May-04	12.19	8.54
Southampton	15-May-04	16-May-04	16.20	5.30
Le Havre	17-May-04	17-May-04	8.20	6.30
Case C: Car carrier with deep sea and light port calls				
Omaezaki	05-April-03	7-April-03	14.30	12.00
Toyohashi	08-April-03	8-April-03	9.00	6.00
Hiroshima	10-April-03	10-April-03	9.18	6.30
Honolulu	20-April-03	20-April-03	6.06	4.00
San Juan	06-May-03	06-May-03	7.18	3.40
Jacksonville	09-May-03	10-May-03	24:12	8.30
Baltimore	12-May-03	13-May-03	25.42	7.40
Nakanoseka	10-Jun-03	11-June-03	31.39	29.25

Appendix 4
Social and Welfare Facilities for Seafarers in Foreign Ports

In the shipping industry there used to be a well-established division of labour in the promotion of welfare services for seafarers from the traditional maritime nations (from North America, Europe and Japan). Within this division of labour, trade unions provided services to their members for matters concerning technical training and employment contracts. Charitable foundations, like the UK Merchant Navy Board and the Norwegian Government Service for Seafarers provided liberal education, libraries, sporting activities and so on, sometimes with state assistance. Maritime religious ministries provided mainly pastoral care and the provision of port-based recreational facilities. The globalisation of the shipping industry has undermined this division of labour. Nationally provided trade union services and nationally provided charitable and state-aided services have declined and it is in any case beyond the resources of national unions to provide port-based social and welfare services for seafarers when they are in foreign states. The maritime ministries, which were already organised on a global basis, have come to the fore and now represent the main and almost exclusive welfare support for seafarers in foreign ports.

Today, the welfarě of seafarers in port is largely provided by a unique network of Christian maritime world ministries. The International Christian Maritime Association (ICMA) is an association of 27 different Christian Churches and Christian communities. It was founded in 1969 to encourage ecumenical collaboration and mutual assistance between these different organisations on the local port, national and international levels. ICMA 's members are charitable organisations which have organised 526 seafarers' centres and 927 chaplains in 126 countries. Some of them have a long history. In Rotterdam for example some of the maritime ministries have been providing services for seafarers for over a century. The German Seaman's Mission was established in Rotterdam as early as 1890. The Norwegian Seaman's Church goes back to 1900, the Swedish Seaman's Church to 1909, the Finnish Seamen's Church to 1927. Such maritime ministries often had their origins in providing services to seafarers of a more evangelical kind than is the case today when they perform what is predominantly a secular function. They provide local minibus services for shopping and sightseeing and make hospital visits. They run port-based seafarers' centres, typically providing accommodation, shops, recreational facilities, telephone and internet access, libraries, bars and cafes. They exchange foreign money as well as offer pastoral care – the provision of which was rated an important port-based welfare service in a major survey of the world's seafarers in 1996 (MORI 1998: 74). One consequence of reduced turnaround time has been the provision of 'speedies' – mobile shops on trailers which were first developed in Bremen by the Apostleship of the Sea with funding from the ITF Seafarers' Trust and which are driven out to ports to provide café and office facilities (internet access, telephone and so on).

The maritime ministries not only provide what is often the sole source of social support and welfare services for seafarers when they are in foreign ports, they also constitute a worldwide network through which can be brought to light the abuses suffered by seafarers and the illegalities to which they may be subject. As such, they are sometimes the first link between seafarers and the ITF – the only organisation that has any chance of actively advancing their interests and protecting them on a supra-national, global, basis (and which, as we have seen, indirectly provides financial help to such welfare organisations through its Seafarers' Trust).

The missions are voluntary organisations. They undoubtedly do good work. They by no means restrict their services to those of their own religion. In some instances, they provide prayer rooms which are available to all faiths. Despite all this, they are dependent on voluntary financial help and services and are almost everywhere under-funded. Sometimes chaplains need to cover more than one port and those ports that have seafarer centres may not have sufficient staff or money to meet the needs of all seafarers, who, in any case, because of fast turn-arounds, may be unable to take advantage of what local services are available. As we saw in Chapter 7 the shore life of car carrier crews can be brief, hectic and socially unrewarding.

It is true enough that land-based workers may also lack the benefit of adequate social and welfare facilities but it is much more likely that they will be familiar with their locality and its customs, be fluent in the requisite language and even enjoy citizenship rights. All of this underlines that the social and welfare needs of seafarers often remain unfulfilled, despite the work of the voluntary port welfare workers. Moreover, not all ports have a seafarer centre or port chaplain. In 2001 research conducted for the ITF Seafarers' Trust identified 136 ports which had practically no welfare services for seafarers. If, therefore, the maritime world ministries provide valuable services to seafarers, it remains the case that, despite their best efforts, what they offer is, in many instances, deficient.

References

Abegglen, J. C. (1958) *The Japanese Factory*, Glencoe, IL: The Free Press.

Alderton, P. M. (2005) *Port Management and Operations*, London: Lloyd's Practical Shipping Guides.

Alderton, T, Bloor, M., Kahveci, E., Lane, T., Sampson, H., Thomas, M., Winchester, N. and Zhao, M. (2004) *The Global Seafarer: Living and Working Conditions in a Globalised Industry*, Geneva: International Labour Office.

Amante, M. S. V. (2004) 'Industrial Democracy in the Rough Seas: The Case of Philippine Seafarers', *Industrial Relations Research Association Proceedings*, www.press.uillinois.edu/journals/ irra/proceedings2004/06b_amante.html.

Andries, T. Q. (1991) *Understanding the Filipino Seaman: His Values, Attitudes and Behavior*, Manila: Our Lady of Manaoag Publishers.

Anner, M., Greer, I., Hauptmeier, Lillie, N. and Winchester, N. (2006) 'The Industrial Determinants of Transnational Solidarity: Global Inter-Union Politics in Three Sectors', *European Journal of Industrial Relations, forthcoming.*

Armstrong, P., Glyn, A. and Harrison, J. (1991) *Capitalism Since 1945*, Oxford: Basil Blackwell.

Asteris, M. (1995) 'World Shipping: The Flagging Out Phenomenon', *Proceedings of Chartered Institute of Transport*, 4 (4), pp. 11–25.

Aubert, V. (1982) *The Hidden Society*, London: Transaction Books (first published 1962).

Barber Ship Management (1999) *Welcome on Board Booklet*, Kuala Lumpur: Barber International.

Belcher, P., Sampson, H., Thomas, M., Veiga, J., Zhao, M. (2003) *Women Seafarers: Global Employment Policies and Practices*, International Labour Office, Geneva.

Bergantino, A. S. and Marlow, P. B. (1997) *An Econometric Analysis of the Decision to Flag Out, Final Report*, Cardiff: Cardiff University, Seafarers' International Research Centre.

Bergstrand, S. J. (1983) *Buy the Flag: Developments in the Open Registry Debate*, Paper 13, August, London: Polytechnic of Central London, Transport Studies Group, Discussion.

Beth, H. L., Hader, A. and Kappel, R. (1984) *25 Years of World Shipping*, London: Fairplay Publications.

Beynon, H. (1973) *Working for Ford*, London: Allen Lane.

Beynon, H. and Nichols, T. (2006) *The Fordism of Ford and Modern Management*, 2 vols., Cheltenham: Edward Elgar.

Blauner, R. (1964) *Alienation and Freedom: The Factory Worker and His Industry*, Chicago: University of Chicago Press.

Bonacich, E. (2003) 'Pulling the Plug: Labor and the Global Supply Chain', *New Labor Forum*, Summer.

Bray, J. (2003) 'Race Relations Exemption Axe Could Cripple UK Fleet', *Lloyd's List*, 1 May.

Brewer, J. (1990) 'Cost Cutting "Has Reached End of Line"', *Lloyd's List*, 25 September.

Brewer, J. (2000) 'War Declared on the FoC Money Launderers', *Lloyd's List,* 4 August.
Brooke, J. (2004) 'Landlocked Mongolia's Seafaring Tradition', *New York Times, 2 July.*
Carlisle, R. (1981) *Sovereignty for Sale: The Origins and Evolution of the Panamanian and Liberian Flags of Convenience,* Annapolis, MD: Naval Institute Press.
Carson, I. (2004) 'Perpetual Motion', *The Economist,* 2 September.
Chamber of Shipping (2004) *Supplementary Memorandum by the Chamber of Shipping, Select Committee on Transport: Written Evidence,* 23 June.
Chapman, P. K. (1991) *Trouble on Board: The Plight of International Seafarers,* Ithaca, NY: ILR Press.
Chapman, S. (1992) 'Flagging Strategies' in *Leading Developments in Ship Management: Selected Papers from the 2nd International Lloyd's Ship Manager Ship Management Conference 1991,* London: Lloyd's of London Press.
Chinoy, E. (1955) *Automobile Workers and the American Dream,* Boston: Beacon Press.
CIA (2004) *CIA – The World Factbook 2004, http://www.cia.gov/cia/publications/factbook/.*
Cockroft, D. (1998) 'The ITF as Regulator', in *Is There a Better Way to Regulate the Shipping Industry? Verbatim Report of the Conference Organised by the International Transport Workers' Federation and Lloyd's of London Press in Oslo, 4–5 June 1998,* London, Lloyd's of London Press.
Cockroft, D. (2005) Interview with David Cockroft at the ITF, London, 19 October.
Cowling, M. (2005) *Still at Work? The Empirical Test of Competing Theories of the Long Hours Culture,* London: The Work Foundation.
Cruz, R. (2001) 'On Being a TAP Employee', *Sjömannen,* 1, February–March.
Cully, M, Woodhead, S., O'Reilly, A. and Dix, G. (1999) *Britain at Work: As Depicted by the 1998 Workplace Employee Relations Survey,* London: Routledge.
Danford, A. (1999) *Japanese Management Techniques and British Workers,* London: Mansell.
DfT (1998) *British Shipping: Charting a New Course,* London : Department of the Environment, Transport and the Regions.
Dicken, P. (1998) *Global Shift: Transforming the World Economy,* London: Paul Chapman Publishing Ltd, 3rd edition.
Dohse, K., Jurgens, U. and Malsch, T. (1985) 'From "Fordism to Toyotaism"? The Social Organisation of the Labour Process in the Japanese Automobile Industry', *Politics and Society,* 14 (2), pp. 115–45.
Dore, R. P. (1973) *British Factory – Japanese Factory: The Origins of National Diversity in Industrial Relations,* Berkeley: University of California Press.
Drewry (1971) *Car/Bulk Carriers: Their Impact on the Freight Market,* London: H.P. Drewry (Shipping Consultants) Ltd.
Drewry (1999) *Market Outlook for Car Carriers: New Opportunities in a New Millenium,* London: Drewry Publishing.
Dron, A. (2003) 'Vehicles Drive Mexico's Export Traffic', *Routes,* 3 October.
Drucker, P. (1946) *The Concept of the Corporation,* New York: John Day.
Du Rietz, P. and Ljunggren, M. (2001) *Isolde av Singapore: På världsomsegling med bilar i lasten,* Stockholm: The Swedish National Maritime Museum.
Dyer, G. and Mackintosh, J. (2005) 'Next for the West are Cars "Made in China"', *Financial Times,* 31 May.

Elger, T. and Smith, C. (2005) *Assembling Work: Remaking Factory Regimes in Japanese Multinationals in Britain,* Oxford: Oxford University Press.

Eyre, J. H. (1989) 'A Ship's Flag – Who Cares?', *Maritime Policy Management,* 16 (3), pp. 179–87.

Fairplay Daily News (2004) 'Myanmar Seafarers Are Cheapest', *Fairplay Daily News,* 12 October.

Fairplay Daily News (2005) 'Manning Levels Must Change', *Fairplay Daily News,* 13 September.

Fairplay International Shipping Weekly (2004) 'Deepsea Ro-Ro Booming', *International Shipping Weekly,* 1 July.

Fairplay International Shipping Weekly (2005) 'A Risky Rate Rise for Ratings', *Fairplay International Shipping Weekly,* 24 February.

Featherstone, M. (2004) 'Automobilities: An Introduction', *Theory, Culture and Society,* 21 (4–5).

Fromme, H. (2005) 'Munich Re to Scale Down Car Carrier Business', *Lloyd's List,* 10 May.

Froud, J., Haslam, C., Johal, S. and Williams, K. (1998) 'Breaking the Chains: A Sector Matrix for Motoring', *Competition and Change,* 3.

Garrahan, P. and Stewart, P. (1992) *The Nissan Enigma,* London: Mansell.

Gereffi, G. and Korzeniewicz, M. (ed.) (1994) *Commodity Chains and Global Development,* Wesport: Praeger.

GLM (2002) *Seafarer Global Labour Market Study,* Cardiff, Cardiff University, Seafarers International Research Centre.

GLM (2003) *Seafarer Global Labour Market Study,* Cardiff, Cardiff University, Seafarers International Research Centre.

Glyn, A., Hughes, A., Lipietz, A. and Singh, A. (1990) 'The Rise and Fall of the Golden Age' in Marglin, S. A. and Schor, J.B. (1990) (eds), *The Golden Age of Capitalism: Reinterpeting the Postwar Experience,* Oxford: The Clarendon Press.

Goffman, E. (1961) *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates,* New York: Doubleday Anchor.

Graham, L. (1995) *On the Line,* Ithaca: ILR Press.

Gubbins, E. J. (1986) *The Shipping Industry: The Technology and Economics of Specialisation,* London: Gordon and Breach Science Publishers.

Guest, A. (1991) 'Japanese Ratings Face Bleak Future', *Lloyd's List,* 30 November citing Saburo Takamara, *The Narrowing Trend of the Labour Market for Japanese Oceangoing Seamen Since 1970,* Japan Maritime Research Institute, 1991.

Hall, P. V. and Olivier, D. (2005) 'Inter-Firm Relationships and the Evolution of Transportation Systems: The Case of the Car Carriers and Automobile Importers to the United States, *Maritime Policy and Management,* 32 (3), pp. 279–95.

Hand, M. (2001) 'Philippines Challenged on Manning Supremacy: The Future Sources of Labour for the Shipping Industry Is a Continuous Concern for those in Manning and Crewing', *Lloyd's List,* 27 November.

Hanson, M. E. (ed.) *Official Guide to Ship Registers 2000,* Stamford, CT: International Ship Register Review.

Hill, H. (2005) 'Buck Passing Exposes Auto Trade to Risk', *Lloyd's List,* 26 September.

Hill, J. M. M. (1972) *The Seafarer Career: A Study of the Forces Affecting Joining, Serving and Leaving the Merchant Navy,* London: The Tavistock Institute of Human Relations.

Hindell, K. (1994) 'Special Report on World Shipping Registers: Saving on Crew Costs', *Lloyd's List,* 30 March.
Holweg, M. and Miemczyk, J. (2002) 'Logistics in the "Three-Day Car" Age', *International Journal of Physical Distribution and Logistics,* 32 (10), pp. 829–50.
Holweg, M. and Pil, F. K. (2004) *The Second Century: Reconnecting Customer and Value Chain Through Build-to-Order: Moving Beyond Mass and Lean Production in the Auto Industry,* Cambridge, MA: MIT Press.
HUAL (2005) *History of HUAL, http://www.hual.com* accessed 14 March.
ICONS (2000) *Ships, Slaves and Competition,* Charlestown, NSW, Australia: International Commission on Shipping.
ILO (1950) *Conditions in Ships Flying Flags of Convenience,* Geneva: International Labour Organisation.
ISL (2004) *ISL Shipping Statistics and Market Review 2004,* Bremen: Institute of Shipping and Logistics.
ITF (1999) *Flags of Convenience Campaign Report 1998/9,* London: ITF.
ITF (2004a) *ITF Seafarers' Trust Annual Report 2003,* London: ITF.
ITF (2004b) *Message to Seafarers 2004,* London: ITF.
ITF (2005) *Uniform 'TCC' Collective Agreement for Crews on Flag of Convenience Ships,* London: ITF.
JAMA (2003a) *Towards a Global Industry (1985–1995),* Japan Automobile Manufacturers' Association: www.jama.org.
JAMA (2003b) *Growing Investment and Employment in America,* Japan Automobile Manufacturers' Association: www.jama.org.
JAMA (2004) *Japan's Motor Vehicle Statistics: Total Exports by Year,* Tokyo: Japan Automobile Manufacturers' Association.
JETRO (2003) *Japanese-Affiliated Manufacturers in Europe/Turkey – Survey 2002,* Tokyo: Japan External Trade Organisation.
Johnsson, L. (1996) *Funny Flags: The ITF's Campaign – Past, Present and Future,* Falköping: Utbildningsförlaget Brevskolan.
Kahveci, E. (1999) *Fast Turnaround Ships and their Impact on Crews,* Cardiff University: Seafarers International Research Centre.
Kahveci, E. (2001) 'Husband, Father, Stranger, *Seafarers Bulletin,* 15.
Kahveci, E. (2002) 'Seafarers' Families: the Children Speak', *The Sea,* January—February.
Kahveci, E. (2005) 'Cargo in the Wrong Hands', *Transport International,* 18, January–March.
Kahveci, E., Lane, T. and Sampson, H. (2002) *Transnational Seafarer Communities,* Cardiff: Cardiff University, Seafarers' International Research Centre.
Kenney, M. and Florida, R. (1993) *Beyond Mass Production: The Japanese System and Its Transfer to the US,* Oxford: Oxford University Press.
Kilkauer, T. and Morris, R. (2003) 'Human Resources in the German Maritime Industries: "Back-Sourcing" and Ship Management', *International Journal of Human Resource Management,* 14 (4) 544–58.
Koch-Baumgarten, S. (1998) 'Trade Union Regime Formation Under the Conditions of Globalisation in the Transport Sector: Attempts at Transnational Trade Union Regulation of Flag-of-Convenience Shipping', *International Review of Social History,* 43.
Krznaric, B. (2005) Interview with Branco Krznaric, ITF, London, September 22.

Lane, A. D. (2000) *The Global Seafarers' Labour Market: Problems and Solutions,* Submission to the International Commission on Shipping (www.icons.org.au).
Lane, A. D. (2001) 'Study Looks at Mixed Nationality Crews', *The Sea,* March/April.
Lane, A. D. (1996) *Crewing of the World's Merchant Ships,* Cardiff, Cardiff University: Seafarers' International Research Centre.
Lash, S. and Urry, J. (1994) *Economies of Signs and* Space, London: Sage Publications.
Leggate, H. and McConville, J. (2002) *Regional Maritime Conference in the Asia/Pacific Region – Philippines,* Geneva: International Labour Organisation.
Lewchuk, W., Stewart, P. and Yates, C. (2001) 'Quality of Working Life in the Automobile Industry', *New Technology, Work and Employment,* 16 (2), pp. 72–87.
Lillie, N. (2003) *A Global Union for Global Workers: The International Transport Workers' Federation Flag of Convenience Campaign and the Representation of seafarers on Flag of Convenience Shipping.* Unpublished PhD Thesis, Cornell University.
Lillie, N. (2004) 'Global Collective Bargaining on Flag of Convenience Shipping', *British Journal of Industrial Relations,* 42 (1), pp. 47–67.
Lillie, N. (2006) *A Global Union for Global Workers: Collective Bargaining and Regulatory Politics in Maritime Shipping,* London: Routledge.
Linhart, R.(1981) *The Assembly Line,* [trans. Margaret Crosland], London: John Calder (publishers) Ltd. First pub in France 1978.
Llewellyn, A. (2005) Interview with Anna Llewellyn, ITF, London, September 29.
Lloyd's List (1995) 'Japan and China Sign Deal on Crews', *Lloyd's List,* 4 April.
Lloyd's List (2000a) 'Special Report on Vehicle Carriers: Hyundai Unit Diversifies, *Lloyd's List,* 4 August.
Loyd's List (2000b) 'Clear Road Ahead for Wilhelmsen', *Lloyd's List* 11 November.
Lloyd's List (2001) 'Special Report on Vehicle Carriers: Operators Keeping on Top of Trends', *Lloyd's List,* 19 July.
Lloyd's List (2002) 'Barber Getting into Trim for Future Expansion in Global Shipmanagement', *Lloyd's List,* 29 May.
Lloyd's List (2003)'No Easy Salvage', *Lloyd's List,* 8 January.
Lloyd's List (2005) V.Ships Embraces Marine Service Activities As It Seeks Growth', *Lloyd's List,* 18 March.
Macfarlane, J. (1970) 'Shipboard Union Representation in the British Merchant Navy', *International Review of Social History,* XV, Part 1.
Marino (2000) 'ICON Holds Dialogue wit Local Maritime Leaders', *Marino,* September–October, www.ufs.ph.
Marisec (2004) *Shipping Industry Flag State Performance Table (Based on Data Available as of June 2004),* London: Maritime International Secretariat Services Ltd.
Marsh, A. and Ryan, V. (1989) *The Seamen: The History of the National Union of Seamen,* Oxford: Malthouse Press.
Marx, K. (1981) *Capital Volume 3,* Harmondsworth: Penguin Books Ltd.
Mattsson, L-O (2004) 'Finding the Right Business', *Routes,* 2, June.
Metaxas, B. N. (1985) *Flags of Convenience: A Study of Internationalisation,* Aldershot: Gower.
Mitas, D. K. (1992) 'Long term Potential New Crew Sources', in *Leading Developments in Ship Management: Based on Selected Papers from the 2nd*

International Lloyd's Ship Management Conference, 1991, London: Lloyd's of London Press.
MORI (1998) *Seafarers' Living Conditions Survey,* London: ITF.
Morris, R. and Donn, C. (1997) 'New Technology and Industrial Relations in the United States and Australian Shipping', *New Technology, Work and Employment* 12 (2).
National Research Council (1990) *Crew Size and Maritime Safety,* Washington, DC: National Academy Press.
Navigo Ship-Managers (2005) company promotional material, from http://www.navigo-cy.com/.
Nichols, T., Sugur, N. and Demir, E. (2002a) 'Beyond Cheap Labour: Trade Unions and Development in the Turkish Metal Industry', *Sociological Review,* 50 (1), pp. 23–46.
Nichols, T., Sugur, N. and Demir, E. (2002b) 'Globalised Management and Local Labour: The Case of the Whitegoods Industry in Turkey', *Industrial Relations Journal,* 33 (1), pp. 68–85.
Nichols, T. (1986) *The British Worker Question: A New Look at Workers and Productivity in Manufacturing,* London: Routledge and Kegan Paul.
Nichols, T. and Beynon, H. (1977) *Living with Capitalism: Class Relations in the Modern Factory,* London: Routledge.
Nichols, T. and Cam, S. (2005) *Labour in a Global World: Case Studies from the White Goods Industry in Africa, South America, East Asia and Europe,* Basingstoke: Palgrave Macmillan.
Nichols, T. and Sugur, N. (2004) *Global Management, Local Labour: Turkish Workers and Modern Industry,* London: Palgrave Macmillan.
Nightingale, B. (2004) 'Carrying Cars – Car Crazy', *Lloyd's Shipping Economist,* 26, September.
Notteboom, T. and Winklemans, W. (2001) 'Structural Change in Logistics: How Will Port Authorities Face the Challenge?' *Maritime Policy and Management,* 28 (1), pp. 71–89.
O' Mahony, H. (2005) 'Pentamaran That Could Run Without Fossil Fuels', *Lloyd's List,* 8 March.
Ohrelius, B. (1984) 'The Seafarer's Job Past and Present', in *Wallenius Lines 1934–1984,* Stockholm: Wallenius Lines.
Osler, D. (2000) 'Outsiders' Could Increase Pressure by Entering Shipmanagement Sector', *Lloyds List,* 27 October.
Parker, A. W., Hubinger, L., M., Green, S. Sargent, L., and Boyde, R., (1997) *A Survey of the Health, Stress and Fatigue of Australian Seafarers.* Australian Maritime Safety Authority, www.amsa.gov.au/sp/fastoh.120p.
Parker, M. and Slaughter, J. (1990) 'Management-by-Stress: The Team Concept in the US Auto Industry', *Science and Culture,* 8, pp. 27–58.
Parola (2004) 'POEA's New Gift to Filipino Seafarers', *Parola,* 123, September-December.
Perry, N. (1974a) 'Conflict on Board Ship: An Interpretation', *Sociological Review,* 22 (4), pp. 557–80.
Perry, N. (1974b) 'The Two Cultures and the Total Institution', *British Journal of Sociology,* 25 (3), pp. 345–55.
POB (2002) 'Interview- WWL's Jan-Eyvin Wang' *Port of Baltimore,* May.

POEA (2003) *Rules and Regulations Governing the Recruitment and Employment of Seafarers,* Philippines Overseas Employment Administration, www, poea.gov.ph (last accessed 19 May 2005).

Porter, J. (2003) 'WWL Keeps Pace with Changes in the Fast Lane', *Lloyd's List,* 20 May.

Porter, J. (2005) 'Wallenius Wilhelmsen Looks to Ship Lengthening Option', *Lloyd's List,* 16 June.

Reinikainen, K. (2004) 'Rocking Good Times for Rolling Cargo', *Fairplay International Shipping Weekly,* 9 December.

Rinehart, J., Huxley, C. and Robertson, D. (1997) *Just Another Car Factory? Lean Production and Its Discontents,* Ithaca: ILR Press.

Sampson, H. and Wu, B. (2003) 'Compressing Time and Constraining Space: The Contradictory Effects if ICT and Containerisation on International Shipping Labour', *International Review of Social History,* 48.

Schrank, R. (1983) *Industrial Democracy at Sea: Authority and Democracy on a Norwegian Freighter,* Cambridge, MA: MIT Press.

Selkou, E. and Roe, M. (2004) *Globalisation, Policy and Shipping: Fordism, Post-Fordism and the European Union Maritime Sector,* Cheltenham: Edward Elgar.

SIN (2004) 'Listing of Pure Car Carrier Ro Ro Vessels', Shipping Intelligence Network, Clarkson Research Studies at www.clarksons.net.

Sletmo, G. K. (1989) 'Shipping's Fourth Wave: Ship Management and Vernon's Trade Cycles', *Maritime Political Management,* 16 (4).

Smith, A., Lane, T., Bloor, M., Allen, P., Burke, A. and Ellis, N. (2003) *Fatigue Offshore: Phase 2 The Short Sea and Coastal Shipping Industry,* Cardiff, Cardiff University: Seafarers International Research Centre.

SMMT (2004) *Motor Industry of Great Britain 2004: World Automotive Statistics,* London: Society of Motor Manufacturers and Traders Ltd.

Spruyt, J. (1994) *Ship Management,* London: Lloyd's of London Press.

Taylor, P. and Bain, P. (1999) 'An Assembly Line in the Head: Work and Employee Relations in the Call Centre' *Industrial Relations Journal,* 30 (2), pp. 101–17.

Taylor, R. (2002) *The Future of Work Life Balance,* ESRC Future of Work Programme.

The Economist (2004) 'Detroit's Nine Lives', *The Economist,* 2 September.

Thirud, A. P. (2005) 'Streamlining Underway at Wallenius Wilhelmsen', *Seatrade,* September/October.

Thorsrud, E. (1977) 'Breaking Down Bureaucracy' in D. W. Vermilye (ed.) *Relating Work and Education,* San Francisco: Jossey-Bass Publishers.

Thorsrud, E. (1981) 'Policy Making as a Learning Process in Working Life' in B. Gardell and G. Johansson (eds.) *Working Life: A Social Science Contribution to Work Reform,* Chichester: John Wiley & Sons.

TNC (2001) *Formation and Maintenance of Transnational Seafarer Communities,* Transnational Communities Project Interviews Conducted by Kahveci, Lane and Sampson, Cardiff, Cardiff University, Seafarers' International Research Centre (unpublished documents).

Toyota (2004) *About Toyota: Worldwide Operations,* www.toyota.co.jp/en/about_toyota/worldwide.html.

Transportation Institute (2004) *Maritime Policies of Select Countries,* Washington: The Transportation Institute http://www.tran-inst.org/EuropeanMaritimePolices.htm

UECC (2004) www.uecc.com accessed 29.11.04.

UNCTAD (2004) *Review of Maritime Transport 2004,* Geneva: United Nations Conference on Trade and Development.

Urry, J. (2004) "The "System" of Automobility', *Theory, Culture and Society,* 21 (4–5).

Vertovec, S. (2004) 'Cheap Calls: The Social Glue of Migrant Transnationalism', *Networks,* 4 (2).

Walker, C. R. and Guest, R. (1952) *Man on the Assembly line,* Cambridge, MA: Harvard University Press.

Winchester, N. and Alderton, N. (2003) *Flag State Audit 2003,* Cardiff, Cardiff University: Seafarers' International Research Centre.

Wittholn, R. (2000) 'Giant Vehicle Carrier Tarago in Service', *Lloyd's List,* 11 November.

Womack, J. P., Jones, J.T. and Roos, D. (1990) *The Machine That Changed the World: The Story of Lean Production,* New Jersey: Macmillan Publishing.

WWL (2003) Powerpoint Presentation, Wilhelm Wilhelmsen, Oslo, 11 February.

WWL Terminals (2005) *Wallenius Wilhelmsen Terminals,* www.2wglobal.com.

Zhao, M. (2002) 'The Consequences of China's Socialist Market Economy for Seafarers', *Work, Employment and Society,* 16 (1), pp. 171–83.

Index

alienation, 1–3

blacklisting, 131

capital-supply countries, 87
car carriers
  capacity utilisation, 56, 74, 181
  compared to other vessels, 147, 186
  cost of, 67
  deep-sea trade, 42, 48, 49
  fleet size, 137
  industrial concentration, 68, 70, 178
  insurance risk, 66–7
  number of cars transported, 9
  ownership, 137
  ship operating budget, 38
  short-sea trade, 9, 70, 75, 122, 124, 147
  size of vessels, 60–7
  speed, 61, 65
  relations with car manufacturing companies, 68
  technical development, 51–65, 76, 106, 107, 133, 182
  types of vessel: car/bulk carriers, 52; converted, 52; 'jumboised', 66; large car and truck carriers, 60; pure car carriers, 51, 55, 63, 68; pure car and truck carriers, 57, 59–60, 65–6, 67, 68, 71, 110; vehicle and project cargo carriers, 51; zero emission concept car carrier, 62, 64
  vintage, 173–4
car/vehicle manufacturers
  BMC, 45
  BMW, 44, 45, 67
  British Leyland, 44
  Daimler Chrysler, 43, 45, 48, 71
  DaimlerChrysler-Mitsubishi, 68
  Ford, 43, 45, 71
  Fiat, 45, 71
  Fuji, 43
  GM, 43, 45, 68, 71
  Honda, 44, 45, 46, 71
  Hyundai, 45, 74
  Isuzu, 45, 46
  Jaguar, 43, 71
  Land Rover, 44, 71
  MAN, 45
  Mazda, 46
  Mercedes-Benz, 45
  MG Rover, 44
  Mitsubishi, 46, 68
  Nissan, 44, 45, 46, 47
  Peugeot, 44, 45, 71
  Renault, 45
  Renault-Nissan, 68
  Rover, 71
  Saab, 52, 67
  Subaru, 43
  Suzuki, 43
  Toyota, 44, 45, 46, 47, 68, 71
  VAG (Volkswagen–Audi), 45, 48, 68, 71
  Volvo, 43, 48, 52, 67
car/vehicle manufacturing
  3day car, 72
  assembly line workers, 1–4, 7, 72, 110, 113, 114, 115, 126–30, 134, 187
  see also land-based industry, compared
  build to order, 72
  car carrier trade, 42
  distribution networks, 50
  employment, 7
  exports, 44, 45, 46
  industrial concentration, 43–4, 68, 178
  logistics, 50
  MPVs, 45, 56
  overcapacity, 43
  production methods
  see just in time, lean production

car/vehicle manufacturing – *continued*
profits, 43–4
output, 42–3, 46, 47
relocation of plants, 44, 45, 48
SUVs, 56, 57
transplants, 4, 9, 46, 48, 181
cargo
crated, 51
high and heavy, 51, 57, 60, 72, 123, 142, 182
non-containerised, 57
cargo handling, 39, 40, 117, 121–2, 147, 151, 163
cargo mix, 51, 56–7, 74, 182
charitable foundations, 196–7
cheap labour, 18, 29–31, 44–5, 178, 187
continuing search for 31–2
China, 26, 27, 28, 29, 30, 31, 32, 33, 35, 37, 44, 48, 74, 88, 96, 181
commodity chain, 4, 6, 9, 67, 73, 184
communication with home, 156–7
cost, 156
email, 133, 156, 182, 183
letters, 156
new technology, 156–7
companies, differences between, 136–42, 182–3
containerisation, 9, 38–41
contracts of employment, 112–14, 116, 117, 130, 158, 169, 182
double contract system, 120
length of, 113
TAP employees, 113–14, 116, 117, 141
crew
accommodation, 60
costs, 18, 25, 26
functional separation, 112
hierarchical separation, 112
number of, 26, 63, 110, 111, 143, 145–7, 168, 185
national, 16, 28–9
multinational, 26–33, 87–9, 110, 111, 143, 168, 186, 188
see also undercrewing
reduction, 61, 99, 111, 143
spatial separation, 112
crewing agencies, 81–4, 119–20, 131–2, 174, 175
deregulation, 16–27, 122–3, 179
discrimination, 89–90
division of labour on board, 80, 91, 99, 100–7
captain, 100
chief officer, 100, 101, 104
second officer, 100, 101, 104
third officer, 100, 101
radio officer, 135
bosun, 100, 101, 104
AB, 100, 101
OS, 100, 101, 104
chief engineer, 103
second engineer, 103, 104
third engineer, 103
fourth engineer, 104
fitter, 103, 104
oiler, 103, 104
wiper, 103, 104
motorman, 104
electrician, 104
chief cook, 104
second cook, 104
messman, 104
dockworkers, 40, 121, 162, 163, 164, 166, 172, 173, 183

economies of scope, 179, 184
engine room, 103, 108, 134
manned, 61
unmanned, 106
engine room/deck relations, 108, 110, 180, 186
English language
crew selection, 32
proficiency, 81, 132
working language, 79
EU, 21, 44, 45, 90, 114, 115, 116, 128, 168

fatigue, 115, 143, 149–51, 158, 168, 186
fiddles, 120, 123, 182
flags of convenience, 16–27, 35, 37, 110
defined, 18
early examples, 16–17
fictitious capital export, 18
illegal activities, 25

flags of convenience – *continued*
Islamic, 24
new registers, 24–5
post-war development, 18–20
rich and poor nations, 20–4, 26
second registers, 26, 82–3
trade unions, 174, 175
training, 175
Fordism/post-Fordism, 1, 3, 5, 99, 179–80

globalisation, literature on, 9
global labour market, 25, 28, 32, 41, 136

health and safety, 126, 127, 131
collisions, groundings and fires, 66–7, 115
hierarchy, 100, 106, 107–8, 110, 111, 112, 125, 127–8, 130, 180
alternative to, 108, 110, 111
hours of work, 16, 112, 114–16, 137, 143, 150, 158, 167, 168, 175, 182, 187
'flogging the log', 135–6

ICONS (International Commission on Shipping), 131
ILO, 23, 101, 116, 117, 121, 159, 160, 161, 163, 168, 172, 176, 18
Consolidated Maritime Labour Convention, 172
IMEC (International Maritime Employers' Committee), 164, 166
IMVP (International Motor Vehicle Programme), 5
IMO, (International Maritime Organisation), 23, 101, 115, 117, 163, 168
ISAN (International Seafarers' Assistance Network), 165
industry, concept of, 6–7, 9
integrated bridge system, 61
INTERTANKO International Association of Independent Tanker Owners), 24
ISF (International Shipping Federation), 24, 26, 168
ISPS (International Ship and Port Facility code), 101, 104, 135, 185

Japan, 4, 24–5, 35
car exports, 46
car manufacturers 44, 46, 67–8, 72, 178
companies, 4
FDI, 5, 46
contribution to trade, 45–50
management techniques, 5
seafarers, 20
shipowners, 31
transplants, 4, 46, 181
japanisation, 5–6
junior officers, 80, 81, 87, 88, 89, 93, 95, 97, 107, 122, 128, 156, 190
just in time, 50, 74, 143, 182

labour-supply countries, 87, 187–8
land-based industry, compared, 37, 38, 100, 110, 112, 113, 114, 115, 116, 126–9, 133, 134, 138, 140, 149–50, 158, 182, 186–7
lashing and unlashing, 60, 62, 67, 73, 120–2
liberalisation of trade, 43
lean production, 5–6, 48, 99, 181
lean transport system, 184
loading and discharge, 39–41, 60–1, 63, 65, 73–4, 84, 87, 104, 143, 144, 182
logistics, 41, 50, 68, 72–4, 172, 179, 180, 183, 184
look-outs, absence of, 151

management 'climate', 138–40, 174–5
MARPOL (IMO Convention for the Prevention of maritime Pollution from Ships), 135, 185
medical care, 174
merger and acquisition, 36, 41, 43, 68, 178, 184

nationalities
Bangladeshi, 26, 27, 32, 81, 89, 91, 94, 119
British, 16, 27, 30, 89, 90, 111, 117, 151

nationalities – *continued*
Bulgarian, 81, 87, 89, 91, 120, 130
Cape Verdian, 28
Chinese, 26, 27, 28, 30, 31, 88, 91, 117
Croatian, 29, 91
Dutch, 27, 30
Filipino, 28, 30, 31, 80, 82, 83, 88, 89, 90, 91, 92, 94, 107, 113, 120, 130, 131, 132, 152, 153, 170, 188: blacklisting, 131, 132, 185; employment opportunities, 94; 'Filipino mentality', 130–1, 171, 185; officers, 91, 94, 111, 113, 117, 119, 190; ratings, 32, 37, 88, 89, 111, 117, 119, 130, 131, 153, 190; unfree labour, 82; utility boys, 83–5; why decide to be a seafarer, 92; *see also* POEA
German, 26, 30
Ghanaian, 30, 87, 111, 117, 170
Indian, 27, 28, 29, 37, 81, 88, 89, 91, 93, 117, 166, 170
Indonesian, 27, 28, 30, 91
Italian, 81, 90
Japanese, 88, 89, 90
Malaysian, 30, 107
Mayanmarese, 30, 81, 89, 91, 94, 98, 107
Norwegian, 26, 30, 38, 81
Pakistani, 27, 29, 81, 91
Polish, 28, 81, 90
Portuguese, 170
Romanian, 91
Russian, 28, 29, 30, 91
Singaporean, 89, 91, 107
South Korean, 28, 87, 88, 89, 90, 91
Sri Lankan, 81, 91
Swedish, 81, 87, 88, 89, 93, 107
Thai, 30
Turkish, 28, 29
Ukrainian, 28, 29, 30, 89, 91, 93, 130, 170

outsourcing, 33–8, 181

Panama, 17–18, 20, 28
Canal, 51, 66
flag, 17
vessels, 17, 29
P & I clubs, 172
PDI (pre-delivery inspection), 73
pensions, 174
petty officers, 80, 81, 88, 91, 93, 95, 97, 106, 107, 127, 128
physical conditions, 84–7, 123, 142, 147, 176, 177
Plaza Accord, 46
POEA (Philippines Overseas Employment Administration), 82, 113, 131–2
ports, 40–1
dedicated terminals, 70–3, 123
hub ports, 70, 79, 144: Bremerhaven, 70–1, 79; Durban, 70; Pusan, 70; Southampton, 70–1, 79; Vera Cruz, 70; Zeebrugge, 70–1
port chaplains, 165, 197
ship board operations in, 137
social and welfare facilities, 143–4, 147, 182, 196–7
super-ports, 180
see also turnaround time, containerisation
Port of Bristol, 74–6, 79
port state control, 23
primitive accumulation, 182
privatisation, 166

race to the bottom, 142
rank
aspirations for children and, 97–8
expectations and, 92–4
nationality and, 87–9, 91, 92
social origin and, 91
See also hierarchy, division of labour on board
ratings, 80, 81, 87–9, 91, 92, 93, 94, 95, 96, 97, 106, 107, 108, 122, 127, 128, 134, 136, 156, 177, 185
regulation
international, 135, 151, 158, 159, 184
see also ILO, IMO, STCW
national, 159
paper compliance, 135, 185
problems of compliance with, 167–8
see also deregulation

religious ministries, 196–7
  Apostleship of the Sea, 145
  ICMA (International Christian Maritime Association), 196
remittances, 82, 153
roll-on, roll-off, 37, 42, 50, 51, 55, 56, 68, 73

seafarers
  age, 80
  aspirations, 97–8, 154
  communication with home, 156–8
  education, 83
  expectations, 92–6
  families and children, 94, 96–8, 151, 152
  flexibility, 99, 100, 106, 110, 179, 180
  geographical origin, 81, *see also* nationalities, discrimination
  influence, 128, 140–1
  insecurity of, 129–31, 133, 142, 188
  job experience, 81, 106
  loyalty, 138, 139, 174, 175, 188
  marital status, 80
  privacy, invasion of, 133, 156
  reasons for going to sea, 92–6
  recruitment, 10, 31–3, 82, 125, 181, 188
  skills, 99, 101, 142, 175, 179, 18
  stress, 133, 149, 151, 176, 188
  social origin, 83, 91, 92–4, 108
  wages, 26–7, 29–30, 117–22, 137, 167, 178, 187
  worry about job, 133, 176
seafarer's book, 120, 132
senior officers, 80, 81, 88, 89, 90, 91, 93, 94, 95, 96, 97, 107, 122, 126, 128, 134, 135, 156, 185, 190
  extra pressure on, 134–6, 185
ship management companies, 33–9
see also shipping/ship management companies
shipping/ship management companies
  Acomarit, 36
  Anglo-Eastern, 37
  AP Møller-Maersk, 41, 178
  Barber Ship Management, 37, 111
  Celtic Marine, 36
  Colombia Ship Management, 36
  Denholm Shipma Magement, 36
  EUKOR, 68, 70
  Grimaldi, 71
  HUAL, 52, 62, 68, 70, 71
  Huyundai and Kia Motors, 70
  Huyundai Merchant Marine (HMM), 48, 68
  Kiwi Car Carriers, 70
  K Line, 67, 70, 71
  MOL, 65, 68, 70, 71
  Navigo Shipping, 33
  Norwegian Hoegh Line, 110
  NYK, 63, 65, 68, 70, 71
  Oldendorff Carriers, 33
  P&O Nedlloyd, 41, 178
  Schulte Group, 33
  UECC, 63, 65, 70, 71, 73
  V Ships, 36, 37
  Wallenius Lines, 55, 68, 70, 101, 145
  Wilhelm Wilhelmsen, 36–7, 70
  Wilhelmsen Lines, 68
  WWL, 51, 57, 60, 62, 63, 66, 67, 68, 70, 71, 72, 73, 74
shore leave, 143–9, 186
see also turnaround time
social democratic option, 138–42, 182
social integration, lack of, 185–6, 188
social isolation
  from family and friends, 151–8, 186
  on board, 110, 111, 186
SOLAS (International Convention on the Safety of Life at Sea), 135, 183, 185
STCW (Convention on Standards of Training, Certification and Watchkeeping), 101, 106, 115, 135, 185

total institution, ship as, 112, 133, 149, 185
tonnage tax, 21–2
track and trace services, 73, 184
trade routes, 47–9, 71, 79, 181
  fragmentation of, 48, 71

trade unions, 159–77
  global union federations (GUFs), 162, 182
  International Transport Workers' Federation (ITF): affiliates, 160; blue certificate, 163; flag of convenience Campaign, 17, 160–7; green certificate, 163, 167; IBF agreement, 117, 166–7, 169, 171, 172, 173, 177, 183; industrial campaign/political campaign, 172; inspectors, 163; institutional centrality, pursuit of, 173, 183; length of contract, 137; logistics and potential for, 183, 184; mark-up on wages, 162; partnership idea, 166, 171, 172; port of convenience campaign, 183; Standard collective agreement, 166, 173; TCC agreement, 113, 115–19, 120–1, 161, 166, 168, 173; Seafarers' Trust, 164–5, 196, 197; Welfare Fund, 164, 167
  member involvement, 168–71
  national unions, limitations of, 167, 196
  on board representation, lack of, 133
  particular national unions: AMOSUP (Associated Marine Officers and Seamen's Union of the Philippines), 171; NUS (National Association of Seamen), 169; NUMAST (National Union of Marine, Aviation and Shipping Transport Officers), 151; SEKO (Swedish Union for Services and Communications), 114
training, 37, 137, 175, 182
  on-the-job, ('OTJ'), 83
  see also STCW
turnaround time, 40, 50, 56, 74–6, 143–4, 147, 150, 156, 158, 163, 182, 186, 194–5

United Kingdom
  car exports, 44
  car imports, 44
  car production, 43, 46
  chamber of shipping, 26–7, 90
  decline in merchant fleet, 20
  employment act 1980, 166
  flagging out, 16, 90
  race relations act 1976, 90
  seamen's strike 1966, 16
  select committee on transport, 27–8
undercrewing, 151, 168

vehicle processing centres, 73, 184
voyage cycles, 75, 137, 144–9, 150, 152, 194–5

work/life balance, 93, 143, 151–8
WERS (Workplace Employee Relations Survey), 79, 113, 114, 115, 126–9, 134, 138, 140, 149–50