British Railway Shipping 1948-1984

A Nationalised Success Story

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ABSTRACT

This dissertation will look at British Railways shipping activities under the British Transport Commission (BTC) and British Railways Board British (BRB). At the time of nationalisation in 1948 the BTC took control of the extensive shipping activities of the British railway companies. The research done for this dissertation suggests the BTC was the largest operator of passenger ships in Europe in the early post-war years. Academic research in this field is very limited, indeed the whole coastal shipping scene has been somewhat neglected. What has been done suggests that the “railway ships” were outdated, inefficient and unprofitable. Richard Pryke in the *Journal of Fiscal Studies* considered the BRB shipping activities as a failure compared to Townsend, a private enterprise operation. A number of commentators also highlight the advent of the Townsend car ferries in leading the way forward for ferry services from the UK. What this dissertation will show by looking at a number of aspects of this sector is that this was not the case. Most of the studies and commentator’s have not compared like for like and that will be highlighted. The financial performance of the shipping sector will be examined to show that overall it was a very profitable operation. The equipment used in terms of the fleet and harbour facilities will show that over the period under consideration the BTC/BRB fleet moved forward in a manner comparable with other operators in the similar circumstances. It will also show that a massive change in the market place, moving from the classic rail-sea-rail passenger and rail born freight traffic on cargo ships to the modern mixed use vehicle ferry was managed very successfully with Sealink emerging as a major force and leading brand for short sea and ferry operations.

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The National Archives at Kew, the British Library at Boston Spa and the Search Engine at the National Railway Museum have also been an important resource for this work and the staff at these locations most helpful

Finally can I thank the former Sealink staff who spoke to me in the course of research for this dissertation and the many Sealink staff who have safely and comfortably carried me on many coastal journeys around the British Isles over the years.

Any errors in this dissertation are the result of my work rather than theirs however.

DECLARATION

I declare that all the work contained herein is my own work except as otherwise acknowledged and that I have not plagiarised another's work. Neither has this work been submitted or accepted for any other award previously.

Chapter 1
INTRODUCTION

MV ANTRIM PRINCESS[1]

Built in 1967 for the Stranraer Larne service

The British railway companies developed a large maritime business as an extension of their railway networks. With the nationalisation of the railways in 1948 this fleet all came under control of the British Transport Commission (BTC) and later the British Railways Board (BRB). As this dissertation will show, the shipping operation which later became known as Sealink has generally been painted as another example of the dead hand of nationalisation. This dissertation will explore if that the picture of a third rate, out of date and uncompetitive service is supported by the evidence. It will investigate the decisions, the services operated and their profitability, responses to changes in the market, and the equipment and facilities provided in comparison with other operators. The dissertation also discusses the context in which the services were operated, as an ancillary for the BTC and BRB, subject to government influence in a way their private sector competitors were not and for the English Channel services with the every present discussion about a Channel Tunnel.

[1] Image from a Sealink postcard

The sources located for this dissertation at times regard the maritime activities of the BTC and BRB at best as a necessary evil, with some reporting an apparently widely held view that the private sector did it much better, was much more successful and made less mistakes. This dissertation explores the shipping activities from a number of angles to consider the evidence. The development of railway maritime activities and the BTC's inheritance are the starting point but this dissertation will refer to the legacy of the Big Four's. It will also highlight the differences between the private sector organisations used in comparisons and show how this affects the drawing of direct comparisons. The areas that will be examined in particular are the development and in some cases the closure of the services and routes that the BTC and BRB operated on. The modernisation of the fleet and associated facilities will also be discussed and compared with that of the competitors. Evidence about the management structures and financial results will be presented to explore the profitability of the business and its responses to changing circumstances.

A particular critic of the nationalised operations has been Richard Pryke whose article in the *Journal of Fiscal Studies* compared the performance of public and private enterprise organisations. He chose to compare British Airways with British Caledonian Airways, The Gas and Electricity Board salesrooms with Comet and Curries and Sealink with European Ferries Limited (EFL) which will be better known as Townsend Thoresen[2]. Richard Pryke makes a number of observations. He states that the publicly owned activities were losing money over a long period, (although as this dissertation will argue it was clearly not the case for Sealink). He gives credit for the carriage of commercial vehicles in multi purpose ships to EFL. He continues by crediting EFL with a more innovative style and also a higher level of productivity than the BRB fleet. The higher speed of 1980's EFL ships is praised as a private sector advance along with the simplicity of their route structure. This dissertation will show that much of this criticism is unfounded. This is in part due to a not quite comparing like with like. I will

[2] R Pryke, "The Comparative Performances of Public and Private Enterprise", *Journal of Fiscal Studies* Vol 3. no 2 (1982), 68-81.

present evidence that Pryke has overlooked the failures of EFL when comparing their product with Sealink. While I will identify what I consider to be are a few factual errors in Pryke's work, I will also acknowledge that the date of his study, 1980 (article published 1982) was when Sealink was waiting of the arrival of its next generation of ships which was to put it on an equal footing with EFL on the Dover Calais route. While there were a number of reasons for Richard Pryke to choosing to compare Sealink with EFL, placing the industry in a wider context reveals that he selected the most successful UK private sector operator as a comparator. I will argue that there were several other private sector operators that would have not compared so well against the nationalised operator.

Richard Pryke is not the only commentator to downplay the effectiveness of the BTC fleet while overstating the contribution of other operators. Peter and Dawson in their book *The Ferry a drive through History*[3] are dismissive of the LORD WARDEN, the BTC's 1952 car ferry for Dover Straights service. An example of this bias is the praise they give to FREE ENTERPRISE (later FREE ENTERPRISE 1) in this book compared with the LORD WARDEN. However the LORD WARDEN was a cross channel car ferry with a virtually identical carrying capacity to the Townsend's FREE ENTERPRISE of 120 cars and 100 passengers[4] but did this ten years before FREE ENTERPRISE came into service. Peter and Dawson argue convincingly that the LORD WARDEN should have been a diesel ship rather than a steam ship (though General Watsons report of 1954 puts a different case here[5]) but then they also state that every other shipping company operating short sea services was building diesel ships by then which again was not the case[6].

Other commentators such as Miles Cowsill and John Hendy in their book *The Viking Saga* have used the withdrawal of the BTC and BRB from services such as the Southampton to Le Havre and the Channel Islands as a

[3] B Peter & P Dawson, *The Ferry a drive through History* (Ramsey:Ferry Publications,2010)
[4] Cowsill & Hendy,*The Townsend Eight* (Ramsey: Ferry Publications,2002), 96.
[5] NRM 65A/124P Gen D Watson, *British Railways Marine Services* (BTC, 1954), 33-39.
[6] B Peter & P Dawson. *The Ferry a drive through History,* 49.

sign that they could not make money on routes while the commercial operators did[7]. Again it is questionable whether like is being compared with like as this claim seems to overlook other services provided by the BTC that provided a better alternative at the time. By 1984 the EFL ships had ceased sailing from Southampton[8] which also seems to be overlooked by commentators.

In his PhD thesis, *The Commercial and Technical Evolution of the Ferry Industry 1948-1987* Bill Moses develops a far more nuanced critique of the ferry services nonetheless it is still a picture of a failing railway service as opposed to a successful private enterprise one. He writes *"*The arrival of Thoresen on the Western Channel, the continuing success of Bustard[9] and the decision by Townsend to construct new vessels were to be fundamental in the loss of railway supremacy*"*[10]

Possibly one of the biggest contributors to this overall impression of a poor and inefficient service was the feeling the public had that the nationalised system was unresponsive, it was seen to be drab and unexciting. As part of the loss making British Railway system the shipping activities were assumed to be a failure. Those who remembered the pre war era probably seen through rose tinted glasses had memories of polished engines, first class service and luxury. This was not entirely untrue. The CANTERBURY was the epitome of this, built as an all first class ship carrying 400 passengers complete with a Palm Court[11] between their express Pullman trains en-route from London to Paris. The ship had one crew and made a single round trip a day between Dover and Calais. This low level of utilisation and single crew meant the ships were always in excellent condition with staff who took pride in the job. There are parallels here with the flagship trains and railway engines having specific drivers allocated to them. Such a

[7] Cowsill & Hendy, *The Viking Saga* (Killgetty:Ferry Publications,1989) 1.
[8] Cowsill & Hendy, *The Townsend Thoresen Years* (Kilgetty;Ferry Publications, 1988) 37.
[9] Col Bustard's new ships had actually been built by the BTC
[10] B Moses, *The Commercial and Technical Evolution of the Ferry Industry 1948-1987* (PhD thesis, University of Greenwich,2010*),* 210.
[11] A Greenway, *A Century of Cross Channel Passenger Ships* (Shepperton: Ian Allan, 1981) 46.

discourse is evident in the writings of Rixon Bucknall who comments on the early days of the BTC that *"*compared with 1914 the result beggared description, on every hand were seen and heard evidence of dishonesty, discourtesy and delay"[12]. For British Railways the modernisation plan was not going as well as had been hoped[13] and this was reflected in the public perception of the BTC in all aspects of its operation including the shipping activities. Probably the best example of this negative stereotype was the British Railway's sandwich, as the butt of a comedians joke was up their alongside the mother in law. It even reached the stage where an episode of the Goon Show was entitled "*The Collapse of the British Railway Sandwich System"* and broadcast on the Home service on 8 March 1954[14].

Another factor which come to light in when studying the BTC and BRB's marine operations is that it was a far more diverse operation than that of its private sector competitors. The network of routes had been established before the First World War and was inextricably linked to the railway network. However the needs of the travelling public and the freight customer were to change. The BTC/BRB was also under the statutory constraints that had applied to the railway companies and the closure of shipping routes was subject to a similar procedure to that of closing a railway. The private enterprise competition that is used as a comparison by many commentators, in particular the competitors Townsend and Thoresen operated on a very limited number of routes. While this is a logical way to run a ferry service, it maximises utilisation and minimises costs this option was not open to the BTC and the BRB. This is another aspect of the BTC and BRB operation that makes like for like comparisons with the commercial operators a difficult matter.

None of this is to say that poor choices were never made. There are examples in the 98 ships that the BTC and BRB acquired of poor design but only a few. The same though can be said of all the competitors. It is also

[12] R Bucknall, *Boat Trains and Channel Packets* (London:Vincent Stuart,1957) 153.
[13] BTC reports comment on the difficulties as do most commentators
[14] The Goon Show Vol 23 "The Collapse of the British Railway Sandwich System" Amazon listing, accessed 4/5/14, http://www.amazon.co.uk

evident that there were times when the BTC and BRB operation lagged behind its competitors on the Dover Straits but the reasons may be attributed to external factors. In particular what can be called Channel Tunnel Blight slowed the investment process down at times[15] and for a while in the late 1970's this left the BRB's cross channel fleet some way behind the EFL's vessels (although this was rectified in the early 1980's). The evidence further reveals that the private sector did bring some developments and new ideas to the short sea operations around the UK. However the evidence also suggests that the BTC and BRB ran a successful shipping operation. As Michael Bonavia comments in *British Railways the first 25 years* "unlike the railways itself the shipping business of British Railways has been a story of very nearly continuous growth"[16].

This dissertation will chart how the services provided by the pre nationalisation railway companies often referred to as the Big Four, the Great Western Railway (GWR), London Midland & Scottish Railway (LMS), London & North Eastern Railway (LNER) and the Southern Railway (SR) were developed and also closed down though in the majority of cases it is a story of development. The evidence suggests that the routes chosen for development and the type of investment made show with one exception good strategic choices and ones that have stood the test of time post state control. The financial picture will be reviewed showing a profitable business, not one as Richard Pryke states[17] with a long history of losing money. The financial returns may also be correlated to investment choices and again the majority of decisions made appear to have had a sound financial basis. Finally there were the changes in the fleet. The fleet in 1984 was of course very different to the one in 1948, it was also a lot smaller but it was moving larger numbers of people and vehicles. Synthesis of the evidence suggests the growth in vessel size, the change in the type of vessel and the more intensive utilisation do not show Sealink in an unfavourable light alongside any of its competitors.

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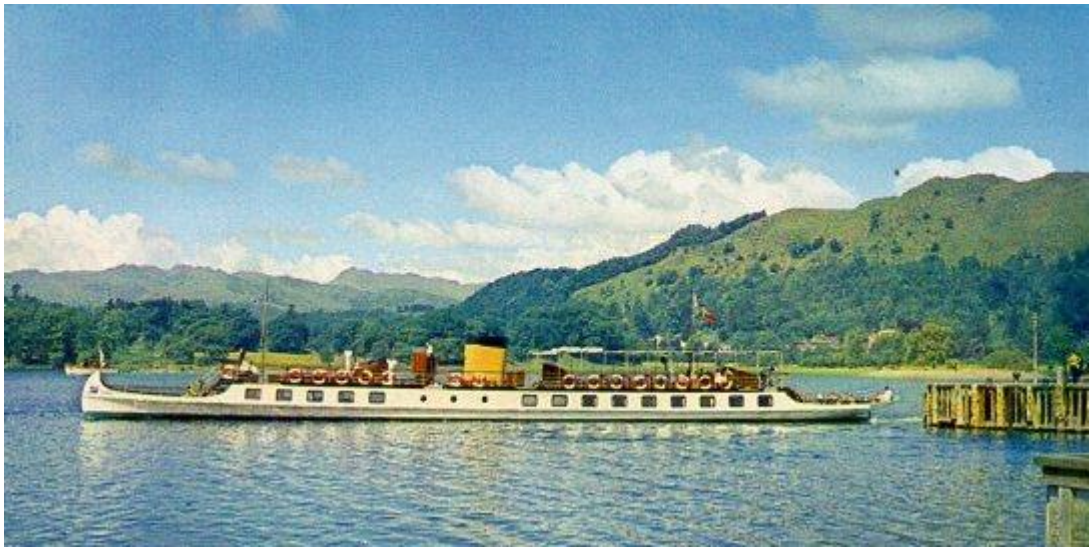
[15] Ripley & Rogan, *Designing Ships for Sealink* (Kilgetty: Ferry Publications, 1995) 6.
[16] M Bonavia, *British Railways the first 25 years (*Newton Abbot: David & Charles, 1981) 171.
[17] R Pryke, "The Comparative Performances of Public and Private Enterprise", *Journal of Fiscal Studies* Vol 3 Issue 2 (1982) 68-81.

Chapter 2
HISTORIOGRAPHY



MV TERN on Lake Windermere[18]

Built in 1891 for the Furness Railway, the oldest vessel in Sealinks fleet

Set up in 1948, the BTC was given control of very large sectors of the British transport industry and infrastructure. Under its jurisdiction the BTC set up four executives to manage what would now be called business sectors. These were the Railway Executive, Docks and Inland Waterways Executive, Road Services Executive and the Hotels Executive. The overall operations of the BTC have been the subject of considerable research and comment from both academic historians and also the interested amateur. However the vast majority of this work has focused on the railway operations, especially the work of the Railway Executive and its successor the BRB. There is also a further narrowing down of the sphere of study even within the Railway Executive since the vast majority of studies have looked at the operation of the railways and also the hardware involved with that aspect of the business. The pages of Otley's bibliography reflect this. Other areas that were important in their own right and also in scale were significant undertakings such as the civil engineering operation, marketing and publicity,

[18] Image from a J A Dixon postcard

and their maritime activities, the subject of this dissertation have not received much attention. In looking at the historiography the subject matter was broken down into the following categories of sources of evidence.

1) Published railway literature
2) Published shipping literature
3) Academic journals and published papers
4) Theses
5) Records and archives
6) Other sources

1) Published Railway Literature

In surveying this area a good starting point is *A Bibliography of British Railway History* complied by George Otley.[19] This is because Otley covers the very large pantheon of literature devoted to the many facets of the British Railway industry. Of the 437 pages listing the relevant literature two pages are devoted to docks, shipping and canals owned and operated by railway companies and British Railway (BR). In what is probably be regarded as the standard business history of British Railways, Gourvish's two volumes, *British Railways 1948-1973* and *British Rail 1974-1997*[20] , the maritime activities of the BTC and BRB similarly receive very little attention other than coverage of their sale in 1984. The area has also been missed by most of those inside the business that chose to write about their experiences. M R Bonavia who was a manager in the LNER and later with BR has written a number of books on British railways. His *British Rail the First 25 years does* devote a chapter to the shipping services but few others even mention this part of the industry .[21] G Fiennes classic *I Tried to run a railway*[22] contains only the briefest of references to the shipping activities of the railway. Even on the engineering side little is said about the maritime activities of the BTC and BRB, for

[19] G Oltey.*A Bibliography of British Railway History* (London:HMSO,1983)
[20] T R Gourvish. *British Railways 1948-1973.*(Cambridge University Press,1986) and *British Rail 1974-1997*. (Oxford University Press,2002)
[21] M R Bonavia, *British Rail, the first 25 years,* chapter 19.
[22] G Fiennes, *I tried to run a railway* (Shepperton:Ian Allan,1967)

example, the history *British Railways Engineering 1948-80*, manages just three brief mentions of harbour works[23].

The standard histories of the railway companies vary in their coverage of the maritime aspects. *The North Eastern Railway, its rise and Development*[24] by W W Tomlinson, regarded by many[25] as an excellent early railway history (published in 1914), covers most aspects of the North Eastern Railway including its dockyard ventures, however the only mention of its shipping services is that of the 1905 Act[26] giving the NER powers to operate ships to a variety of mainland European Ports and also the joint venture with Wilson's to form the Wilson's and NER Shipping Co. Interestingly this book fails give any details of this venture and ignores the Hull and Netherlands Steamship Co (H&NSSCo) which became a wholly owned subsidiary of the NER and one that NER interests in are on record from 1896[27]. On the Western side of England, E T McDermot in the classic three volume history of the GWR records the significant marine milestones but only in the briefest of detail[28]. The *History of the Southern Railway* by Dendy-Marshall devotes a chapter to each of the constituent companies' shipping activities and then another one to the SR's own maritime business. This is probably the most coverage given to the maritime dimension of a railway company in any of the standard histories and probably reflects the great importance of the English Channel and Isle of Wight services to the SR[29]. The individual histories of pre-grouping railways vary widely in the coverage they give to shipping services. The two volume history of the *North British Railway* (NBR) covers the shipping activities of the NBR[30] while O S Nock in *North Western* devotes a chapter to the London & North Western Railway's (LNWR) 'maritime

[23] J Johnson, R Long and R C Bond, *British railway engineering 1948-1981* (Bury St Edmunds:Mechanical Engineering Publications, 1981)
[24] W Tomlinson, *The North Eastern Railway, its rise and development* (Newton Abbot:David & Charles,1967, reprint from 1914)
[25] Kevin P. Jones "W W Tomlinson", Steamindex, accessed 15/8/14 http://www. steamindex. com/library/tomlin.htm
[26] North Eastern Railway (Steam Vessels) Act 1905 (5 Edw. 7) c.cciii
[27] J Hartill.*The H&NSSCo 1894-1918.* (Hull University: BA dissertation, 2010)
[28]E T Mc Dermot, C R Clinker and O S Nock *History of the Great Western Railway* 3 Vols (Shepperton: Ian Allan,1972)
[29] C F Dendy Marshall, *History of the Southern Railway.*(Shepperton: Ian Allen,1982) chapters XIII;XXII;XXXII:XL
[30] J Thomas, *The North British Railway* 2 vols (Newton Abbott: David & Charles,1975)

activities [31] and, in what is probably the most comprehensive pre-grouping history, G Dow's *Great Central* in each of its three volumes contains a chapter devoted to the marine aspects of the Great Central.[32] There are a few other studies specifically of the marine activities of railway companies. The marine histories of the Barry Railway[33], the Caledonian Railway[34] and the Somerset and Dorset[35] have been recorded though only the Caledonian Railway through its maritime offshoot, the Caledonian Steam Packet Co could be called a major enterprise in this area.

2) Published shipping literature

When approached from seawards rather than dry land there is more evidence to work on, although still relatively little considering the scale of the operation, the length of time the business has been running, and also its interesting and complex history from both a technical and management perspective. Academically there have been papers on constituents of the BR fleet but nothing on the post nationalisation operation. Published works do cover the fleets of ships in some detail. The most comprehensive sources are Duckworth and Langmuir's *Railway and other Steamers[36]* and for information on the Scottish fleets there is the book *Clyde River and Other Steamers[37]* first published in 1937 but with an updated 4th edition published as recently as 1990. Duncan Haws' *Merchant Fleets[38]* also provides good coverage of the subject and with Clegg and Styring's *British Railways Shipping and Allied Fleets[39]* provides drawings or photographs of the vessels. F Burtt covers the development of the paddle steamer *[40]* and G Grimshaw describes the pre war operations [41] both of which contribute to an appreciation of the BTC's inheritance . There are several other publications that cover the fleets, Ian

[31] O S Nock, *North Western* (Shepperton: Ian Allan,1968)
[32] G Dow, *Great Central* 3 vols (Shepperton: Ian Allan,1985)
[33] M A Tedstone.*The Barry Railway Steamers.(*Usk: Oakwood Press,2005)
[34] Ian MacArthur, *The Caledonian Steam Packet Co Ltd* (Glassgow:CRSC,1971)
[35] Chris Handley. *Maritime activities of the Somerset & Dorset Railway* (Bath: Millstream, 2001)
[36] Duckworth & Langmuir.*Railway & Other Steamers.*(Prescot:Stephenson,1968)
[37] Duckworth & Langmuir.*Clyde River and other steamers. (*Glasgow:Brown Ferguson 1990)
[38] D Haws.*Merchant Fleets Vols 24/25/26*.(Hereford:TCL Publications,1994)
[39] Clegg & Styring, *British Railways Shipping and Allied Fleets* (Newton Abbot David & Charles,1971)
[40] F Burtt, *Cross Channel and Coastal Paddle Steamers* (London:Tilling,1937)
[41] G Grimshaw ,*British Pleasure Steamers 1920-1939* (London:Tilling,1945)

Allan published a series of books on coastal ships which can be used to trace the changes in fleets and routes. Ambrose Greenway's (Charles Drexel Greenway, 4th Baron Greenway) two volumes on passenger ships of the North Sea and English Channel[42] are useful in comparing the railway fleets with those of their competitors prior to the advent of the car ferry. The development of the car ferry itself in Europe is well covered in Peter & Dawson's *The Ferry a drive through history[43],* one of the few works that can be regarded as an academic history in terms of its depth and sources. N Robins has written on the turbine steamers and the development of the diesel ferry[44]. From an insiders' perspective, Tony Rogan and Don Ripley's *Designing ships for Sealink[45]* provides a series of insights into the background of design decision making, and some of the internal politics in the company, while Brian Haresnape's *Sealink[46]* continues the theme of his earlier railway works by looking at design and style aspects of the operation. Miles Cowsill and John Hendy have though their Ferry Publications' imprint covered many aspects of the short sea field.

3) Academic journals and published papers

The academic world has thus far produced very little work on the short sea and ferry services. There has been some research on coastal shipping but most of it relates to cargo carrying in the age of sail although John Armstrong and Gordon Jackson have written on the development of the coastal steamship trade. There have also been some studies of the growth in trade as steam took over from sail in the 19th Century; *Shipping Movements in the Ports of the United Kingdom 1871-1913* edited by D J Starkey is a useful source of statistical information. The early years of the General Steam Navigation Co, a leading British short sea shipping company, have been studied by Prof Sarah Palmer. Baron Duckham[47] published a study on the

[42] A Greenway *A Century of Cross Channel Ships* and *A Century of North Sea Passenger Steamers* (Shepperton Ian Allan 1981 & 1986)
[43] Peter & Dawson .*The Ferry a drive through history*.
[44] N Robins.*Turbine Steamers of the British Isles* (Newtonards Colourpoint 1999) and *Ferry Powerful a history of the modern British diesel ferry* (Portishead McCall,1998)
[45] Ripley & Rogan.*Designing ships for Sealink.*
[46] B Haresnape.*Sealink.(*Shepperton Ian Allan,1982)
[47] B Duckham,"Railway Steamship Enterprise:The Lancashire & Yorksire Rai;way's East Coast Fleet 1904-14" *Buisness History* Vol X No1 (Jan 1968) 44-57.

Goole Steamship Co, owned by Lancashire and Yorkshire Railway's in the years running up to the First World War. However, this is almost the only reference to coastal shipping services and certainly to what we would regard as ferries today listed in the 432 entries in the index for Business History 1958-1990[48]. Starkey and Gorski have written about Wilson's and the NER Steamship Co, an early joint venture between the NER and Wilson Line[49]. As noted in the introduction there is also Richard Pryke's comparison in the journal of fiscal studies.

4) Theses

Technical developments in ferry design in the post war years have been covered in *The Commercial and Technical Evolution of the Ferry Industry 1948-1987.*[50] Harmanus Heijveld has produced a thesis on *An analysis of ferry services operating from and within the United Kingdom* from the University of Plymouth [51]. At the University of York *Railway development and the port of Hull* formed the subject of doctoral research by Keith Nolan (Nolan, 2006) and the UK to Holland services focusing on the passengers' perspective were the subject of doctoral research by Simon Willgoss *Gateways to Europe: by rail and sea between the Netherlands and Great Britain 1900-1975* (Willgoss, 2010).

5) Records and Archives

The National Archives and also the specialist internet search engine at the National Railway Museum contain a number of records that were consulted in the course of this dissertation. As noted, the principle source was to be the annual reports for the BTC and BRB. These contain overall financial information and some basic traffic, staff and equipment information. However, data relevant to this dissertation became less comprehensive in the later BRB years as Sealink UK was formed.. Nonetheless the shipping

[48] "Business History 1958-1990 a cumulative index" *Business History* Vol XXXII no 2 (1990) 136.
[49] Starkey & Gorski "Our Little Company" in *Harbours and havens, essays in port history in honour of Gordon Jackson* Fisher & Jarvis Ed St (Newfoundland: St Johns University 1999)
[50] William Moses *The Commercial and Technical Evolution of the Ferry Industry 1848-1987* (PHD Thesis University of Greenwich 2010)
[51] Heijveld, Harmanus, *The ferry service offer : an analysis of ferry services operating from and within the United Kingdom* (PhD diss, University of Plymouth, 1998)

committee annual reports available for the early years proved valuable to this dissertation. For example, the BTC, BRB and Railway Executive minute books contain some information and also much in the way of decision records but, as these are not indexed, it has not been possible within the time available for this dissertation to analyse them in great detail. The Archives also include a number of reports, in particular the Gen Watson's 1954 report on shipping activities[52] and the report on future ship design[53].

5) Other Sources

A number of magazines and journals are devoted to maritime activities. *Lloyds's List*[54] and the *Motor Ship*[55] can be useful for news, industry wide trends, and specific ships. Within the United Kingdom several magazines devoted to maritime matters are aimed at the enthusiast, *Sea Breezes*[56] and *Ships Monthly*[57] are the leading two with Ferry Publications also offering a quarterly subscription journal as well as its long list of publications, although many of these have a limited amount to offer the academic study. A final source of information relating to the British Coastal passenger sector is the Coastal Cruising Association's *Cruising Monthly*[58], again a subscription journal but a useful source of information particularly about short term changes in operations.

[52] NRM 65A/124P Gen Watson *British Railways Marine Services* (BTC 1954)
[53] NRM G5A/16 Report on Cross Channel Vessels (BTC 1955)
[54] *Lloyds List,* Lloyds Rochester
[55] *The Motor Ship* Mercator Media Ltd Fareham
[56] *Sea Breezes,* Sea Breezes Publications Douglas
[57] *Ships Monthly,* Kelsey Publishing Group Kent
[58] Coastal Cruising Association, "Cruising Monthly" accessed 12/8/14, http://cruisingmonthly.co.uk/

Chapter 3
THE BACKGROUND

SS ARUNDLE at Dieppe circa 1930[59]

The ARUNDLE was built for the London Brighton & South Coast Railway in 1900.

This chapter will examine the reasons behind the development of the railway shipping services and also the different nature of their operation to that of a conventional shipping company. As the literature review in the preceding chapter has demonstrated, coastal and short sea shipping is often the forgotten aspect of the UK transport network. Ships by their nature tend not to be seen by the vast majority of the public and when they are it tends to be the very large ocean going vessels that attract attention although the car ferry today is likely to be the only contact point most of the public will have with maritime traffic. It is often not realized how much goods goes by the short sea routes. According to Department of Transport in 2012 the top five lo-lo ports[60] (containers) handled 44.3 million tons of cargo while for the top five ro-ro ports[61] the figure was 57.5 million tons[62]. The fact that ro-ro ferry

[59] Image from a Editions d'art YVON postcard
[60] lo-lo is stands for lift on lift off and is the shorthand for mainly container traffic
[61] ro-ro is stands for roll on roll off and is the shorthand for vessels that car, commercial vehicle and trailer traffic can be driven on.

traffic brings more goods into the UK than deep sea container shipping is often not appreciated. The short sea passenger trade has declined with the advent of budget airlines in particular but there were still 61.8 million short sea passenger journeys undertaken in 2012[63]. In the pre railway era water was the most significant transport mode for any large scale movement of goods, be that by sea or river and later canal. It is often thought that the advent of railways saw the end of waterborne trade within the British Isles particularly on the inland and coastal network but this is far from the case. Indeed, it has been argued, by, amongst others, David Edgerton in "*The Shock of the Old*" that new technologies can extend the life of old technologies and often increase their effectiveness. He points out that the peak time for horse use in Britain which was at that time the world's most industrialised country was the early 20th century, one hundred years after the invention of the steam railway[64]. In the same way the improved transport infrastructure of the railways networks increased the need for goods and passengers to be shipped in and out of the British mainland. An example of this is the Port of Ipswich. In 1876 the throughput of coastal cargos by sailing ship was 180,715 tons but by 1913 this had grown to 256,759 tons. The comparable figures for steamships are 187,677 tons in 1873 and 518,721 tons in 1913. This was a 42% increase for sailing ships but a 176% increase for steamships[65]. This illustrates David Edgerton's argument that new technologies often increased the demand for established ones as well.

The steamship which was developed very much in parallel with the steam railway was particularly advantageous for short sea journeys. Many of the drawback of the early steam engine were minimised by the short distances travelled and the key advantages of being less dependant on wind and tide to enter and leave harbour were far more important for short

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[62] "Port Freight Statistics :2012 final figures", Department for Transport, accessed 15/7/14, https://www. gov.uk/government/uploads/system/uploads/attachment_data/file/244717/port-freight-statistics-2012-final-figures.pdf

[63] "Sea Passenger Statistics :2012 final figures", Department for Transport, accessed 15/7/14 ,https://www. gov.uk/government/ uploads/system/uploads/attachment_ data/file/88207/sea-pass-2012.pdf

[64] D Edgerton .*The shock of the old* (London Profile, 1996) 33.

[65] J Starkey Ed, *Shipping movements in the ports of the United Kingdom 1871-1913* (University of Exeter Press,1999) 148.

journeys with frequent visits to ports. For deep sea journeys the sailing ship was a very competitive mode up to the end of the 19th century, as noted above, but the crucial advantage of being in practical terms independent of wind and tide for entering and exiting harbours, and because for short journeys the vessels did not need to carry large amounts of fuel as they could restock on a regular basis made the steamship and steam railway were natural companions. Most of the very early railways were linked to waters that could accommodate commercial shipping, The horse drawn Tanfield Railway of 1725[66] down to the Tyne and the later steam powered Stockton and Darlington Railway to the Tees in 1825[67] are two of the best known examples but there were others as well.

Early in the development of the UK railway system the commercial advantages of extending the network with steamship services became apparent to the railway companies.. The options were to either run ships in connection with the railway services on their own behalf or work in co-operation with other ship owners to form part of what would now be called an integrated transport chain. One of the earliest railway shipping services was the London and Blackwall Railway (Now part of the Docklands Light Railway)[68] which commenced a service from Blackwall to Gravesend in 1842. On the South Coast in 1844 the South Eastern and Continental Steam Packet Co was formed by the South Eastern railway to run services to France[69]. Railway companies formed under an Act of Parliament could only provide services as specified in their Acts, or subsequent amendments. This legal framework which continued until the end of nationalised shipping restricted their operations and flexibility. By the time of the grouping in 1923, with the exception of the Great Northern Railway, all the major railway companies had maritime operations. After the grouping all the 'Big Four' continued these operations. There was some rationalisation but overall it was very much a continuation of the pre-grouping services.

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[66] "History of the Tanfield Railway", Tanfield Railway, accessed 21/7/14, http://www.tanfield-railway.co.uk/history.php

[67] M E Quick. *Railway Passenger Stations in England Scotland & Wales 2nd ed* (Richmond: RCHS, 2003) 268.

[68] Duckworth & Langmuir .*Railway and other Steamers,* 49.

[69] Ibid., 128

It is often thought that the advent of railways saw the end of waterborne trade within the British Isles but this was far from the case. Even today there is a substantial coastal freight traffic (23.6 billion ton-kilometers in 2012)[70] though it is now bulk cargo's rather than the general cargo that was the maritime equivalent of the railways wagon load freight. It was the same road lorry that brought about the end of wagon load traffic on the railway that also saw the end of canal traffic and also the smaller coastal vessels. The natural course of events in coastal shipping led to a service in response to commercial demand where the geography made the route the best option. The early extensions of the railway network with steamship services varied in its effects. In some cases this caused very little change, for example the traditional sea route to Dublin from Holyhead just became railway connected but the sea services from London to France by sea were more quickly replaced by shorter routes that were rail connected such as Dover to Calais or Southampton to Le Havre. The services were developed by or in association with various railway companies which lead to competition and a multiplicity of routes. Examples are the Dover services that were in competition with the Folkestone Boulogne, Newhaven Dieppe and Southampton Le Havre routes. On the Irish Sea a variety of services left Fishguard, Holyhead, Fleetwood, Heysham, Barrow, Siloth and Stranraer again reflecting the different railway companies' interests[71] with associated shipping companies operating out of Glasgow and Liverpool .

By the 1860's the routes operated fell into four categories.

1) There were the obvious and often historic sea passages an island nation used to connect itself to its nearby neighbours. Dover to Calais and Holyhead Dun Laoughaire services are good examples of this service.

[70] "Domestic Waterborne Freight 2012", Department for Transport, accessed 15/7/14 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/264733/dwf-2012.pdf

[71] Duckworth & Langmuir. *Railway & Other Steamers,* 250-390.

2) Within the UK itself there were the ferry routes to the Islands of the British Isles, Portsmouth to Ryde (for the Isle of Wight) or Weymss Bay to Rothsay (for the Isle of Bute) are examples of this service.

3) There were also the internal ferry services across the UK's rivers and Estuary's; Hull to New Holland across the Humber and Kingswear to Dartmouth across the Dart fall into this category with Dartmouth and Hull Corporation Pier being that rare example of a "railway station" that never had a train call.

4) The final group of service is the smallest being the inland lake tourist service which emerged in the Lake District and on some of the Scottish Lochs.

All the Big Four companies had substantial fleets described below which came from the following pre grouping companies.

GWR

Great Western Railway; Alexandra Docks & Railway Co; Barry Railway: Cardiff Railway; Fishguard & Rosslare Railway & Harbour Co; Swansea Harbour Trustees; Port Talbot Railway; Taff Valley Railway[72]

SR

London Chatham & Dover Railway and South Eastern Railway which became jointly the South Eastern & Chatham Railway; London Brighton & South Coast Railway; London & South Western Railway[73]

LMS

Caledonian Railway (Caledonian Steam Packet Co.); Glasgow & South Western Railway; Highland Railway; Furness Railway; Midland Railway (including London Tilbury & Southend Railway); London & North Western Railway; Lancashire & Yorkshire Railway; Somerset & Dorset Joint Railway(joint with SR)[74]

[72] Duncan Hawes.*Merchant Fleets Vol24,* 30.
[73] Ibid., 155
[74] Duncan Hawes.*Merchant Fleets Vol25,*172.

LNER

North British Railway; Great Central Railway; Great Eastern Railway; Hull & Barnsley Railway; North Eastern Railway[75]

As this list shows even amongst the second division of railway companies the Great North of Scotland Railway, Maryport and Carlisle and the North Staffordshire Railway were the only two never to have operated shipping services. As with the railway companies themselves there were competing routes. There was considerable duplication and rationalisation had set in before the grouping with the joint working between the South Eastern and the London Chatham & Dover Railway, as the South Eastern & Chatham, enabling a reduction in fleets and competition across the Dover Straits. The amalgamation of the Lancashire and Yorkshire Railway with the London and North Western Railway would also have produced economies had there been time for that to develop but that was left to the LMS to implement after the grouping in 1923.

The Big Four companies then all acquired a significant shipping and also dockyard portfolio both in their own right and as part of joint operations. The joint operations were for the GWR the Fishguard and Rosslare Railway & Harbour Co. The LMS had joint operations with the LNER on Loch Lomond and the Humber Estuary as part of Associated Humber Lines. The LNER had the other half of those operations. It also had a joint company with Wilson lines and the Harwich Hook service was operated with Stoomboot Maatschappij Zeeland (SMZ). The SR was probably the biggest joint operator working in conjunction with the Society Anonyme de Gerance et d'Armement, Society Anonyme de Navigation Angleterre-Lorraine-Alsace and Les Chemins de Fer de L'Ouest. The nationalisation of the railway in France in 1938 saw all the French Railway operations all merged into the Société Nationale des Chemins de fer Français (SNCF) though it was post World War Two when this had an impact on the British railway shipping operation. For a short while there was also a joint LMS/SR operation that was the

[75] Ibid., 149

legacy of the Somerset and Dorset Railway although this ceased trading in 1933[76].

As has been highlighted the major difference between a railway operated shipping service and normal commercial shipping was that the shipping was seen as an extension of the railway service rather than a stand alone commercial operation. Another difference was that a commercial operator could trade freely as the conditions and traffic available dictated. Because of their nature and the Acts of Parliament under which the railways were built and operated the railway services could only operate where they had powers to do so. Appendix 4 lists these Acts of parliament.

The time of nationalisation and the formation of the BTC was not a straightforward nationalisation of British coastal and domestic shipping unlike the railway companies. The BTC did not take control of David MacBrayne's Ltd despite the LMS having a major shareholding in it. The integration of the two Scottish domestic fleets had to wait until 1969 and the formation of the Scottish Transport Group. Neither was there any attempt to nationalise other British shipping companies providing similar services. The Coast Lines group (which included the Belfast Steamship Co, North of Scotland Orkney and Shetland Shipping Co, and Burns and Laird), The Atlantic Steam Navigation Co[77], The Isles of Scilly Steamship Co and The Clyde Shipping Co were all operations that had major links with the railways, were in most cases similar operations to the railway shipping services, but none of these were placed under the control of the BTC in 1948.

[76] Chris Handley. *Maritime activities of the Somerset & Dorset Railway* (Bath: Millstream, 2001) 136.
[77] The Atlantic Steam Navigation Co was nationalised in 1954

Chapter 4
INHERITANCE

Map from Gen Watson's 1954 report
based on the number of vessels at each port[78]

This chapter will consider the situation inherited by the BTC in 1948. As with their railway, canal and road operations the starting point affected the way the operations were developed. The state of the operation in the early years of nationalisation also gives a base line to measure subsequent performance against. The operation the British Transport Commission (BTC) inherited in 1948 made it one of the largest transport undertakings in the

[78] NRM 95A/124P Gen Watson *British Railways Marine Services* (BTC 1954) appendix D

world, the workforce of 873,257 people gives an indication of scale[79]. The immediate post war period was naturally affected by the Second World War but by 1950 the situation had to some degree returned to normal trading. This is a helpful point to examine further the baseline for the BTC and its railway ships. Gross receipts for the carrying operations of the BTC were £519 million pounds in 1950 with the railways providing 66% of that.[80]. The shipping activities of the railway companies had a gross income of £11.4 million. With a profit of £2.8 million it was in percentage terms by far the most profitable part of the BTC and continued to be so[81].

On the 1st January 1948 the BTC had gained control of a fleet of 129 ships[82] excluding service craft and tugs. These ships served a large network of routes with 24 English and Welsh calling points, over 30 on the Clyde, 2 in the Channel Islands, 6 in Ireland, 6 in France, 3 in Belgium, 3 in Holland, 2 in Germany , 1 in Denmark and services on Lake Windermere, Loch Lomond and Loch Awe. No other coastal shipping operation in Europe covered this range of services. The railway's dock interests and almost all the British canal network were nationalised at the same time. While the docks and inland waterways were seen as a discrete unit by the BTC the shipping activities of the railway companies were viewed as an extension to the railway system. These along with the ports that were predominantly for railway related shipping (known as the packet ports) were left under railway control.

The services can be broken down by area, the Humber; Harwich; the Thames; Dover Straits; Newhaven; Isle of Wight; Southampton; Weymouth; Devon; Fishguard; Holyhead; Heysham; Stranraer; the Clyde and the Lakes/Lochs. This chapter will present information related to these services at the start of the BTC era. For clarity and consistency these will be

[79] NRM BR/2/1 BTC *Annual Report 1948* Table VIII-1
[80] NRM BR/2/3 BTC *Annual Report 1950* Table IV-1
[81] This gave the shipping services an operating ratio of 75%, the next best was road passenger transport at 91%
[82] Appendix 1, ships in service that had been built before 1948, there are alternative viewpoints for this figure.

examined working round the UK in a clockwise manner from the Humber in this and the next chapter.

The Humber

The Humber services had a complex structure. Vessels owned by the Lancashire and Yorkshire Railway and the Goole Steamship Co, which was taken over by the Lancashire and Yorkshire Railway in 1905, became part of the LMS. The Lancashire and Yorkshire Railway via the Goole Steamship Co also purchased the Co-operative Wholesale Societies ships, EQUITY, LIBERTY and UNITY in 1906[83]. The LNER took over three fleets on the Humber. These were those of the Great Central Railway, The Hull and Netherlands Steamship Co which was owned by the North Eastern Railway (NER) and lastly Wilsons and the NER. Shipping Co. Limited. Wilsons and the NER Shipping Co. Ltd was a company jointly owned by the Wilson line and the NER. There were several overlapping services, opportunities to rationalise and increase profitability which lead to the formation of Associated Humber Lines in 1935[84]. This was a joint management of the LMS and LNER Humber shipping activities though, oddly enough, not the Hull to New Holland Ferry Service. The railway companies still maintained separate ownership of their vessels but it enabled six vessels to be withdrawn by 1937[85]. These routes served Belgium, Holland, Germany and Denmark and were in the main a cargo service though passengers were carried. The Hull to Copenhagen route was the longest sailing of any railway ship[86]. At the time of nationalisation the services were provided by a variety of ships dating from 1906. There were 9 ships based at Goole and 4 at Hull[87]. Although all the ships took passengers it was under the 12 passenger rule[88] with just the BURY (ex Great Central Railway) and the MELROSE ABBEY on the Hull to Rotterdam service being what would actually be regarded as passenger

[83] Haws, *Merchant Fleets Vol25,* 70.
[84] Ibid., 76.
[85] NRM 95A/124P Gen Watson, *British Railways Marine Services* (BTC,1954) appendix B
[86] The National Archives AN83/12 *Railway Executive Steamship Services and Register of Ships 1948*
[87] Clegg & Styring, *British Railways Shipping and Allied Fleets* (Newton Abbot: David & Charles,1971) 231.
[88] Ships carrying 12 or less passengers do not have to comply with the full set of regulations that apply to passenger vessels

ships. All the ships were coal fired and powered by steam reciprocating engines. They were quite slow ships typically being capable of 12 to 13 knots with a passage time of around 19 hours. These services were very much aimed at the cargo market and bore more relationship to conventional deep sea sailings than a ferry service as the publicity material in the 1950's makes clear. The fare included meals and a basic cabin, supplements could be paid for a higher grade of cabin and when possible the vessel could be used for overnight accommodation on a bed a breakfast basis at the continental ports for an extra 15/- (75pence) per passenger. The times of sailing were dependant on tides and most vessels made one round trip a week to the continent though the longer services, such as the Copenhagen run, took a fortnight to go there and back. This sailing departed on a Saturday in each direction, the single fare was £12. It was operated by the DEARNE and the DON, in the 1930's they were fitted with refrigeration equipment[89] and became know as the butter boats as that was an important part of their cargo along with bacon and beer, living up to the stereotypes of Danish Goods. It should however not be thought that the Humber services were unimportant. Though low in the number of passengers carried these were by far the biggest cargo carrying service the BTC operated. carrying 341,000 tons and making £98,511 profit in 1950 increasing to over £161,000 in 1951[90]. This shows why replacing the ageing fleets on the Humber services was a priority for the BTC. In addition to being profitable the Humber services also had a very large proportion of their cargo transhipped to/from rail services. In 1952 the figures were 108,000 tons of imports via Hull (65% of the trade) and 30,000 tons of exports (52%). For Goole the railway figures were even higher with 137,000 tons of imports (78%) and 62,000 tons of exports (62%)[91].This reinforces the view of railway managers at the time that the services should be seen as part of a railway network[92].

The Humber ferry itself, from New Holland Pier to Hull Corporation Pier, was operated by three paddle steamers. Two had been built in 1934

[89] Haws *Merchant Fleets Vol 25* 174
[90] National Archives AN83/1 *Marine committee records and statistics 1951*
[91] NRM 95A/124P Gen Watson, *British Railways Marine Services* (BTC,1954) 10.
[92] Ibid., Chapter IV

and one in 1940. The Humber ferry route carried over 1 million passengers in 1950 and just under 1000 vehicles a week and showed a profit of £22,289 for 1950[93]. In the BTC era the with the newest ship, the LINCOLN CASTLE only 8 years old at the time of nationalisation and the older two vessels 14 years old, there was no pressing need to replace them.

Harwich

The next batch of services consisted of those from Harwich to Holland and Belgium. The main passenger service from Harwich to the Hook of Holland had been started by the Great Eastern Railway and passed to the LNER. The LNER formed a subsidiary company with Belgian State Railways called Great Eastern Train Ferries Ltd to operate a Harwich to Zeebrugge train ferry service using three second hand ships that had been built for the First World War Richborough to Dunkerque train ferry service. This was followed by an agreement with SMZ in 1927 which moved its service to Holland from Gravesend to Harwich[94]. In 1934 Great Eastern Train Ferries Ltd was completely taken over by the LNER and the Harwich Hook service day sailing service was operated by SMZ and the night one by the LNER. In part this was responsible for the large number of vessels required to operate this service in 1948. There was also the local ferry service from Harwich to Shotley and Felixstowe. In 1950 the Harwich Hook route carried 220,000 passengers and was second only to the Dover Straits service in terms of profitability at £622,1551 for the year. The freight services out of Harwich to Rotterdam and Antwerp lost £16,780 but the main train ferry route to Zeebrugge carried just under 100,000 tons and made £63,543[95]. Two new ships operated the Hook service, the ARNHEM from 1947 built for the LNER and the AMSTERDAM, a sister ship delivered to the BTC in 1950. A similar situation applied to the train ferries on the Zeebrugge route where the LNER had taken delivery of a new diesel ship, the SUFFOLK FERRY, in 1947 and the BTC a sister ship the NORFOLK FERRY in 1951. The freight ships on the other Harwich services were a collection of elderly vessels built for the

[93] National Archives AN83/1 *Marine committee records and statistics 1951*
[94] M Cowsill , F Haalmeijer, J Hendy *Harwich Hoek Van Holland 100 Years of Service* (Kilgetty: Ferry Publications,1993) 49
[95] National Archives AN83/1 *Marine committee records and statistics 1951*

Great Eastern Railway, the Great Central Railway and the LNER. The train ferry service by its nature was of course a generator of railway traffic but the passenger trade should not be underestimated. The major services from Harwich had connecting boat trains, of which the "Hook Continental" was the best known and most important. The value of this trade can be illustrated by the new train the LNER built for it in 1938 under the auspices of Sir Nigel Gresley. David Jenkinson in his History of British Railway Carriages 1900-1953 calls this "the last of Gresley's super trains"[96]. There was also a service known as the North Country Continental from Liverpool to Parkeston Quay to link Lancashire, Yorkshire and the East Midlands to Parkeston Quay. In the 1950' and 60's this used the Cheshire lines and Great Central route to Lincoln and a restaurant car was attached at Sheffield[97]. With new passenger ships and train ferries it was just the elderly cargo ships that needed replacing. There was also the estuary ferry at Harwich to Shotley and Feixstowe. The main vessel was the BRIGHTLINGSEA built in 1925; this was the LNER's first ship. The service was very seasonal and lost money thouh the sums involved were not large. The BTC was endeavouring to transfer this service to a local operator[98].

The Thames

The BTC operated the former London Tilbury and Southend Railway services from Tilbury to Gravesend ferry service. This had been absorbed by the Midland Railway in 1912 and in turn passed to the LMS[99]. There had been a number of proposals for a lower Thames crossing which became what is now known as the Dartford Tunnel. Work had started on this in 1936 but was suspended for the war period. This had an impact on the long term plans for the route but in 1950 it carried 3.3 million passengers and 236,000 vehicles[100]. The three passenger ships, CATHERINE, ROSE and EDITH had been built for the London Tilbury and Southend Railway between 1901 and

[96] D Jenkinson, *The History of British Railway Carriages 1900-1953* (Easingwold: Pendragon, 1996) 492.
[97] *Bradshaw January 1960*
[98] NRM 95A/124P Gen Watson, *British Railways Marine Services* (BTC,1954)
[99] Haws, *Merchant Fleets Vol 25,* 124.
[100] National Archives AN83/1 *Marine committee records and statistics 1951*

1911, while the two car ferries. TESSA and MIMIE were LMS vessels from 1924. This service made £30,714 profit in 1950[101].

The Dover Straits

The Dover Straits were the were and still are the major crossing point from the UK mainland to Europe. Dover had been the ferry port initially for the London Chatham and Dover railway while the South Eastern Railway used Folkestone. Again joint operations became a feature of this route with initially the Chemins de Fer du Nord, the Societe Anonyme de Genance et D'Armement and finally SNCF. The services operated from Dover and Folkestone to Boulogne and Calais. There was also a train ferry service from Dover to Dunkerque. This was operated by another Joint Company, the Societe Anonyme de Navigation Angleterre-Lorraine-Alsace. This company had a rather convoluted birth but by 1936 it had three train ferries and was managed by the SR who owned 80% of the company. The Dover and Folkestone to Ostend service was not operated by any British vessels but there was very close co-operation between the Regie voor Maritiem Transport (RMT), the Belgium state owned ferry company and the SR and later BR. By 1950 the services had recovered from the war and a cargo service operated from Folkestone to Calais and Boulogne, the DEAL. HYTHE and WHITSTABLE were the ships on this service. Passenger services were in the hands of the ISLE OF THANET, CANTERBURY, INVICTA and the MAID OF ORLEANS. These were all by then two class steam turbine ships capable of at least 21knots. The French fleet had not yet recovered from its war losses and so the BTC vessels operated most services. There was a considerable boat train operation to go with this. Dover Marine station and Folkestone Harbour station, both now closed, had platforms adjacent to the quayside where passengers could transfer to the ships with ease. As an example of these services the 10.00 from Victoria to Dover, a train that included Pullman cars arrived in Dover Marine at 11.32, the ship departed at 12.00 and arrived in Calais at 13.20 UK time, or 14.20 CET. At 14.40 the

[101] Ibid.

connecting boat train left for Paris where it arrived at 18.11 with a restaurant car[102]. The "Golden Arrow" was the premier service, an all Pullman train at this point leaving London at 13.00 arriving in Paris as the "Fleche D'Or" at 21.40. Again this service was significant enough commercially to warrant a new build of Pullman cars in 1951[103]. The Dover Dunkerque train Ferry service was operated by the SHEPPERTON FERRY, the HAMPTON FERRY and the third vessel the TWICKENHAM FERRY which was owned by the French partner on this route. These ships also were part of the early car carrying service across the channel and were ships that vehicles could be driven on and off, including commercial vehicles as well as railway coaches and good trucks. Most of the passenger ships could load cars by crane but the two dedicated car service ships were the AUTOCARRIER, a modified cargo ship which could carry about 30 cars, and the DINARD, a Channel Islands vessel converted to carry 80 cars, both loaded by crane. There were at this time no road link spans at Dover, Calais or Boulogne so crane loading was the only option. These routes carried 1.1 million passengers, 222,000 tones of cargo and 67,000 vehicles again with the drive on Dunkerque route being the biggest carrier of vehicles. The Dover and Folkestone to Calais and Boulogne services made £962,343 and the Dunkerque service £234,237 in 1950[104].

Newhaven

The London Brighton and South Coast Railway had its London Paris route with ships running from Newhaven to Dieppe. This was also a joint operation with the Chemins de Fer de L'Ouest. It operated on a split based on the railway mileages from London to Paris. This gave the LBSCR 19/65's of the operation, a proportion which later was adopted in the joint BR/SNCF operation. This was a much longer crossing and traditionally had the fastest ships on the Channel. The SR's WORTHING and the French LONDRES and ARROMANCHES were all capable of over 24 knots and could make the crossing in 2 and a half hours. This speed came at a price with the

[102] *Bradshaw January 1960*
[103] G M Kitchenside, *Railway Carriage Album* (Shepperton Ian Allan 1980) 244.
[104] National Archives AN83/1, *Marine committee records and statistics 1951*

Newhaven Dieppe vessels needing roughly twice the power of the Dover Calais ships and with the corresponding increase in fuel costs. In 1950 this was a profitable route, served by three ships carrying 426,950 passengers and making £137,168[105]. Again there was the dedicated boat train service to Newhaven Station and the corresponding Dieppe Paris service. Leaving Victoria at 9.30 the connecting train arrived in Paris St Lazare at 18.08[106].

The Isle of Wight

The Isle of Wight was served by railway ships from Portsmouth and Lymngton in competition with Red Funnels services from Southampton to Cowes. The Portsmouth services had been a joint LSWR and LB&SCR operation while Lymington Yarmouth was a LSWR service. The SR had been the first railway company to offer drive through vehicle ferries on its Portsmouth Fishbourne route. The 1st generation ships, FISHBOURNE, WOTTON and HILSEA were joined by a second generation ship, the LYMINGTON on the Lymington Yarmouth route. In many respects this was a revolutionary ship being a drive through diesel car ferry, sufficiently large to take commercial vehicles. After the war the SR ordered another drive through ship for the Lymington Yarmouth route and two new diesel passenger vessels for the main Portsmouth to Ryde Service. This enabled the run down of the paddle steamer fleet. In 1950 the Isle of Wight services carried 3.2 million passengers, 47,944 vehicles and made a profit of £47,944[107].

Southampton

Southampton was the base for the former London & South Western Railway (LSWR) cross Channel services. In 1948 there were sailings to Le Havre, St Malo and also the Channel Islands. The Channel Island sailings were in competition services from Weymouth, the GWR's Channel port. Southampton docks were a major success story for the SR though its own steamer services from the docks were not the most profitable service. They had been important to the LSWR as its route to the continent. The service to

[105] National Archives AN83/1 *Marine committee records and statistics 1951*
[106] *Bradshaw January1960*
[107] National Archives AN83/1 *Marine committee records and statistics 1951*

France was by the 1950's a poor relation to the other routes and the St Malo service was seasonal, running only in the summer. The sailings were operated by the elderly HANTONIA, ISLE OF GURNSEY, ISLE OF JERSEY, ISLE OF SARK, BRITTANY, and the new ship FALAISE There were also the cargo ships, HASLEMERE, RINGWOOD and WINCHESTER. In 1950 the Channel Islands service carried 201,655 passenger and 91,000 tons of cargo making £47,190 profit. In 1950 the Southampton sailings carried 106,403 passengers, a small amount of cargo and produced a profit of £78,233[108].

Weymouth

The rival Great Western route from Weymouth was much shorter. The GWR vessels the ST JULIEN, ST HELIER, ROEBUCK and SAMBUR operated this service. The 1950 figures for this route were 119,411 passengers, 126,430 tons of cargo and a profit of £39.045[109]. This split service reflected the two railway companies that operated the route and in the winter it was an alternate day service from Weymouth and Southampton. The much shorter crossing from Weymouth made considerable economies in service possible, with boat train connections available to the quayside.

Devon

At Dartmouth there was a ferry service across the River Dart from Kingswear, the railway station to Dartmouth, a town that never had a railway but did have a railway station. In practice this was the extension of the railway from Kingswear to Dartmouth on which the 1908 built MEW carried 447,479 passengers across the river making a loss of £2,420 in 1950[110]. At Plymouth as part of its drive to encourage ocean liner trade the GWR had developed a tender service. It takes quite a long time to dock an ocean liner and is also quite an expensive process. If the traffic is just passengers and mail then a small ferry can tie up to the larger vessel and offload this traffic. The GWR had built three vessels known as tenders to fulfil role, the SIR FRANCIS DRAKE, SIR JOHN HAWKINS and SIR RICHARD GRENVILLE.

[108] National Archives AN83/*1 Marine committee records and statistics 1951*
[109] Ibid.
[110] Ibid.

This meant that the larger ships just had to stop and drop anchor while this took place, thereby saving time and avoiding many of the harbour costs. This ocean liner traffic was the basis for the races between the GWR and the LSWR around the turn of the 19th Century. The agreement was the GWR would carry the mails and the LSWR the passenger trade to London. It was on one of these services that the 4-4-0 "City of Truro" became the first locomotive to reach 100mph on a British Railway[111]. The value of this traffic in the 1930 was such that the GWR built special carriages for it, known as the super saloons, all the carriages were names after members of the Royal Family. With the larger GWR loading gauge[112], David Jenkinson describes them as the "equal of if not superior to Pullman"[113]. The interior's design included light French Walnut Veneer and gold silk damask curtains. For the pleasure of travelling in one of these coaches a supplement of 10/- was charged on top of the 1st class fare. Again this shows the commercial value of seaborne traffic to the railways. However while in 1930 38,472 passengers had passed through Plymouth, by 1950 the volume was down to 18,204. The port shipping services lost £24,727[114]. With the concentration of transatlantic lines on the port of Southampton this was a service in decline and closing it down was the only rational option.

The Bristol Channel had been the location for a limited number of railway shipping services and some major dock developments but other than harbour service craft there were no shipping activities there by 1948.

Fishguard

GWR route to Ireland was from Fishguard to Rosslare. A magnificent harbour had been built at Fishguard in an attempt to capture transatlantic traffic and also open up a route to Ireland. This was done through another joint operation, the Fishguard and Rosslare Railway and Harbour Co which

[111] C Rous-Marten claimed City of Truro reached 102 mph, some observers have questioned whether the speed was that high but it is accepted that speeds of around 100 mph were reached by all commentators

[112] The GWR main lines were built by Brunel for 7' wide tracks. Although converted to the standard 4' 8.5" later on the space enabled the GWR to build slightly larger trains for its main lines than ran on the rest of the UK network.

[113] D Jenkinson, *The History of British Railway Carriages 1900-1953*, 492.

[114] National Archives AN83/1 *Marine committee records and statistics 1951*

was a partnership with the Irish Great Southern and Western Railway Co. This is still in existence in 2014 though now this is a partnership between Stena and CIE with the chairmanship alternating between the two on a yearly basis[115]. In 1950 the pre-war ST ANDREW and GREAT WESTERN were joined by the post-war ST DAVID and ST PATRICK. These were very much updated version of the pre-war ships. In 1950 this service was the poor relation on the Irish Sea. With an overnight sailing each way it had the lowest passenger figure of 121,376. The Waterford service was a statutory requirement. A feature of the Irish traffic emerges here, the significant livestock trade. The Waterford service carried 11,105 head in that year but overall the Fishguard routes lost £35,213 for the year[116]. The traditional 1950's service was an overnight sailing each way requiring two vessels as was the routine at Fishguard with a single ship, the GREAT WESTERN operating to Waterford as required by statute.

Holyhead

London to Dublin via Holyhead was the historic route to Ireland. In 1950 there was an all year round night sailing with the day service being a summer only operation. The service was in the hands of the LMS ordered HIBERNIA and CAMBRIA which had been the first major vessels to be delivered to the BTC. This was the major passenger route into Ireland carrying 679.385 passengers in 1950 making a profit of £223,283. In addition to the main passenger service to Dun Laoghaire there were three ships operating cargo sailings to Dublin and Greenore. These carried 108,450 tons of cargo and 68,046 head of livestock and made a small profit of £4,930 for 1950[117].

Heysham

The LMS had carried out some rationalisation of services and the old Midland Railway and Lancashire and Yorkshire Railway routes from Fleetwood and Heysham to Belfast had been concentrated on the Heysham

[115] Conversation with Dick Ahearn (Chief Executive CIE) 2013
[116] National Archives AN83/*1 Marine committee records and statistics 1951*
[117] Ibid.

route. This had the advantage of sailing from a railway built and owned dock. The LMS had also built three new ships for the service in 1928. The DUKE OF ARGYLL, DUKE OF LANCASTER and DUKE OF ROTHESAY all came from the Dumbarton yard of William Denny. Again this was a night sailing in each with the connecting trains. The Ulster Express ran from Euston with through carriages from the Midlands, from Manchester there was the Belfast Boat Express and there was also a though train from Leeds. The cargo sailings were a significant operation. In 1950 this services carried 370,097 passengers, 240,695 tons of cargo and 82,376 head of livestock. What does stand out is how profitable this service was at £444,785[118] in 1950 contributing 69% of the Irish Sea profits and making it the 3rd most profitable route, after the Dover straits and Harwich Hook. There was also a small scale Barrow Belfast service but this was in the process of being wound up.

The Lake District

Turning inland, the Furness Railway had developed a considerable tourist trade on Lake Windermere and a lesser one on Lake Coniston. The Lake Coniston services did not survive World War 2 although the National Trust later restored the former Furness Railway steamer GONDOLA of 1859 and returned it to service in 1980. On Lake Windermere there were five vessels including the oldest ship to pass to the BTC, the CYGNET built in 1879. At this time it was a summer only service carrying 355,080 passengers in 1950 and making a small loss of £3,775 in 1950[119].

Stranraer

The final Irish route operated by the BTC was also the shortest. Stranraer to Larne had been a complex joint operation between the Belfast and Northern Counties Railway, the Caledonian Railway, the Glasgow and South Western Railway, The London and North Western Railway and the Midland Railway. Fortunately these had all become part of the LMS which must have simplified matters. In 1950 this was the only cross channel drive on car ferry service in the UK. The 1947 built PRINCESS VICTORIA which

[118] Ibid
[119] Ibid

had replaced a similar LMS ship of the same name provided a car ferry route to Northern Ireland. There were also passenger only sailings by other vessels. In 1950 the service carried 197,526 passengers and 6334 cars making a profit of £50,885[120]

The Clyde and the Caledonian Steam Packet Co

The Clyde services were heavy loss makers, the biggest single loss in the BTC's maritime operations losing £163,016 in 1950 despite carrying 3.8 million passengers [121]. There was considerable duplication between the two fleets. The LUCY ASHTON built in 1888, part of the ex LNER fleet, was the oldest of the Clyde steamers that the BTC took over but four vessels on the Clyde pre dated the First World War. The LNER fleet was all paddle steamers as the shallow waters of their base at Craigendoran made screw driven ships of any size problematic with the technology then available. The only post war replacement vessel on the Clyde at this point was the WAVERLEY built for the LNER in 1947 to replace the paddle steamer of the same name which had been lost at Dunkerque in the war. The Clyde services had a whole mystique of their own, even down to its own club, the Clyde River Steamer Club formed in 1932.[122] This is not surprising as the Clyde river and estuary provide the best opportunities for coastal sailing in the UK. It was also for many years at the forefront of technical development with not only the world's first commercial steamship being a Clyde vessel but the world's first commercial Turbine Steamship was also a Clyde vessel. Built in 1901 by Denny, Parsons and Williamson-Buchanan Steamers Ltd this was the KING EDWARD. This ship survived into BTC ownership, to be withdrawn in 1951[123].

To add to this were two loch services. A joint NBR/CR and later LMS/LNER service on Loch Lomond was operated by the PRINCESS MAY (1898) and PRINCE EDWARD (1911) and these were served by direct train services to Balloch Pier. Loch Awe had sailings by an ex LMS vessel, the

[120] Ibid
[121] Ibid
[122] http://www.crsc.org.uk/ accessed 31/5/2014
[123] Clegg & Styring , *British Railways Shipping 7 Allied Fleets,* 186.

COUNTESS OF BREADALBANE with a lakeside station at Loch Awe. Pre war there had been sailings in Loch Tay by the QUEEN OF THE LAKE. This ship was laid up during World War Two, but sailings were never restarted and the ship was scrapped in 1949. This had been served by the railway with a summer only service to Killin Pier until 1939[124].The most northerly railway service was the LMS/CSP car and passenger ferry service from at the Kyle of Lochalsh to the Isle of Skye. This was operated by three small pre war "turntable ferries" and a launch. In deference to local religious objection no sailings operated on a Sunday. These small ferries carried 111,702 passengers, 16,672 cars and 20,692 head of livestock in 1950 making a small profit.

The services operated by David Macbrayne were not part of the railway fleet or the BTC despite a significant railway interest. To complete the picture there was one other railway service, though this was not operated by the BTC. The North British Railway and later the LNER had operated sailings on the Firth of Forth. In 1934 the main service, the North to South Queensferry route, approximating to the Forth Bridges crossing, had been leased by the LNER to William Denny of Dumbarton.

This examination of the BTC's shipping operation in 1950 clarifies a number of points. The services to the continent were a major operation and in total the carrying figures for the 1950 operation were 2.2 million passengers, 940,000 tons of cargo and 100,000 vehicles. These services generated a profit of £2.2 million doing this. It also highlights the very wide range of services the BTC operated. No other British shipping company covered so many areas with such a variety of craft. The task was also complicated by the multiplicity of harbour owners, the large number of life expired ships, and also the statutory constraints placed on the operation of ships by railway companies. The BTC and later BRB accepted, as with loss making railway lines, the social need for some of their services, the Clyde estuary in particular was an example of this, but this cost had to be carried

[124] M E Quick, *Railway Passenger Stations in England, Scotland and Wales* (Richmond RCHS 2003) 193.

within the overall figures. None of the private sector operators had to deal with these constraints. They could open and close services at will and operate anywhere that could take their ships. Finally when looking at the new entrants in the 1960's, Townsend, Thoresen and Normandie Ferries the linkspans were in place already and they could order purpose built ships for the ro-ro traffic from what was, in effect, a blank sheet of paper.

Chapter 5
SERVICE DEVELOPMENT

MV KEPPLE at Largs[125]

Kepple was built for the Tilbury Gravesend service but transferred to the Clyde to service the island of Cumbrae

Having described the operations the BTC took control of in 1948 this chapter will review the changes on a route by route basis again working round the UK in a clockwise manner from the Humber. The changes in the pattern of service and also the routes operated will be considered to see if the charge that the BTC and BRB were unresponsive to changes in the market place as summarised in Chapter 1 is justified. By 1950 a more conventional service pattern had evolved and the fleet had been restored to an almost full service level.

[125] Image from a postcard PT36146

There were starting to be developments and changes in services that need to be seen in the light of a number of factors that affected all shipping operators. In the early part of the period the permissions necessary to operate a UK registered commercial vehicle in Europe were considerable and the large scale road freight that is the core business for most ferry routes now did not exist at that time. Aircraft and hovercraft were seen as the new way forward with for a time a certain level of justification[126]. The long distance international traveller had been moving away from ships to air travel since the end of the Second World War. 1957 was the peak year for international sea travel and also the last year in which on the North Atlantic routes the air passenger was in the minority[127]. By the 1970's the European traveller was often moving to air travel, in particular the business passenger. Aircraft scheduled services had grown from 297 million ton/km in 1950 to 1191 in 1960 and 4129 million ton/km in 1970[128]. The Civil Aviation Authority still though places the Port of Dover as second only to Heathrow for international travellers[129] in the UK. Not only were foot passenger moving to aircraft for international travel but cars were being carried by air as well. This did in the 1960's seem to offer significant competition though this turned out be a short lived operation with British United Air ferries (the successor to Sliver City) final scheduled car carrying flight taking place on 1st January 1977[130] . The Hovercraft was another potential competitor with Hoverlloyd and the internal operation Seaspeed offering an alternative to the ship. This threat proved more durable but again did not survive in the long run.

These competitors for the classic passenger were offset by the rise in vehicle traffic and the start of the phenomenal growth in road fright traffic which was accelerated by the UK's entry into the European Economic Community in 1973.

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[126] Gen Watson and Keith Wickenden refer to these threats.
[127] R Hope, *A New History of British Shipping* (London: Murray, 1990) 405.
[128] CAA "*CAP 375 Annual Statisics 1973*" table 2, accessed 21/9/14 http://www.caa.co.uk/docs/80/historic_combined/1973/1973%20Annual%20UK%20Airlines%20and%20Airports.pdf
[129] Ibid., 57
[130] "British United Airways" accessed 14/8/14 http://en.wikipedia.org/wiki/British_United_Air_Ferries

The Humber

PS LINCOLN CASTLE on the Humber[131]

The last coal fired steam engine operated by the BRB

The demise of the international services in 1971 some 43 years ago has tended to turn the Humber into the forgotten route. It is also seen as one of the areas where the BTC lost trade though a failure to respond to the market. The renewal programme started in 1954 when the WHITBY ABBEY and FOUNTAINS ABBEY came into service. These were conventionally styled general cargo ships and another two similar vessels with refrigerated holds were added in 1956 for the Copenhagen trade. The passenger side of the service was also modernised with the three class ships becoming two class ones in 1956[132]. In 1958 and 1959 two passenger and cargo vessels, this time with all the accommodation placed aft, were added for the Hull Rotterdam route with a further 6 pure cargo ships. This meant the entire Humber continental fleet was now post war diesel ships. The new ships were however in many ways a reflection of the railway's modernisation plans, a modern diesel version of the previous steamship with a specification that did not fit emerging trends. Ripley and Rogan comment that the ships were "designed to a poor commercial remit" and did not cater for the growing

[131] Image from a Bamforth postcard
[132] Clegg & Styring, *British Railways Shipping and Allied Fleets,* 234.

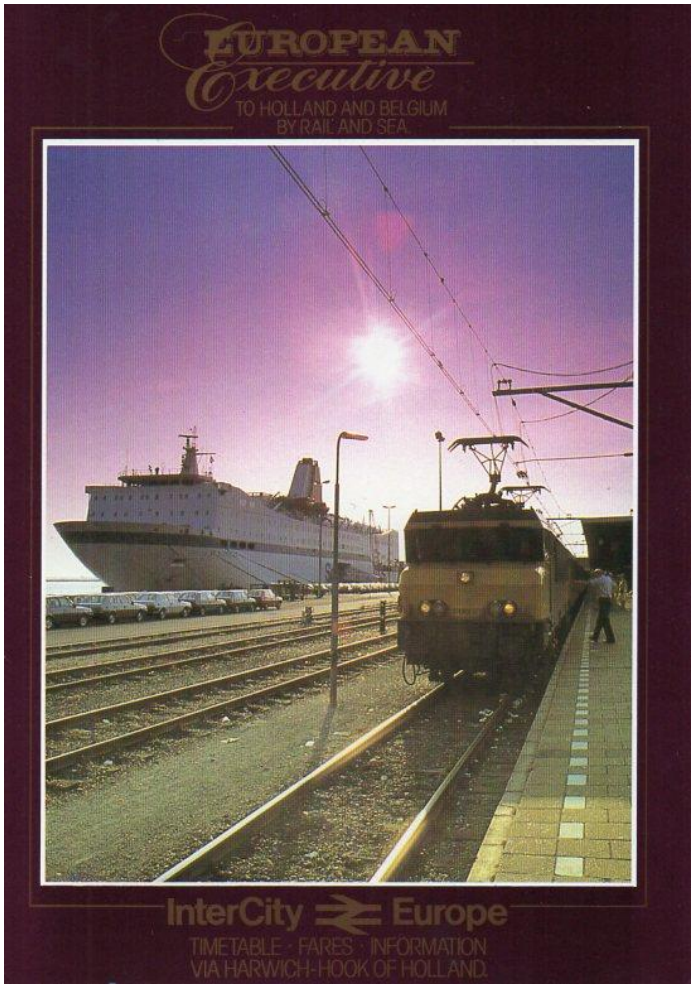
International Organization for Standardization (ISO) containerised traffic"[133]. At the time the new ships were ordered they would be part of a successful conventional cargo service but this soon ceased to be the case and by 1953 the service was losing money[134]. The cargo and passenger figures were dropping and showed no sign of improving. The different harbours and routes involved meant the service was infrequent. Gen Watson's report emphasised the amount of onward traffic this route generated for the railways and the fleet modernisation programme should take took place but It is hard to avoid the conclusion that this was based on wishful thinking rather than any sensible financial projections. In 1962 the FOUNTAINS ABBEY while on its way back to Hull from Bremen caught fire and had to be abandoned, the ship was damaged beyond repair and two crew died. The Copenhagen route was transferred to Ellerman Wilson Lines in 1965. Ellerman Wilson also purchased the two ships on that route, the KIRKHAM ABBEY and BYLAND ABBEY which were moved operate a London Denmark service in 1967. This had a short life and they were sold in 1970 so it is not unreasonable to draw the conclusion that this service had ceased to be viable[135]. The Bremen and Antwerp services ceased leaving the final route to Rotterdam but even this was no longer profitable and in November 1971 the final railway ship left the Humber for Rotterdam ending over 100 years of service.

The withdrawal from the cargo service was a seen as a failure however the only other option would have been to start up a freight and passenger ro-ro service from the Humber to Europe as North Sea Ferries did. To do this there would have needed to be a significant investment in port facilities as well as ships. Another factor is that in practice the BRB would have been investing in a road freight service from the Humber to Europe in competition with its own rail services at a time when the resources were needed elsewhere.

[133] Ripley D & Rogan T *Designing Ships for Sealink,* 22.
[134] National Archives AN83/3 *Marine committee records and statistics 1953*
[135] D Haws, *Merchant Fleets Vol 25,*79.

For the Humber ferries the decision in 1966 by the Wilson Government to proceed with the building of the Humber Bridge meant a managed rundown of this service was the way forward and no new ships were ordered. The LINCOLN CASTLE became the BRB's last coal fired steam engine lasting in service until 1978. A surplus Isle of Wight ferry, the FARRINGFORD was then sent North to cover the service until the bridge opened in 1981.

Harwich



Harwich Hook passenger brochure from 1984

The Harwich Hook route was the main route into all of Europe with the exception of France and Spain with train connections to the low countries, Germany, Switzerland, Austria and Eastern Europe. For many years 1st class passengers could join the Rheingold at the Hook of Holland and travel in a

deluxe train to Basel with through carriages to Milan[136]. Heading North and East the Holland Scandinavian Express reached Copenhagen or Berlin by evening with onward connection available. The main train ferry route to Zeebrugge was profitable and a generator of rail traffic but the subsidiary cargo services to Rotterdam and Antwerp lost £16,780 in 1950[137]. The freight ships on the other Harwich services were a collection of elderly vessels built for the Great Eastern Railway, the Great Central Railway and the LNER. As on the Humber these were replaced by modern diesel ships but not container carriers. One of these, the COLCHESTER was later lengthened and converted to carry containers. In1968 the BRB responded to the container revolution at sea. In parallel with the freightliner services starting on the railway two new cargo ships specifically designed to carry containers entered service. SEA FREIGHTLINER 1 on the Harwich Zeebrugge service and SEA FREIGHTLINER 2 on the Rotterdam route. These were the first two cellular container ships designed, built and owned in Europe[138]. They stayed in service for the rest of Sealink's existence and for another eight years in the private sector.

There was some debate between the Dutch Government and SMZ in the early post war years over the use of the Hook as their base but this was settled by 1953. This year also saw the collision between the DUKE OF YORK and HAITI VICTORY off Harwich with the loss of 8 lives. The post war ships from SMZ and the BTC settled into the service and the next major change was in 1963 with the arrival of the AVALON, the name chosen was the name of the first Great Eastern Railway ship. The general consensus of opinion is that this should have been a drive on car ferry rather than a passenger ship[139] as three years later, in 1966 the BRB and SMZ agreed to build linkspans at either end of the route and order two drive through car ferries. Initially the service was still run by 4 ships with the car ferries running overnight each way and the passenger ships making the daytimes crossing but in autumn of 1968 this changed to each vessel making a one round trip a

[136] *Cooks Continental Timetable Jan 1966* Table 17 and 20
[137] National Archives AN83/1 *Marine committee records and statistics 1951*
[138] Ripley & Rogan. *Designing ships for Sealink,* 43.
[139] M Cowsill , F Haalmeijer, J Hendy *Harwich Hoek Van Holland 100 Years of Service,* 83.

day. The British ship sailed out from Harwich in the day and returned overnight with the Dutch vessel making the opposite sailing. The growth of traffic on the route enabled a third car ferry to be constructed. The Falklands war caused some disruption to these services with the ST EDMUND being requisitioned by the Ministry of Defence, a role from which it was never to return.

The growth in traffic on this route continued and Sealink was able to charter the PRINSESSAN BIRGITTA from Stena which was renamed the ST NICHOLAS and became the biggest railway ship ever to operate from the UK. It had been built as a one class vessel but to maintain a two class service a 1st class restaurant and lounge were added at the aft of the ship. The European Executive Brochure illustrated at the start of this section shows that the classic passenger was still a significant part of the business even in the 1980's with the old North Country Continental train now renamed the "European" and still running from Liverpool to Harwich to connect with the overnight sailings. The ST NICHOLAS also had a large 500 capacity terraced bar with a stage and dance floor at the stern and introduced the Scandinavian style of ferry to the UK's fleet for the first time[140]. The imbalance between the ships and traffic growth lead SMZ to build its own super ferry which entered service after the privatisation of Sealink in 1986[141]. The modern car ferries with a significant freight capacity had enabled the withdrawal of the traditional cargo services when although the container link to Rotterdam and Zeebrugge continued.

The decision to concentrate on the Harwich Hook link and also build larger vessels has been vindicated by the passage of time according to the evidence. Other North Sea services have come and gone, the Harwich Hamburg service and Harwich Esbjerg routes have closed (the latter in 2014). The 149m long ST NICHOLAS which at the time of its introduction at 17,043 GRT with a capacity of 52 commercial trailers was the largest ferry

[140] While it will not be seen as a large vessel now, the author on a crossing on the ST NICHOLAS in 1984 had travelled out to Rotterdam from London on a ship, the STEFAN BATORY that had just crossed the Atlantic which was smaller that the ST NICHOLAS.
[141] Cowsill, Haalmeijer & Hendy.*Harwich Hoek van Holland 100 years of service,* 103.

operating from the UK has been replaced several times but the route still has the UK's largest ferries, the current vessels are some 240m long, 63,600 GRT and can carry 300 commercial trailers.

The Thames

From being a major route in the 1950's the opening of the Dartford Tunnel and the change in industry along the Thames corridor saw this route in permanent decline from its heyday of 3.3 million passengers a year in 1951[142]. Three new ships were built for passenger only service in 1960 but this was soon over capacity on the route. One of the ships was made available to the Caledonian Steam Packet Co in 1967 travelling to Scotland by the East Coast and the Caledonian Canal under its own power. After some minor alterations ROSE was renamed KEPPLE and began a second career serving the island of Cumbrae until 1986 and continuing with excursion work on the Clyde until 1992. In 1976 Sealink attempted to close this service as it was making a loss however as it was a statutory requirement this request was refused by the High Court on grounds of local hardship. A second ship was taken out of service in 1981 leaving the Edith to operate the route alone. The route survived until the end of Sealink UK Ltd and it is now (2014) operated with a subsidy provided by Thurrock and Kent County Councils carrying about 80,000 passengers a year[143]. When looking at traffic figure for the BRB and Sealink in later years and comparing them with the 1950's the loss of huge number of passengers on ferry services like this one and the Humber needs to be taken into account.

The Dover Straits

By the 1950's this service was almost back to its pre-war level. The train ferries were running to Dunkerque, cargo ships were crossing from Folkestone and the passenger ships were running from Dover and Folkestone. The drive on facility offered by the train ferries was not the first "proper car ferry", this had been provided from Stranaer to Larne by the

[142] National Archives AN83/1 *Marine committee records and statistics 1951*
[143] PLA "Gravesend Tibury Ferry Service Tender Opportunity", accessed 18/8/2014 http://www.pla.co.uk/Passenger-Ferry-Service-Between-Gravesend-and-Tilbury-Tender-Opportunity

Princess Victoria in 1939, but vehicle traffic was increasing on the Dover Straits. Dover and Calais were not railway owned ports and in 1950 neither had link-spans to drive road vehicles onto a ship's car deck. The BTC had recognised the need for a purpose built car ferry and ordered the LORD WARDEN for these services. The initial route was from Dover to Boulogne. This was a major step forward in offering the motorist a short sea crossing to Europe on a vessel specifically designed and built for the carriage of cars rather than a conversion or as an ancillary service. The LORD WARDEN was in service before the car ramps had been finished by Dover Harbour Board and initially cars had to be loaded by crane at that port. The conventional passenger ship MAID OF ORLEANS had also joined the fleet post war and this enabled older vessels to be withdrawn. The second purpose built Dover car ferry, the MAID OF KENT, was added in 1959[144] and with the French partner, SNCF's new vessel the car ferry COMPIEGNE[145] joining in 1958, this meant that at the end of the 1950s Dover was being served by three railway owned purpose built car ferries. The only competitor for the car market was the Townsend car ferry HALLADALE, a converted frigate which ran to Calais.

There were still in the 1950's and 1960's significant amounts of boat train passenger traffic and passenger services ran from the Western docks and also Folkestone to Boulogne and Calais. The 1955 Kent electrification scheme had seen the railways to Dover and Folkestone electrified with new trains put in service. Once again the importance of the boat train traffic to the railway is shown by the construction of 10 motor luggage vans to work as part of the boat trains[146]. At its peak a boat train could consist of 14 coaches, three 4 car electric multiple units and 2 motor luggage vans. These vans were fitted with batteries to enable them to run along the quayside at Dover and Folkestone on non electrified track. The Night Ferry and Golden Arrow also went over to electric haulage at this point with new locomotives built at

[144] D Haws, *Merchant Fleets Vol 24,* 185.
[145] Ibid., 185.
[146] Haresnape & Swain, *British Rail Fleet Survey 10, (Shepperton, Ian Allan, 1989) 87.*

Doncaster. Although not part of the BTC shipping remit the very close co-operation with the Belgium RMT also saw railway connections to Ostend.

With the closure of the Southampton routes and the conversion of the NORMANIA into a car ferry the BTC had three ro-ro ships on the service in 1963. A significant event at Dover was the entry of FREE ENTERPRISE into service in 1962. This was Townsend's first purpose built car ferry and started the growth of this company into a major competitor to Sealink. However at this time it was very much run in co-operation and a pooling agreement was in place for the revenue on the route. Sealink and Townsend worked together, having an agreement to pool the income and share it out on the basis of the number of sailings made[147]. This agreement ceased in 1970 in response to increased competition and also the growth of Hovercraft traffic. The growth continued with more ships added and by 1969 17 car ferries were operating out of Dover, the joint BR/SNCF fleet had 7 ships with a car capacity of 1197 in total sailing to Boulogne and Calais, Townsend had 5 ships, one of which was dedicated to freight traffic with a car capacity of 796 sailing to Calais and Zeebrugge. The other ships were those of RMT sailing to Ostend. The traditional split of BR car ferries going to Boulogne and SNCF one to Calais was abandoned in 1970[148]. Calais was a shorter crossing and this permitted more intensive use of the vessels. The Calais service's number of weekly round trips increased from 38 to 64 while the Boulogne were reduced from 78 to 66, effectively two extra sailings every day[149]. The rail passenger traffic though still considerable was in decline and from 1972 the passenger ships were just used for the rail connected sailings from Dover Western Docks and Folkestone harbour.

In 1974 the Folkestone Boulogne route was upgraded to a car ferry service with two new ships. From then on the core service was a Dover Calais route and a Folkestone Boulogne car ferry service. There was also the train ferry route to Dunkerque. On this route the older ships had been

[147] J Hendy, *Ferry Port Dover,* (Staplehurst Ferry Publications 1998) 60.
[148] Cowsill & Hendy *The Sealink Years 1970-1995 9*
[149] J Hendy *Sealink Dover-Calais* (Staplehurst Ferry Publications 1989) 30

replaced with two new multipurpose vessels and one post war ship. The route was very much a freight service that carried passengers as an extra. The daytime Golden Arrow service was discontinued in 1972 although the overnight NIGHT FERRY lasted until 1980. This year also saw the end of the passenger only rail linked sailings. Within BR the possibility of the Channel tunnel and the potential of hovercraft were seen as an alternative to the conventional ferry particularly for passenger use and the London Paris service via Boulogne using the hovercraft was extensively marketed. On the French side of the Channel SNCF used their gas turbine powered trains which offered a high level of performance for the run to Paris. The short channel crossing time and the connecting turbo train from Boulogne made this an attractive route as long as the weather was calm. The Hovercraft carried 36 car and 278 passengers, with crossing times of under 30 minutes a hovercraft could make a round trip every two hours, later, when they were stretched the capacity, this was upped to 60 cars and 418 passengers they had a significant capacity[150]. In a 12 hour period a hovercraft could carry 720 cars and 5016 passengers. The 1972 built HENGIST would carry 840 cars and 5600 passengers in the same time but cost £4 million and needed 79 crew[151] plus expensive harbours, all the hovercraft needed was a beach and some hard standing. The success of the hovercraft was such that in August 1977 Seaspeed and the Hoverlloyd who operated from Ramsgate carried 24% of cars and 25% of passengers on the short sea route[152]. With this level of success it seemed a foregone conclusion that the fast high tech craft would be the way forward and the BRB was reluctant to add tonnage to the channel particularly with the possibility of a channel tunnel. This also concerned Townsend and was a cause for comment by European Ferries Chairman Keith Wickenden[153]. As a result of these concerns and the possibility of the Channel Tunnel being built the ships built in this period for the Dover straits were designed with redeployment to other routes in mind[154].

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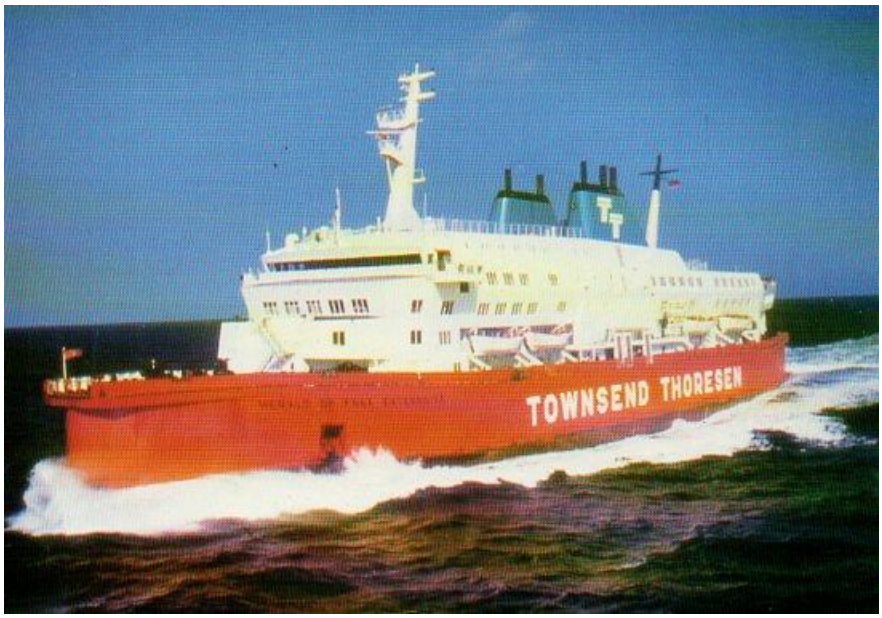
[150] James Hovercraft Site "SRN4" accessed 20/9/14
http://www.jameshovercraft.co.uk/hover/srn4/srn4.php
[151] D Haws,*Merchant Fleets Vol 24,* 194.
[152] J Hendy, *Ferry Port Dover,* 58.
[153] Ibid.,58.
[154] Ripley & Rogan. *Designing ships for Sealink,* 48.

Sealinks Dover Calais service stagnated and its future plans assumed a much lower level of passenger carryings. This was to turn out to be a mistaken viewpoint with passenger using Dover per year continuing to rise from 11 million in 1980 to a peak of 21.4 million in 1997[155] but it affected the specification of future ships for some time.



MV HERALD OF FREE ENTERPRISE[156]

One of three Spirit Class ferries

Townsend continued to invest. Building on the successes of their later ships three Spirit class vessels were ordered with the first launched in 1979[157]. These ships gained notoriety with the sinking of the HERALD OF FREE ENTERPRISE at Zeebrugge in January 1998 and the loss of 193 lives. However, when introduced with their higher speed 23 knots as opposed to the 21knots of the Sealink fleet they could manage an extra round trip a day. This came with huge power and fuel implications needing 24,000hp[158] as opposed to the 10,400 hp of the corresponding Sealink ships. In practice the difference was about 10 minutes, typical open sea breakwater to breakwater

[155] http://www.doverport.co.uk/?page=AnnualTrafficStatistics accessed 2/6/14
[156] Image from a Townsend Thoresen postcard
[157] Cowsill & Hendy.*The Townsend Thoresen Years* (Kilgetty:Ferry Publications,1998) 22
[158] Ibid., 22,

crossing times for the Spirits class ships were around 60 minutes and the slower Sealink ships about 70 minutes[159]. Commentators have focused on speed but the other revolution these brought was double deck loading. Maximising the number of round trips a vessel can perform on a short route is far more dependant on docking and turnaround times than pure speed. The new double deck ramps that had been installed at Calais and Dover were a feature picked up on the new BR and SNCF ships and helped them achieve fast turnarounds. Another major consideration at this time was the duty free trade. The ferry operators could make large profits selling duty free goods onboard. This trade grew to a level that the passenger capacities of the Sealink ships were increased and shopping trips were encouraged. A typical return fare in the 1970s for this journey was £1.50. The onboard spend became a major contributor to the bottom line of profitability and a slightly slower crossing gave the passenger more time to spend money. A new operator, P&O had entered the Dover Boulogne route in 1976 and by 1979 had three ships on this route but these vessels were older and smaller than the Townsend and Sealink ships. The competition from the Townsend and Sealink with their efficient 1980's ferries proved difficult for P&O them and in 1985 they sold out to Townsend[160]. The 1980's ships, ST ANSLEM and ST CHRISTOPHER had enabled Sealink match Townsend's offer and its operation was able to withstand their competition. At the time of privatisation the Sealink (BRB and SNCF) service was comparable with that of Townsend with both operators focused on the core Dover Calais route.[161]

Newhaven

In the early BTC era this route carried on as it before the war. A new ship, the BRIGHTON, was built by Denny's at Dumbarton in 1950 which was capable of over 24 knots. This was the fastest ship built for the BTC.[162] As part of the general change to drive on vessels, car ferry services started in 1964 with the converted FALAISE. This was joined in 1965 by two new

[159] Data from crossings on SPIRIT OF FREE ENTERPRISE 3/1/83 62min PRIDE OF FREE ENTERPRISE 7/11/86 62min HERALD OF FREE ENTERPRISE 21/7/80 57min ST CHRISTOPHER 27/6/83 66min ST ANSLEM 8/4/84 70min
[160] Cowsill & Hendy.*The Townsend Thoresen Years*, 25.
[161] J Hendy *Ferry Port Dover,* 95.
[162] NRM G5A/162 *BTC Register of Ships* (BTC 1963)

French ships reflecting nature of this joint service and the larger interest that SNCF had in it. In 1972 a French freight ship was added to cater for the lorry traffic and in 1973 the ageing FALAISE was replaced by the SENLAC, a sister ship to the Folkestone vessels. This boosted capacity but more was needed and the French vessels which had been stern loading only were converted to drive through and stretched to increase their commercial vehicle capacity in 1976 and 1977[163].

Despite this, the service was turned made a £3 million loss in 1978[164]. The loss for Sealink was in the main part due to the agreement with SNCF which gave them the major share of the income. The route continued to lose money despite attracting more trade and in 1981 Sealink gave SNCF notice that it was terminating the agreement. The aim was to get a better share of the revenue and run a more efficient service. In October 1981 the linkspan at Dieppe collapsed killing a lorry driver and the service was suspended for a month until other arrangements were made to unload at Dieppe. The negotiations failed to come to an agreement and Sealink decided to withdraw from Newhaven[165]. An industrial dispute then followed with the SENLAC blocking the berth at Newhaven. This was followed by an agreement with SNCF to operate a two ship service. The older two French ships being replaced with a larger more modern vessel. The service however continued to be plagued by industrial disputes and the traffic dropped. It acquired a reputation as the least reliable ferry service in Europe which was the state of the service when Sealink was privatised. In 1985 the new owners, Sea Containers, gave notice that it was withdrawing from the service and did so[166].

The route has carried on subsequently, being run by the French and later Stena and currently LD lines. The route at present requires a considerable subsidy from the French Regional Government who have

[163] Cowsill & Hendy *The Sealink Years 1970-1995* ,27
[164] Cowsill & Hendy. *Newhaven-Dieppe the car ferry era* (Kilgetty:Ferry Publications,1994) 29
[165] Cowsill & Hendy *The Sealink Years 1970-1995,* 49
[166] Ibid., 59.

subsidised it to the extent of 231 million Euro's over the last ten years but they have indicated that this may not continue[167].

The Isle of Wight

In the early 1950's there were a number of recently built ships in the fleet although more car ferries would be required in the medium term. The Portsmouth Ryde service would continue as a passenger only route but the other services were being move to simply being served by dual purpose vehicle ferries. Three diesel passenger ships operated an intensive service from Portsmouth to Ryde with the SR and later BTC car ferries running to Fishbourne and Yarmouth from Portsmouth and Lymington respectively.

MV CENWULF at Yarmouth (Isle of Wight)[168]

CENWULF gave 36 years service on this route

The Isle of Wight was also the home of the hovercraft[169] and in 1966 Seaspeed, the BRB's hovercraft operating company started a Southampton to Cowes service followed in 1968 by one from Portsmouth to Ryde using a

[167] The Argus 20th April 2014 accessed 1/10/14 http://www.theargus.co.uk/news/11160839.Ferry_crossing_closure_could_cost_500_jobs/
[168] Image from a Nigh postcard KIW 994
[169] The British Hovercraft Corporation was based at Cowes in the Isle of Wight

Denny built sidewall hovercraft. A private sector operator Hovertravel also commenced a Portsmouth Ryde service in 1965. Seaspeed's Solent operation was to be short lived with the Ryde service closing in 1972 followed by Cowes in 1976. Hoverspeed on their Southsea to Ryde service still operate on the longest running hovercraft service in the World[170]. Traffic continued to grow and in four new car ferries increased the capacity of the routes in the early 1970's. The C class ferries as they were known also set new standards in passenger comfort for the route with high quality passenger lounges above the car deck. CUTHRED, CAEDMON, CENRED and CENWULF grew the route to the point at which the Portsmouth terminal could no longer handle the traffic. A new terminal built a Gunwhale Wharf to enable more traffic to be handled and this could also take larger ships. In the 1980's two new larger ships were built by Cochrane at Selby. At the time of privatisation Sealink's Isle of Wight services comprised a passenger only operation with classic ships on the Portsmouth Ryde route and car ferries running from Portsmouth to Fishbourne and Lymington to Yarmouth.

Southampton & Weymouth

The Channel Islands service highlights the differences between the operation of a conventional shipping company and that of the railway ships. There were the two competing routes, the GWR and the SR, neither of which was an economically strong service. On top of this there were the SR's former London and South Western Railway routes to Le Havre, St Malo and occasionally Cherbourg. Traffic to the Channel Islands was very seasonal and by the late 1950's air was becoming dominant in the passenger market[171]. With much better sea routes to France from Dover, Folkestone and Newhaven the French services from Southampton were a poor relation, not attracting a significant level of traffic. For the Channel Islands the much shorter route from Weymouth made more sense. The BTC decided to concentrate the Channel Islands service on Weymouth and give the control of this to the Southern Region. This proposal had to go before the South

[170] Hovertravel "About Hovertravel" accessed 21/5/14, http://www.hovertravel.co.uk/about-hovertravel.php
[171] K Scelleur . *Channel Islands Railway Steamers* (Wellingborough Stephens 1985) 34

Eastern Area Transport Users Consultative Committee which it did in September 1960. The closure of the Southampton routes was accepted. The Le Havre service struggled on for a few more years but closed in May 1964. The classic ferry routes had been developed in the Victorian era when ships were much smaller. While some of the ports had modernised and expanded to take larger vessels there were a number of locations where this had not happened; the Channel Islands being one of them. The BTC wished to introduce new and larger ships on this route but could not do so until harbour improvements had taken place. The order for new ships was placed once the States of Jersey had agreed to carry out harbour works. The new ships were to be one class and would operate from Weymouth. In 1961 the CAESERA followed later by the SARNIA entered service and the railway connections were switched from Paddington to Waterloo ending the historic link with the GWR. It may be thought that these passenger only ships were an anachronism and unsuccessful but that was not the case. With the electrification of the railway to Bournemouth in 1968 and a retimed service, traffic figures grew by 25% to Jersey and 37% to Guernsey[172] and peak summer sailings needed sailing tickets to restrict numbers. The Channel Islands did not generate a lot of vehicle traffic at this time and freight went by cargo ship.

In 1971 the BRB pooled its freight service with the Channels Island Company Commodore Shipping Co Ltd as part of a programme to get the Channel Islands route containerised. The BRB introduced a drive on car ferry service to Jersey in 1973 using the converted FALAISE and NORMANIA, although as Guernsey had declined to build a linkspan at this time the service did not extend to that Island. Guernsey installed a ramp in 1974 and the route moved towards a multi purpose service. This availability of ro-ro ships that could handle freight vehicles saw the end of cargo ship sailings in September 1977. In 1974 the Weymouth services were expanded to add in sailing to Cherbourg. The success of the Thoresen ships had convinced Sealink that this shorter route to France was a viable. The next major development of the

[172] Ibid., 40

Channel Islands services was a reversal of the withdrawal from the Solent in the 1960's although this time it was Portsmouth the vessels sailed to, with the service starting in late 1977 and as with the Weymouth routes this showed a healthy growth in traffic. As the steamships were retired the Channel Islands' services were in the hands of three second hand ships from Scandinavia by 1980 with a much more intensive service of three sailings every day. The Cherbourg route also continued with a summer seasonal service using vessels which had been cascaded from routes elsewhere. One of the advantages of a large fleet is that it is often possible when new ships are delivered to use older vessels to boost services elsewhere or try a new route without having to invest in new tonnage. This proved to be the case on the Weymouth Cherbourg route.

Devon

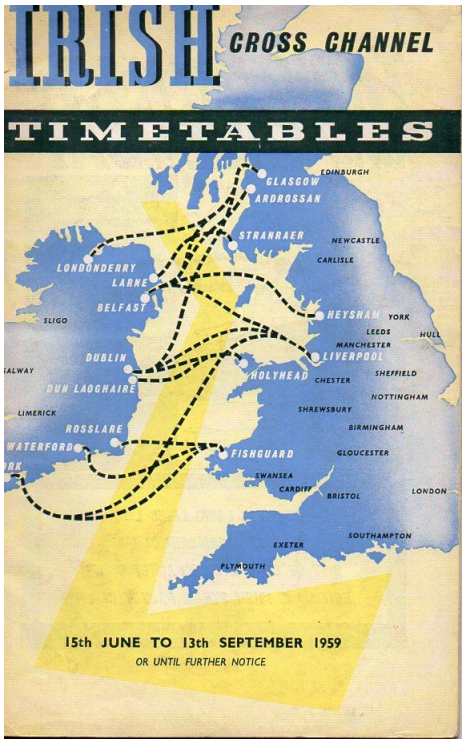
The river dart service from Kingswear to Dartmouth was, like the Harwich services, one of which the BTC wished to divest itself. While Dartmouth never had a train service when the line to Kingwear closed in 1972[173] the BRB was left operating a ferry service between two points neither of which it served. In 1977 the BRB managed to get a local operator to take on this route. The Plymouth services were run down and disposed of, although this took until 1963 some nine years after General Watson's report had recommended its disposal with the end of Plymouth calls by French line being the final nail in the coffin.

Fishguard

This route illustrated some of the problems associated with operating a shipping service and in particular modernising the port facilities to carry cars. While the first car ferry at Dover had to wait a year for the link span to be completed, in contrast at Rosslare there was no road access to the pier and cars had to be unloaded from the ship onto a railway truck which was then shunted down the pier to a point at which they could at last be driven

[173] M E Quick. *Railway passenger stations in England, Scotland and Wales, a chronology,* 178.

away.[174] The Fishguard Rosslare service was one of the few examples of early rationalisation with the maritime operations being transferred to the London Midland Region in 1950. This integrated the England to Ireland Services under one management. A linkspan was installed for the service to go ro-ro in 1972 at a cost of £624,000[175] with a ship redeployed from Stranraer. The Waterford service continued to be operated by ships made surplus from other routes. It continued to lose money and in 1978 Sealink was able to rid itself of the statutory obligation to provide this service. The service continued to use the older converted ships as car ferries but in 1979 a modern Stena car ferry was chartered to operate the route. This ship set the future patter for the route. A large capacity vessel, carrying 470 cars and 1400 passengers, it made two round trips a day. Again this was a major change from the old model of two ships to provide one sailing a day each way.



1959 Timetable for Irish services[176]

This illustrates the variety of routes and also the other operators the BTC worked with

[174] Cowsill M *Fishguard Rosslare 1906-2006,* (Ramsey: Ferry Publications, 2006) 55
[175] Ibid., 56
[176] Cover of Summer BR 1959 Irish services timetable

Holyhead

This route had the traditional night sailing with a day and night sailing in the summer season when the ship made one round trip per day. The classic passenger vessels CAMBRIA and HIBERNIA provided this service. Link spans were provided in 1964 with two round trips a day by a car ferry which was later increased to a two ship service in the summer. The route suffered a major problem in 1970 when Stephenson's Menai Straits Railway bridge was set on fire by children. The railway to Holyhead was closed from 23rd may 1970 to 30th January 1972[177]. Passenger and Freight shipping services switched to Heysham with some car ferry runs in addition but the main ro-ro service continued on the Holyhead to Dun Laoghaire route. In 1972 the services returned to their Holyhead base.

In 1974 a new linkspan was built in the inner harbour so rail passengers could have easy access to a car ferry at the port and this was followed by in 1975 by a change to the timetable ending the traditional over night sailing with the ship being available for passengers to sleep on. The large new ST COLUMBA which arrived at Holyhead in 1977 had the largest passenger capacity of any Sealink vessel[178] and was able to combine the ro-ro traffic with the railway passengers to a level that required two ships to replace it when it was out of use for any reason. The route was further upgraded in 1981 with the second large modern car ferry running opposite the ST COLUMBA, this vessel was a sister ship of the new Dover vessels. Sealinks' final development on the Holyhead route was in 1982 joint working with the B&I line planned. The B&I vessel which ran a Liverpool Dublin overnight service spent the day in Dublin unused and the proposal was to fit a round trip to Holyhead in to use this spare capacity. After some industrial unrest the service started and this arrangement continued to the end of the railway era in 1984.

[177] Network Rail, "Britannia Bridge" accessed 25/9/14 http://www.networkrail.co.uk/VirtualArchive/britannia-bridge/
[178] Haws, *Merchant Fllets Vol 25* , 192

Heysham

The importance of this route in the late 1940's and early 1950's and its profitability give a justification for the construction of three new ships in 1956. The DUKE OF ARGYLL, DUKE OF ROTHESAY and DUKE OF LANCASTER replaced their LMS built predecessors. The DUKE OF LANCASTER was also fitted out so the vessel could undertake cruising in the low season in the course of which it visited Scandanavia, the Continent as far south as Spain and Portugal, and also the West Coast of Scotland. The profitability of this route continued with the 1956 figures showing it had twice the income and three times the profit of the Holyhead route. The container service was also getting close to covering its costs by the late 1950's[179]. and in 1970, when the two ships on the route had been converted to stern loading car ferries, a ro-ro service was commenced. The pattern of sailing was an overnight crossing each way with a peak summer daytime crossing as well. This service did not get the expected take up and with "the troubles" in Northern Ireland a decline set in to such an extent that the passenger service was losing £500,000 a year in 1974 and it was closed down in 1975[180]. The conventional cargo service continued until 1978 when it was converted into a freight ro-ro service.

A major development and expansion for Sealink took place in 1979 when in collaboration with James Fisher & Son the Manx Line was purchased, Sealink taking 60% and James Fisher 40%.[181] This took railway ships back to the Isle of Man, a service that had not been operated since the Midland Railway days. The freight service to Belfast despite getting larger ships was losing £1 million a year by 1980 and was closed down. Also in 1980 Sealink increased its holding in Manx Line to 85% with this being the only Sealink service operated out of Heysham at the time of privatisation

[179] National Archives AN83/6 *Marine committee records and statistics 1956*
[180] Cowsill & Hendy *The Sealink Years 1970-1995* , 22.
[181] Cowsill & Hendy *The Sealink Years 1970-1995,* 31.

Lake District

The CYGNET was withdrawn in 1955 but the other four vessels the Furness Railway's TERN (1891); SWIFT (1900) and the LMS TEAL (1936) and SWAN (1938) are unique in being the only fleet to survive the entire nationalisation period without any replacement. Indeed the Furness railways vessel TERN having passed through the big four and British Railways is the only pre-grouping passenger carrying unit still in daily commercial use (as at 2014). The only major change to these services was the closure of the railway to Lakeside station at the southern end of the lake in 1964[182]. The Furness Railway and LMS ships continued their summer travel up and down the lake throughout the time of the BTC, the BRB and continue to do so under private ownership in 2014 although the SWIFT was broken up.

Stranraer

The Stranraer route was the shortest crossing to Ireland from the British mainland. In the 1950's there were connecting boat trains with the overnight sleeping car train, the Northern Irishman (which travelled via Castle Douglas), connecting with the early morning sailing to Larne and the evening Irishman service from Glasgow. In 1953 the worst disaster to befall the BTC's shipping operations saw the PRINCESS VICTORIA founder in an exceptionally bad storm with only 42 of the 176 on board surviving[183]. The radio officer David Broadfoot remained in his cabin transmitting until the vessel sank in the knowledge that this would give him no chance of survival and was posthumously awarded the George Cross for his bravery[184]. The subsequent enquiry found that the PRINCESS VICTORIA was an unseaworthy vessel due to inadequate stern doors and insufficient means to clear water from the car deck. There had been previous incidents which had not been acted on and the BTC was found to be at fault. This was appealed but the appeal was dismissed[185].

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[182] C R Clinker *Clinkers Register of closed passenger stations and goods depots in England, Scotland & Wales 1830-1977* (Bristol; Avon Anglia 1978) 149
[183] F MacHaffie .*The Short Sea Route* (Prescott: Stephensons ,1975) 151
[184] Ibid., 153
[185] Ibid., 151

There were three long term effects of this disaster, the BTC moved to take more centralised control of shipbuilding, it slowed down the introduction of more car ferries and the Stranraer Larne service had to wait another eight years for a replacement car ferry[186]. A pre war train ferry. the HAMPTON FERRY was sent north to Stranraer to cover the ro-ro services and grew the traffic but it was not until 1959 that a new ship was ordered. The CALEDONIAN PRINCESS was a ship that would cover all the needs of the route, a two class vessel as built, with sleeping accommodation for 176 and a passenger capacity of 1400, up to 100 car or 29 lorries and a smaller number of cars.

The Stranraer route had also had the benefit of early diesel services with the Scottish Inter City Diesel Multiple Units taking over from steam trains in 1959. Having new diesel trains and a new ship the future of the route seemed assured only to find the 1963 Beeching Report advocated the closure of both railway routes to Stranraer. In the end, the Ayr Girvan Stranraer route was saved but the direct route to Dumfries was closed. The service grew to such an extent that a second ship was required by 1965 and the STENA NORDICA was chartered for the 1966 season and this remained on the route until the two purpose built ferries took over the route by 1971. The success of this route attracted competition and in 1973 Townsend started up a service from Cairnryan to Larne. Cairnryan was an ex military port, a little distance down the Loch from Stranraer. Despite this the traffic still grew additional ships were required, a freight ship and a multi purpose vessel had increased the number of ships to 4 and there were 22 sailings a day. This success put the Stranraer Larne route in line for one of the new ferries being built in Belfast. The new ship finally arrived on service in 1983 and the route ended its Sealink days with three multi-purpose passenger ships[187] operating an intensive service between the two ports.

[186] CALEDONIAN PRINCESS entered service in 1961
[187] GALLOWAY PRINCESS; ANTRIM PRINCESS; DARNIA

The Clyde

The Clyde services in the 1950's had two main components. There were the ferry services acting as island lifelines and, in the case of Dunoon a mainland lifeline and also a very extensive excursion and tourist trade.

MV MAID OF ARGYLL at Inellan[188]

This pier and passenger only service was to close in 1972

The complexity of services on the Clyde will not be easily apparent to the modern traveller but in the BTC era there were no less than 7 railway connected piers. On the North bank of the Clyde Craigendoran had been the North British Railway base, on the South bank the Glasgow and South Western Railway had built terminals at Greenock Princess Pier and Ardrossan Montgomery Pier while the Caledonian Railway had piers at Gourock, Weymss Bay, Fairlie Pier and Ardrosssan Winton Pier[189]. With these 7 railway served transfer points the total number of calling points on the Clyde was over 30 giving these service more destinations that the rest of the fleet put together.[190] On top of that, with 25 vessels providing the service

[188] Image from a Dennis postcard 90

[189] A Jowett *Jowett's Railway Atlas* (Wellingborough: Patrick Stephens ,1989) 18-21

[190] Adrishaig; Ardrossan Montgomery & Winton Pier,:Arrochar; Ayr; Blairmire; Inellan; Inverary; Brodick; Campbeltown; Criagendoran; Fairlie Pier: Glasgow Bridge Wharf; Gairlochhead; Gourock; Greenock Princess Pier; Inverary; Largs: Lochgoil head;

and a capability at any one time to have 24,680 passengers afloat this was a very large operation[191]. There were more ships on the Clyde than in any other area of railway shipping services. Nonetheless, it was an unprofitable operation and one with considerable overlap and also restrictions on the operations of the vessels. The LNER fleet operated under the powers inherited from the North British Railway and the LMS with those from the Caledonian Steam Packet Co and the Glasgow and South Western Railway. Nationalisation meant that these restrictions were effectively removed as the BTC had inherited the powers of the LMS and LNER and thus the vessels could now be operated over all the Clyde. It also produced an opportunity to rationalise and unify the management of the two fleets. The whole fleet was operated under the auspices of the Caledonian Steam Packet Co and slowly the older vessels were withdrawn[192].

The rationalisation of the two fleets' operation enabled this to be done without any significant reduction in services. Other than the LNER paddle steamer WAVERLEY there had been no new post war ships and the fleet had a high average age. In 1951 the BTC, accepting its responsibilities to provide services to the Clyde communities, announced that seven new diesel vessels would be built as part of a £1.25 million modernisation programme to replace older steamships and the cargo vessels[193]. This was in many respects a maritime version of the 1955 railway modernisation plan, also directed at loss making services and replacing steam with diesel. Three of these vessels were to offer vehicle and freight capabilities giving the island of Bute and the Cowal peninsular drive on services for the first time. Drive on/off via linkspan was considered and the railways offered to install these at Gourock, Weymss Bay and Fairlie if the authorities who owned the piers at Brodick, Dunoon, Millport and Rothesay did the same[194]. The local authorities

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Lochranza; Millport Kepple Pier; Kilcreggan; Kilmin; Kirn; Millport Old Pier: Rothesay; Strone; Tarbert East; Tighnabruach; Troon; Whiting Bay

[191] Anon *ABC British Railway Steamers (*London:Ian Allan 1954) 39-44

[192] PS LUCY ASHTON 1949; TSS KING EDWARD 1951; PS DUCHESS OF FIFE 1953; TSS DUCHESS OF ARGYLL 1951; TSS GLEN SANNOX 1954; SS ARDYNE 1954; SS MINARD 1954; TSMV WEE CUMBRAE 1953; PS MARCHIONESS OF LORNE 1954; TSMV ARRAN MAIL 1951[192].

[193] I C MacArthur *The Caledonian Steam Packet Co Ltd,* 121.

[194] Ibid., 182

declined to do so and the Clyde waited until the 1970's to get a modern ferry service. The ABC's as the car ferries were known proved a great success. In the 1950's the ability to drive a car on and off a ship at any pier that could take the weight of a car at any state of the tide without expensive pier and harbour works was a revolution. The fares for cars were also reduced, for the Gourck Dunoon route the car fare had been from £1-3-0 to £2-11-8 depending on weight (£1.15 - £2.58), it became 15/- for a car under 12hp and £1 for a car over 12hp (£0.75 - £1.00)[195]. The modernisation programme continued with the fourth car ferry, a larger and faster version of the initial batch being built for the Arran service and enabling a cargo and a passenger vessel to be withdrawn. The rationalisation process continued also and by 1963 the fleet had been reduced to 18 ships, down from the 26 at the time of nationalisation. The Transport Act 1962 placed the same obligations on the BRB as had applied to the railways if they wished to close a regular service. This prevented several attempts from succeeding at reducing the losses on the Clyde by closure. The Loch Awe service were restarted post war but proved unsuccessful and in an epic feat of road haulage the 96 ton COUNTESS OF BREADALBANE was taken by road from Loch Awe over the 673 foot summit of Glen Aray to Loch Fyne on a trailer specially constructed by Denny's. This enabled the ship to cover some of the Clyde ferry services and replace one of the larger steamships. In 1967 proposals for two new vessels costing £1.5 million were rejected by the BRB as not being economically justified[196]. The rail connection traffic had declined steeply despite electrification and new diesel trains. The sailings were optimised around the railway timetable which was no longer a key factor for many passengers. The final chapter of railway ships on the Clyde saw the ships getting the BR blue hulls though with the buff colour Caledonian Steam Packet Co funnel rather than the BR red one.

Loch Lomond was a continual loss maker and withdrawal of this service as a non essential one with the closure of Balloch pier station was threatened under the Beeching plan. The sailings were reprieved and

[195] Ibid., 137
[196] Ibid., 183

additional publicity measures tried and the PS MAID OF THE LOCH eventually joined the rest of the fleet in being transferred to the STG. Losses continues and the service was finally closed in 1981.

The Kyle of Lochalsh ferry route continued to operate with the small turntable ferries shuttling to and fro according to traffic needs though opposition from the Free Church of Scotland prevented Sunday services until 1965. The STG introduced new larger ferries on this route but these were replaced by a bridge in 1995.

David MacBrayne's Western Isles services and the Caledoinian Steam Packets Co's operation were very similar but covered different geographical areas with the exception of the Kyle of Lochalsh service. Both needed extensive investment and both had large elements of being a loss making social service. However unlike closing a railway a bus replacement service was not an option. The search for a new "owner" had seen the Transport Holding Company which held the Government's 50% share in MacBraynes considered but in the end the Scottish Transport Group was established by the Transport Act 1968 and the CSP operation left the railway sphere. At this point the fleet comprised four car ferries, five diesel passenger ships and four steam excursion vessels for summer only use; a fleet half the size of the 1948 operation. The STG subsequently merged the Caledonian Steam Packet co with David Macbrayne's to form Caledonian MacBrayane. This operation that continues into 2014 under the CalMac banner and is the last remnant of the nationalised shipping services, though now under the control of the Scottish Parliament. In 2013 the Clyde services carried 2.2 million passengers and the entire operation (Clyde and Western Isles) received a grant of £73 million for the year from the Scottish Government[197] in comparison with the 1950 figures or 3.8 million passengers and a loss of £0.18 million.

[197] CalMac reports accessed 4/5/2014http://www.calmac.co.uk/Downloads/Corporate/annual-reports/CalMac%20Ferries%20Ltd%20Directors%20Report%20and%20financial%20Statements%202013.pdf

Having reviewed the individual routes some patterns can be discerned. This dissertation has highlighted in a number of places the connecting train services and the sometimes very high standard of accommodation provided for international sea travellers. This confirms the commercial importance of this trade as part of a through railway service and reinforces the view of the railway managers in the 1950's that the ships were an extension of their railway lines. This traffic though was in decline and by the end of the Sealink era a shadow of its former self. Probably the most significant pattern to emerge is that the story is one of success and development in almost all the cases. Unlike the railway activities of the BTC and BRB there was far less route closure. In terms of major routes that the BTC and BRB withdrew from, these were the Humber Continental routes, Southampton to France and the Channel Islands and Heysham to Belfast. The Humber was an area that the BRB surrendered to its commercial rivals but the Belfast route was served in a far more efficient way by the Stranraer Larne service. In the same way Southampton to France had the alternative Newhaven Dieppe route and the Chanel Islands became concentrated on Weymouth which again offered a shorter route.

The major routes, Harwich Hook; Dover Calais; Fishguard Rosslare; Holyhead Dublin and Stranraer Larne all moved from the low utilisation of separate passenger and cargo ships to high utilisation of dual purpose vehicle ferries with large capacity for cars and commercial vehicles as well as passengers. A good example of this was the Fishguard to Rosslare service where two ships made an overnight crossing each giving one sailing per day to one ship making two round trips a day but a similar story can be told for most of the routes. It can also be seen how the linking of the ships' sailing times to the railway timetable to provide the foot passenger with a through service was replaced with a timetable that maximised the number of crossings a vessel could make in 24 hours. It can also be shown that the BTC and BRB moved towards drive on drive off ships as fast as the port facilities could be made available with in some cases the ships in service before the ports were ready for them as has been described at Dover, Guernsey and Rosslare .

Chapter 6
MANAGEMENT

MV EARL GODWIN arrives at Weymouth from the Channel Islands[198]

One of the few second hand ships Sealink operated built as the SVEA DROTT in 1966, entered Sealink service in 1975

The BTC gained a shipping operation in 1948 at a very opportune time for European short sea traffic. Indeed globally the 1950's were a boom time for shipping with Ronald Hope calling 1948-1957 the "Halcyon Years"[199]. In Europe there was a very large amount of post war traffic both civil and military that needed to be moved across the Channel. Civil aviation had not developed to present any large scale competition at this point and the public was starting to travel again. Wages and costs were not rising at this time and although new and replacement ships were slow in being delivered their costs were not rocketing up as they did in later years. With the BTC decision to leave the railway ships with the railways and also the "packet ports" it was very much business as usual. The Docks, Harbour and Inland Waterways executive did not get the ships or the ports which were primarily harbours for the railway connected train services. Harwich; Folkestone; Newhaven; the

[198] Image from a postcard by After the battle 258
[199] R Hope *A new history of British shipping* chapter 22

Isle of Wight route terminals; Fishguard; Holyhead; Heysham; Stranraer and many of the Caledonian Steam Packet Co terminals were left under railway control. The rationale for treating these routes and services as part of a railway journey at that time was not without merit if the amount of traffic that arrived by rail was considered. Further more practical terms, Folkestone, Newhaven, Fishguard, Stranraer, Gourock, Weymss Bay, Craigendoran and Balloch were virtually railway stations that a ship could tie up at. The same applied to Portsmouth Harbour, Ryde and Lymington on the Isle of Wight routes.

The majority of the shipping activities were under straightforward railway control however there were joint operations on the Harwich and Dover routes and joint companies on the Fishguard and Humber services. In Scotland the Clyde and Skye sailings were operated by the Caledonian Steam Packet Co which was a wholly owned company that had been set up for historical reasons by the Caledonian railway 1889[200]. If the aim of this was to ensure the minimum disruption to the service and successful trading that was certainly achieved. The operation of the service came under the regions but the BTC reserved to itself the powers to order ships, dispose of ships and also authorise any large scale expenditure on works. The BTC also undertook a maritime version of tidying up the control of services, a parallel version of the transfer of control of railway lines to geographically more logical units. In this transfer the ex GWR service to the Channel Islands was placed under the Southern Region and Fishguard Rosslare route was moved to the London Midland Region so the English Channel and Irish Sea services were not under split managements.[201]. The minutes of the BTC meetings indicate that the Commission was mainly concerned with the services that were not performing satisfactorily, and any new ships. Thus the main Irish and Continental service are infrequently mentioned but the Clyde was referred to frequently and the Loch Awe services were also discussed. Considering the size of the organisation, the question needs to be asked if this sort of small scale decision needed to go to that level. On a more positive

[200] I MacArthur *The Caledonian Steam packet Co* 13
[201] NRM BR/2/1 *BTC Annual report 1948* 92

note in 1949 the BTC was in favour of a purpose built car ferry for the Dover Straits[202] which shows the view expressed by that they were resistant to the advent of the car ferry was not true. Also in the 1949 report the heavy traffic is commented on and it is clearly the view of the BTC that it has a public service obligation. Financial considerations were not the sole criteria for provision of a service[203]. Fortunately for those working within the maritime sphere this was much less of a problem than the railway one.

1953 was the year of Queen Elizabeth's coronation and the BTC report for that year notes that not only was the BTC officially invited to attend the naval review at Spithead but 17 of their vessels were there. If that was the high point of the year then 1953 was also the worst year ever for railway ships outside wartime with the loss of the PRINCESS VICTORIA and the collision of the DUKE OF YORK also with a loss of lives. On top of that the HEBBLE capsized whilst in dry dock. The years 1953 and 1954 were also the time where the annual profit had dropped to around the £1 million mark. Income was up but expenditure had risen even more.

General Sir Daril Watson was asked by the BTC (he was made a Commission Member in 1949[204]) to submit a report on British Railways Marine Services which he did in 1954. The review was commissioned to be very wide ranging and to consider how the services should be delivered in the future. In the course of compiling the report he visited 24 ports served by railways ships. Early on the report the justification for railway operation of ships is provided which may be summarised as the following:

A) It is financially viable

B) Valuable traffic both passenger and freight is obtained for the rail services, in competition with

Direct sea services

[202] National Archives AN 85/3 BTC Minute book 3 2/1087.
[203] NRM BR/2/1 *BTC Annual Report 1948* 96
[204] T Gourvish *British Railways 1948-1973* 39

A combination of sea services and independent road transport

Air services[205]

He is also clear that if it not financial viable then part B would only apply in exceptional circumstances. After considering the loss making services Sir Daril went on to recommend a new structure. This would be done on an areas basis; the areas being The Clyde; The Humber; Irish Services and Continental Services (Eastern and Southern Regions services merged). Each area would have its own manager and these would not be subordinates of the chief regional officers as the senior railway managers were called at that time. The BTC would take responsibility for new ship construction, liaising with national/international bodies and inter area transfers. His report also contains the response of the chief regional managers. The operation of the shipping services as has been noted above was seen as an extension of the railway routes. The big four all had maritime divisions and a structure based around the geography of their routes. It was also linked in to the considerable interests in ports the railways possessed. The operations came under a marine manager whose remit covered the operation and maintenance of the ships. The commercial side of the operation was dealt with as part of the overall railways' commercial operation and was seen as part of the railways' operation. This point is made very forcefully by K W C Grand (Chief Regional Officer of the WR) in the Chief Regional Officers response to the report[206]. Grand's argument was that the shipping activities were for the most part a section in a rail/sea/rail journey and as such should not be operated in isolation. Some of the responses to the Watson report were contradictory, for example the Chief Regional Officers reject the idea of having a manage for the Northern Island routes in Belfast as Belfast is not a railway owned harbour but seemed quite happy to have a manager in Dover which is not a railway owned harbour. In his footnotes Sir Daril's exasperation with such contradictions is apparent. K W C Grand on behalf of the Chief Regional Officers goes on to say "the ships do not generally create business of their own as is customary in ordinary

[205] NRM G5A/124p Gen Sir Darril Watson *British Railways Marine Services* BTC 1954 4.
[206] Ibid., 15.

shipping companies" again emphasising the railway ships as an extension of a railway line rather than a service in their own right. . While this was somewhat of an overstatement the basic point was true at the time of nationalisation and during the early years of the BTC and into the 1960's. Looking at the port of Dover in 1960 1,621 freight units were shipped but there were 2.7 million passenger most of whom came by train[207]. Again from 1960, 77.6% of the passengers carried from Newhaven (247,942) used the boat train[208]. This also shows how the traditional methods of travel and also the movement of goods lasted into the 1960's. The growth of car traffic was far more gradual than it has often been portrayed and the development of ro-ro freight traffic was a feature of the 1970's rather than the 1960's. Dover's figures for ro-ro freight usage were 83,000 units in 1970 and 508,000 units in 1980 illustrate this[209]. These factors were influences in the decisions taken by the BTC and the BRB with regard to service development and investment and though with the benefit of hindsight some of the choices were questionable the evidence supported them at the time they were made.

Sir Daril then turns to the fleet and notes that the average age of cross channel ships was 13.5 years in 1939 and was 18.25 in 1954 with the depreciation life of these ships being 25 years. A programme of new building is recommended with large passenger capacity car ferries as the way forward for cross channel services. The report comments on the various harbours and the different conditions they present. It discounts the idea of a standard ship that could go everywhere as the compromises made to ensure that was possible would mean the ship was well below the commercial optimum for most services. An example of the variety of conditions encountered reported is the tidal range, from 9.25 feet at Stranraer to 40.25 feet at St Malo. This also goes some way to explaining the early introduction of a drive on car ferry on the Stranraer route, it was much easier to build a link span there. The objections of the Chief Regional Officers to the re-organisation of the management side were allowed to stand at this point in time but the loss of

[207] J Hendy *Ferry Port Dover,* 127
[208] Cowsill & Hendy *Newhaven –Dieppe the car ferry era,* 10
[209] J Hendy *Ferry Port Dover* , 127

the PRINCESS VICTORIA and the subsequent court cases did however ensure that ship construction and conversion were centralised at the BTC at the end of 1956[210]. A subsequent report into ship design for cross channel vessels was undertaken in 1955, this did not recommend anything significantly different to that of Gen Watson's in 1954

Traffic continued to grow for the shipping services. In contrast to the railway operation the motor car was not a threat. The car did not take traffic off the ships; it brought traffic to the ships. Secondly people had more money and more spare time and wanted to travel more, on land much of this extra travel went on the roads but for those who wanted to visit an island or get off and island then a ship would probably be involved. The only shipping sector that consistently deteriorated, and this was not just the BTC's operations, was that of the excursion vessel aimed at day trip passenger. Most of the large scale excursion work closed down, examples of this were the Liverpool & North Wales Steamship Co which ceased trading at the end of 1962[211] and the General Steam Navigation Co that closed its passenger ship operation down at the end of 1966[212]. The excursion trade had declined to a level where it would no longer support large vessels.

The 1962 Transport Act saw the BTC replaced by the BRB but that had very little effect on the shipping operation initially. Even the annual reports seem unchanged apart from the title. The modernisation process continued albeit at a measured pace but the 1965 report raised one of the problems that faced the BRB. Within the BTC, because of the wide range of services it provided, a degree of internal competition was inevitable, road vs rail vs canal, for example. With the BRB it might have been thought that this would not happen but in 1966 British Rail Hovercraft Ltd which was better known as Seaspeed started operating services to the Isle of Wight[213]. The 1968 report heralds the winds of change with the shipping services to be taken from regional control and centralised under a shipping division. This a

[210] Ripley & Rogan. *Designing ships for Sealink,* 15.
[211] Duckworth & Langmuir *West Coast Steamers* (Prescott: Stephenson, 1966) 67
[212] N Robbins *The British Excursion Ship* (Glasgow: Brown, Son & Feruguson, 1998) 81
[213] NRM BR/2/17 BRB *Annual Report 1966* 47.

proposal that had been on the table for a long time being one of General Watson's proposal of 1954. The BRB was split over the how it should function with the options being a non-functional board with a Chief Executive running the railways or a board with members having functional responsibility. McKinsey & Co were chosen to report firstly on the board's role and then on the whole management structure of British Railways. The structure that evolved from this was one with subsidiary boards for the different functions one of which was shipping and international services which would have its headquarters at Liverpool Street station in London[214]. This was rapidly followed by the adoption of the Sealink brand. The old railway view that given a free hand the shipping service would not focus on the railway connection is given credence by the change in focus of the annual reports and the attention given to vehicle traffic. The traffic figures for 1974 showed how much had changed. In 1950 the railway fleet had carried 16.1 million passengers, the passenger carrying figures for 1974[215] matched the 1950 level and the car and freight carrying far beyond that. In 1959 it took 137 ships to do this, by 1974 these numbered just 45.

The 1970's were a period of growth and consolidation, in 1977 one of the joint operations, the French Angleterre-Lorraine-Alsace Society Anonyme de Navigation became wholly owned by the BRB[216]. Sealink UK Ltd came into being in 1979 as a subsidiary of the British Railways Board. In 1980 the Minister of State for Transport (Norman Fowler MP) announced that Sealink would be sold off along with the hotel and hovercraft activities of the BRB. Having the operation as a wholly owned but separate company had paved the way for this and Sealink was later transferred to British Railway Investments Ltd with the other subsidiaries that were to be sold off. It was from this unit that Sealink was sold to Sea Containers in 1984 as, despite six companies showing serious interest, this was the only company that made a formal offer[217].

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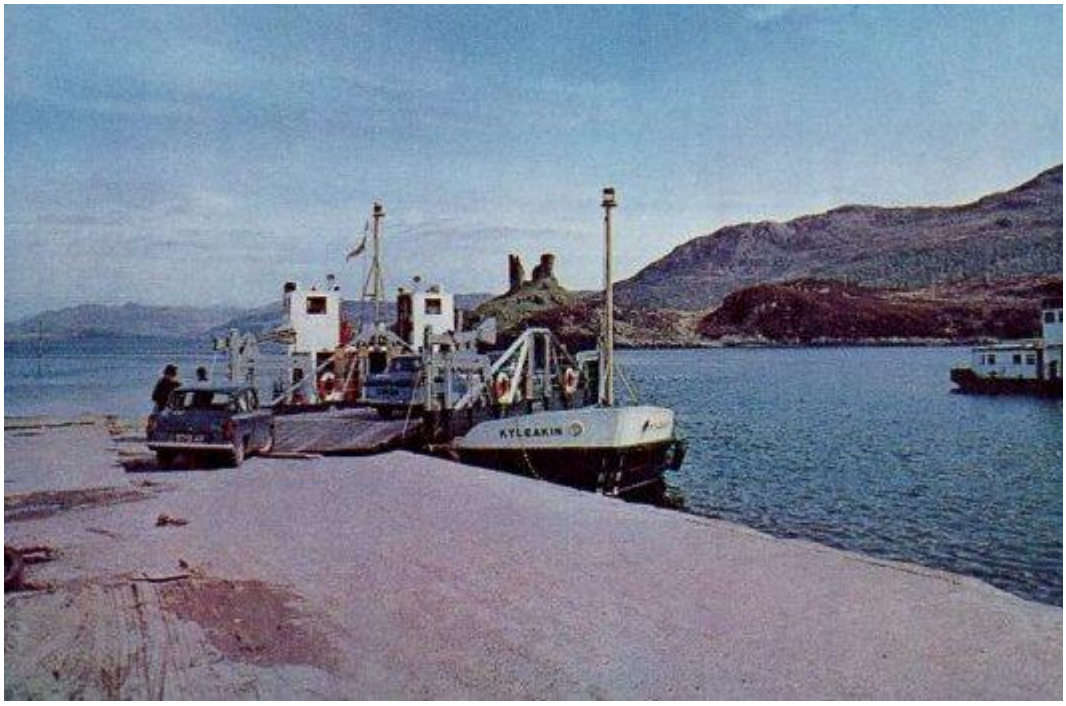
[214] NRM BR/2/19 BRB *Annual Report 1968* 21.
[215] NRM BR/2/27 BRB *Annual Report* 1974
[216] M Cowsill & J Hendy *The Sealink Years,* 25.
[217] T Gourvish *British Rail 1974-97,* 243.

The changes in the management structure show a slow movement from being part of the railway system to being a stand alone shipping operation. It can be argued that the reforms suggested by Gen Watson in 1954 should have been adopted earlier but the counter argument that the marine services were extensions of the railway and should be treated as such are supported by the traffic figures as does the change to being road traffic based at the time of the sale of Sealink. The debate to be had is in many respects were the timing of the changes right rather than were the changes the right ones.

Chapter 7
FINANCIAL PERFORMANCE



MV KYLEAKIN on the Kyle of Lochalsh ferry service[218]

This was the BTC's most Northerly service and has now been replaced by a bridge

This chapter covers the financial performance of the BTC and BRB's marine services from 1948 to 1983.[219] With regard to finances the marine operations of the BTC and BRB were largely profitable. The shipping services started in 1948 with a profit of £2.94 million from a turnover of £10.33 million[220]. This has to be seen as an exceptional level of profit but these very high levels continued for a number of years as Table 1 shows. This was to some extent due to life expired assets that had already been written down and there being low depreciation. By 1950 the annual report noted that the increased provision for depreciation as a consequence of new

[218] Image from a Harvey Barton postcard CT297
[219] Sealink was privatised in mid 1984 with the result that full year figures are not available and the half year figures are not comparable.
[220] MRM BR/2/1 BTC *Annual Report 1948,* table IV-7

ships entering service had an effect on profitability although at £2.85 million that was not an unsuccessful year. [221]

Table 1[222]

BTC & BRB Profit/Loss on shipping services	
Year	Profit
1948	£2,939,887
1949	£3,113,171
1950	£2,850,010
1951	£2,877,033
1952	£1,885,393
1953	£950,726
1954	£1,106,221
1955	£2,013,622
1956	£1,779,973
1957	£1,889,705
1958	£2,344,734
1959	£3,881,800
1960	£3,914,045
1961	£3,874,443
1962	£4,280,616
1963	£4,699,000
1964	£5,134,000
1965	£4,885,000
1966	£3,727,000
1967	£4,747,000
1968	£4,636,000
1969	£4,511,000
1970	£3,179,000
1971	£1,960,000
1972	£3,304,000
1973	£2,560,000
1974	-£1,825,000
1975	-£5,227,000
1976	-£2,238,000
1977	£6,478,000
1978	£9,093,000
1979	£9,590,000
1980	£2,522,000
1981	-£4,500,000
1982	£2,900,000
1983	£12,800,000

In 1952 the results started to decline, the report notes that the currency restriction of £25 that was placed on travellers had reduced the tourist traffic. By 1955 the total income fro the year had risen from the £10.2 million of 1948 to £14.3 million, the rate of increase in the working expenses

[221] NRN BR/2/7 *BTC Annual Report 1950* 54
[222] NRM BTC and BRB annual reports 1948-1983, see appendix 2

had been halted and profit was back up to £2 million. This continued though the decade and comparison with the railways' income presents a very different picture.

Table 2

Change in Income and costs Shipping and Railways 1949-1960[223]						
Year	Shipping			Railways		
	Income	Costs	Profit	Income	Costs	Profit
1949	11.1	8.0	3.1	334.1	367.2	-33.1
1960	19.2	15.3	3.9	478.6	606.9	-128.3
Change	8.1	7.3	0.8	144.5	239.7	-95.2

All figures in £ million

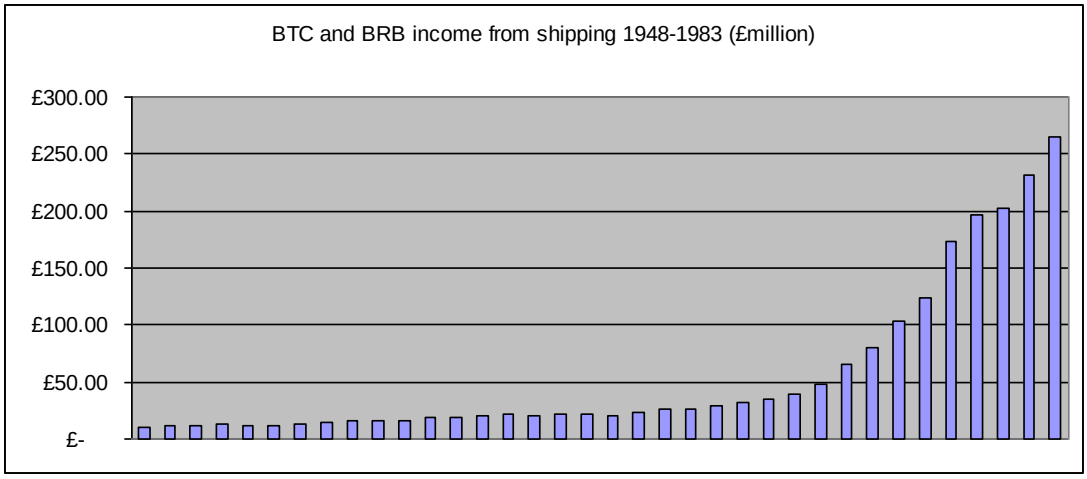
The comparison with the railway income and costs for the years 1949 to 1960 show that the big difference was the shipping side had a better income growth proportionately and had managed to keep the rise in costs below the rise in income.

The pattern of annual income shows a slow but steady growth up to the early 1960's when it flattens out. From 1960 to 1966 there was virtually no growth at all. Putting an element of scale on this, the gross receipts for the shipping activities in 1963 were £20.0 million (excluding catering income). The corresponding figure for the railways was £463.1 million. The income from the shipping side was about 4% of the railways' annual income. The "old railway" argument was that even a large increase in income from the shipping sector if it brought about a small drop in the railway's income was overall a net loss to the organisation as a whole is supported by these figures. Around 1969 the curve starts to steepen and income starts to grow. This is in line with the time that Sealink was formed and the management of the maritime activities of the railways was separated from the management of the railway. The inference from this must be that the profitability of the shipping arm had been held back by railway management and with the

[223] Shipping figures from BTC reports (appendix 2) , railway figure Gourvish British railways 1948-1973 192

decline in the classic rail and sea passenger the traditional attitude to the railway ships was no longer supported by the marketplace.

Table 3[224]



In 1977 the revenues exceeded £100 million for the first time. The turn round from the losses of 1975 was remarkable with a profit of £6.4 million for the year. The profits continued to rise to over £9 million in 1976 and 1977 only to slump to a £4.5 million loss in 1981, a year when the revenues broke the £200 million barrier. Sealink was back in profit by 1982, the trend continued and, in 1983, its last year saw income reach £265 million and the highest ever profit of £12.8 millions. Between 1977 and 1981 Sealink had virtually doubled its income.

Turning to the other side of the profit and loss account, the costs of operating the service the curve is very similar to the income one with a few variations. Costs increased over the years as would be expected however two significant price rises affected the operation that were outside the BTC's and BRB's control. The first was the rise in the prices of ships. Although not quite comparing like for like because later ships became bigger and better equipped this did affected the balance sheet. Focussing on car ferries, the LORD WARDEN cost £0.7 million in 1952, the MAID OF KENT £1.7 million in 1959, the HENGIST £4 million in 1972 and the ST ANSLEM £18 million in

[224] Source BTC and BRB Annual Reports 1948-1983, see appendix 2

1980. This trend has continued and the latest P&O ferry cost 180 million Euros in 2010.

Table 4[225]

Fuel costs for ships	
Year	Costs £ Million
1950	1.6
1960	1.6
1966	0.9
1970	1.2
1980	18.7

The second one was the rise in fuel costs between 1970 and 1980. As table 4 shows the fuel bill actually dropped from 1950 to 1970. Again this informs the decision to retain steamships and goes some way to explaining the view that steamships were fine and the fuel savings on diesels not worth chasing. The fuel price shock at the end of the 1970's put an end to that option and the steamships were all gone by 1982.

The maritime operation of the BTC and BRB generated a profit of £113 million on a gross income of £2007 million between 1948 and 1983. This operation also made a significant contribution to the railways' balance sheet by generating trade, although this was a decreasing amount as the road traffic element grew but as late as 1978 34% of the turnover was still railway related[226]. The balance sheet showed an ability to absorb shocks like the fuel price increases and the rise in costs of ships. This was also done in an environment where there were considerable increases in the competition.

During this period the short sea operation changed completely, many commercial operators closed down or left the short sea sector. Examples of this are Coast Lines who had a fleet of 109 ships in 1950 ceased trading in 1970[227], Bergen Line, their sailing from Newcastle to Norway ceased in

[225] Source BTC and BRB annual reports
[226] T Gourvish *British Rail 1974-97* , 234.
[227] P&O Heritage accessed 20/8/14 http://www.poheritage.com/our-history/company-guides/coast-lines

1974[228] and Ellerman Wilson Line who closed their final passenger route out of Hull in 1973. The picture then presented by the BTC and BRB accounts is one of a profitable organisation that was able to fund its own replacement and development program in challenging times. The BTC and BRB's shipping services were able to respond to adverse trends and on the two occasions that the operation became loss making respond to that in a short timescale. This was done in an environment of increased competition and finally this was done against a background of rising costs for ships and in the later years very high price rises for fuel.

[228] A Greenway *A Century of North Sea Passenger Ships* 141

Chapter 8
EQUIPMENT

ST CHRISTOPHER and ST ANSLEM on the Dover Calais service[229]

This image shows the two ships in their post privatisation colour scheme

The choice of equipment in any business can be used as an indicator of the managements mindset and strategy. This is particularly true in the transport field. There are many examples of railways, airlines and shipping companies whose attitude to the equipment they use has produced adverse results in terms of long term viability. Terry Gourvish[230] and others argue for example that the failure of the BTC to examine options for diesel engines in railway locomotives in the early 1950's had adverse consequences for the railways. This attitude can manifest itself as an undue respect for tradition or at times an obsession with new technology. Both of these latter extremes may have adverse effects on the performance of a company. Examples of this attitude in the short sea shipping field are Coast Lines MV SCOTISH

[229] Image from a Sealink British Ferries postcard L6/SP7184
[230] T Gourvish *British Railways 1948-1973* 88

COAST which entered service in 1957 and the Isle of Man Steam Packet Co's side loading car ferries of the 1960's and 70's. The traditional over night Coast Lines passenger ships was unable to adapt to changing travel habits and the Glasgow to Ireland services they operated had ceased by 1968. The Isle of Man Steam Packet Co's failure to move to link span operation and conventional ro-ro ships opened the way for Manx Line to commence sailing to and from the Isle of Man. Manx Line were later taken over by Sealink, who in turn were sold to Sea Containers. Sea Containers then acquired the Isle of Man Steam packet Co in 1996. Stena lines HSS craft (High Speed Sea Service) illustrate the other side of this coin. These very fast catamarans powered by gas turbines can reach speed in excess of 40 knots but their operating costs are such that of the four built in the 1990's only two remain in service[231].

The types of ship that the BTC, BRB operated were in the main estuarial and short sea ferries. These vessels emerged as a distinct type in the mid 1800's and went on to become a very refined and sophisticated vessel often at the cutting edge of marine technology. Examples of this are the train ferries that appeared in the UK as early as 1850 when the Edinburgh, Perth and Dundee Railway Co, later part of the North British Railway, started to operated goods ferries from Granton to Burntisland across the Forth. Indeed the sailing by the LEVIATHAN on 7th February 1850 has been called the world first open sea ro-ro sailing[232]. This service ended with the construction of the Forth Railway Bridge in 1890.[233] The worlds first commercial steam turbine ship, the KING EDWARD was built for Clyde Estuary service in 1901 and survived to become part of the BTC fleet. At Dover the RMT Channel ferries of the late 1930's were the worlds fastest motor ships. There are a number of reasons for advanced design of short sea ships. The risk factor is reduced when using new technology if the asset will be near its base most of the time. By the nature of its trade the short sea ship is unlikely to be more than four or 5 hours away from a port and will be

[231] N Widdows *Ferries 2014* (Ramsey: Ferry Publications, 2013) 90 & 176
[232] Peter & Dawson .*The Ferry a drive throughHiistory* 15
[233] D Haws *Merchant Fleets Vol 26* 71

at its home base often daily or at least every two or three days. In addition the constraints of ports and the competitive nature of the services placed a premium on technological advance in this sector. The Scottish shipbuilding firm William Denny & Co of Dumbarton who established a very high reputation for this type of vessel were the first commercial shipbuilder to build a model testing tank in part as a response to a stringent contract with the Belgian Marine Administration for its Dover Ostend service in 1897[234]. The development of the ro-ro moved to the Baltic in the 1930's. There the more sheltered waters and the lower tidal range made operation of this type of vessel much easier. This, coupled with the proximity of Germany, Denmark and Sweden, gave rise to a situation where the commercial opportunities and the technical capabilities came together to develop the train ferry. At the end of the 19th Century. As the motor car became more common, it was a simple task to drive a car onto a ship built for a train. The diesel engine had also reached a point where it could be used to power a small ro-ro ferry after the First World War and Denmark and in particular Danish State Railways led the field here. The world's first purpose build car ferry was the MOTOR PRINCESS built by Canadian Pacific Railway in 1923 for service to Vancouver Island[235]. This was a side loading ship rather than the drive on drive off stern loading vessels that are used these days. The development of the car ferry then returned to the UK where William Denny built the UK's and probably Europe's first open water drive through car ferry for the SR's Isle of Wight service. The FISHBOURNE launched in 1927 was a double ended vessel that could take 16 cars and used long slipways at Portsmouth and Fishbourne to allow it to lower its ramps at any state of the tide. This was so successful two additional slightly larger version were added in 1928 and 1929[236]. The next advance was in the Baltic once more where Grenaa-Hundested Faegefart A/S introduced the DJURSLAND, a drive though car ferry with the now common bow door capable of carrying 52 cars and 500 passengers in 1935[237]. Again this was so successful that a larger version, the ISEIJORD, followed in 1935. To give an idea of how successful this vessel

[234] A Greenway *A Century of Cross Channel Passenger Ships,* 8.
[235] Peter & Dawson .*The Ferry a drive through History*, 23.
[236] Clegg & Styring *British Railways Shipping and Allied Fleets,* 89.
[237] Peter & Dawson .*The Ferry a drive through History* , 27.

was it was still in service in 2004 in Italy carrying 40 cars and 400 passengers[238]. The cross channel ferry became in effect a miniature ocean liner, as Keith Wickenden the Chairman of EFL called them[239]. Indeed it was in many ways part of the marketing to describe them as pocket liners. The LMS made a major advance in 1939 with the introduction of the PRINCESS VICTORIA on the Stranraer to Larne route. This was a purpose build diesel car ferry that was designed to cope with open waters that had a reputation for rough seas[240]. This ship was the prototype for the modern car ferry, a sea going vessel with a large drive on garage space and also the ability to carry up to 64 cars and 1417 passengers at 19 knots. Its car decks turned out to be ideal for mine laying and ironically after being taken into naval service for the Second World War it was sunk by a German mine off the mouth of the Humber in 1940[241].

At the end of World War II there was a need to rapidly replace lost tonnage. The quickest way of doing this was to build a mark two version of pre was ships and that is what tended to happen. The PS WAVERLEY is a particularly good example of this; it was a ship that could have been built any time after 1930. This was not just a feature of the railway ships; the private sector was doing the same with P&A Campbell's paddle steamer BRISTOL QUEEN, a very similar vessel to the WAVERLEY. On a larger scale the KING ORRY built for the Isle of Man Steam Packet Co in 1947 and the BORODINO built for Wilson line in 1950 could have been built before the war and showed this was common shipbuilding practice for a variety of owners. On the 1st January 1948 the railway companies passenger and cargo fleet comprised 129 vessels[242]. In order of size, 55 came from the LMS, 39 the SR, 22 the LNER and 11 the GWR. Almost half, 46% had steam reciprocating engines, 35% steam turbines and 19% were diesel ships. The fleet's average age was 21 years old with the oldest vessel being the CYGNET on Lake Windermere built in 1879. The most recent additions

[238] J Hartill 21-1-2004 20.20 sailing Pozzuoli - Ishcia
[239] J Hendy *Ferry Port Dover* 58
[240] Peter & Dawson .*The Ferry a drive through History* 34
[241] D Haws *erchant Fleets Vol 26* 103
[242] Appendix 1 (based on vessels that sailed for the BTC)

were 8 new ships that had entered service in 1947[243]. Nine new vessels had been launched in 1947, with another seven in various levels of construction and acceptance[244].

Table 5

The BTC fleet statistics for 1950[245]

Railway Fleet in 1950	
Average Age	21 years
Average Size	1459 GRT
Steam Ships	101 (81%)
Diesel Ships	24 (19%)
Passenger Ships	70 (56%)
Cargo Ships	37 (30%)
Ro-Ro Ships	18 (14%)

Table 5 give a breakdown of the fleet in terms of size, age, machinery and type. The definition of a ro-ro that is used is that the vessel is constructed for the carriage of either road or rail vehicles that and be driven on and off without using a crane. A case could be made to say that the three paddle steamers on the Humber fell into this category but for the purpose of this table they are included in the passenger fleet series as most observers would not regard them as a ro-ro vessels.

In the 1950's the BTC report Gen Watson noted that the average age of cross channel ships was 13.5 years in 1939 and was 18.25 in 1954 with the depreciation life of these ships being 25 years. A programme of new build was recommended with large passenger capacity car ferries judged to be the way forward for cross channel services. Not surprisingly the replacement of the 1891 built TERN on Lake Windermere is described as being obviously needed[246]. In looking at new ship design the subject of engines is covered by Gen Watson's report. This report in discussing propulsion machinery notes that on the cross channel routes the time spent

[243] WINCHESTER; ARNHEM; SUFFOLK FERRY; ST DAVID;FALAISE; WAVERLEY; CORUISK
[244] ST PATRICK; FARRINGFORD; BRADING; SOUTHSEA; CAMBRIA; HIBERNIA; MAID OF ORLEANS
[245] Appendix 1
[246] NRM G5A/124p Gen Sir Darril Watson *British Railways Marine Services* BTC 1954, 42.

under full power varied from 600 to 1800 hours per year. Thus, the best utilisation of a ship at full power (there would be some additional time at reduced power entering and leaving harbour) was calculated to be 4.9 hours per day is an indicator of how low the utilisation of ships was at this time. The report comes down in favour of steam turbines for the faster ships and diesels for the rest. The arguments being that the steam turbines, though heavier on fuel use, were cheaper, more reliable and did not suffer from vibration so gave the passenger a better crossing, particularly important on overnight trips. A second report by a committee of technical experts in 1954 was specifically about ship construction but expressed very similar views to Gen Watson on what should be done.

On 22nd December 1949 the BTC approved the recommendation of the railway executive to order a "motor car and passenger vessel for short sea continental services", this was to be built by William Denny & Bros for £638,7000.[247] The LORD WARDEN launched in 1952 was the first purpose built cross channel drive on car ferry. This was a very significant vessel although as has noted above in Chapter 5, the full ro-ro service had to wait for the link span to be completed at Dover. These facilities at Dover were very much a product of BTC operations but once provided they enabled other operators to develop competing services. By 1953 the BTC had a 120 car carrying, stern loading 1000 passenger one class ship providing a Dover Boulogne service. Most commentators on the British ferry scene hail the FREE ENTERPRISE as a ground breaking ship that broke the mould[248]. The first Townsend vessel was certainly a development in ship design but in essence it was a 120 car carrying, stern loading 1000 passenger one class ship that came into service almost a decade after the LORD WARDEN. It was a diesel ship, but the LMS PRINCESS VICTORIA of 1939 had been that also. It had a more open plan passenger layout but again the 1959 Denny built MAID OF KENT had started the open plan lounge interior layout. FREE ENTERPRISE did have a hull that was painted green but that cannot be considered a ground breaking step forward. What the Townsend ship did and

[247] National Archives AN85/2 BTC Minutes No3 minute 2/1187
[248] Peter & Dawson, Cowsil & Hendy all express this view.

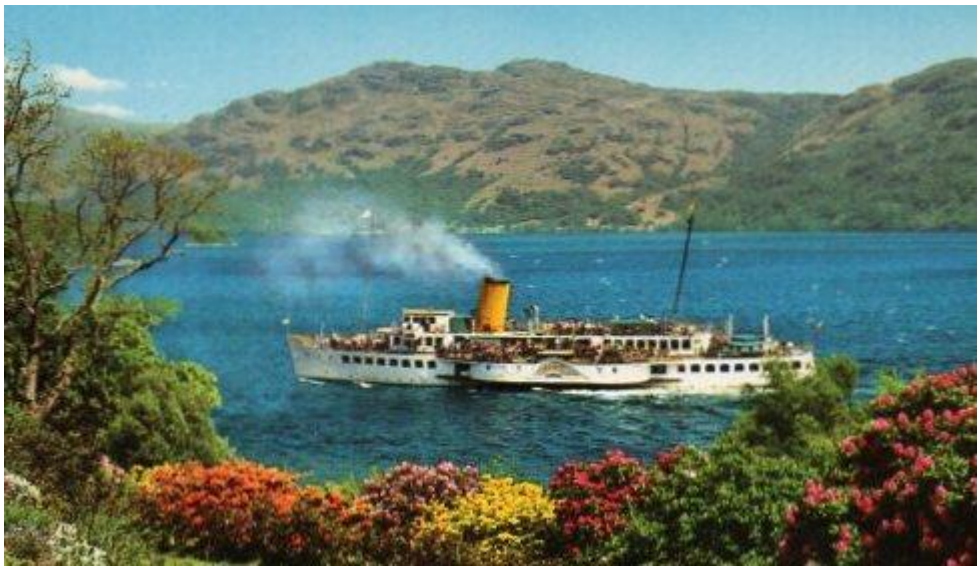
the innovations it brought was to put all the elements into one ship. Nonetheless the BTC with the LORD WARDEN had for all operational purposes got there in 1952, ten years earlier. The Isle of Wight had another diesel passenger ferry, the SHANKLIN, a sister to the last two SR ships added to the fleet in 1951 and in 1959 another car ferry, the LYMINGTON was further added.

The next major fleet renewal was on the Clyde. The poor financial result for the Clyde services have been commented on in chapter 5. Looked at from the fleet point of view the BTC responded with two decisions. One was to build 4 Maid class ships to operate the passenger ferry services. The services these ships provided were in decline nevertheless these ships had working lives of between 19 and 23 years[249]. The second decision was to provide car ferries. In the light of the refusal by the Island harbour authorities to provide link spans an innovative solution was found with the lifting ramp ships, These ships have been criticised for the slow method of loading and unloading but this criticism does not consider what the alternatives were. The three ferries all had a working life of 25 years or more, which means the ships cannot be regarded as failures. The lift on type of ramp was later chosen by MacBraynes as the only way to service the islands off the west coast of Scotland without building link spans. It may be that the BTC in its efforts to provide drive on car ferry services on the Clyde came up with a ship based solution that did not require any investment by pier owners.

The year 1953 did see the entry into service of the BTC's white elephant and it was literally white. The Loch Lomond services were a joint North British Railway and Caledonian Railway operation. This later became and LMS/LNER venture and when passed on to the BTC these divisions became irrelevant. The LMS had built two very successful diesel vessels for excursion on Lake Windermere and it might have been expected that this sort of ship that would be ordered however the BTC chose to build a compound paddle steamer. The order went to the Clyde shipbuilder A & J

[249] D Haws *Merchant Fleets Vol 26.* 26-27

Inglis at a cost of £188,676[250] and the result was the largest vessel to have ever sailed on an inland water in the UK. It was also possibly the only compound paddle steamer to have been built since the First World War.



MAID OF THE LOCH on Loch Lomond

The 1953 built paddle steamer

Sailings from the UK to Ireland and France were still mainly a rail/sea/rail journey and with the Heysham Belfast service being an important link especially in terms of revenue it is not surprising that three new vessels were ordered for this route. The three Dukes replaced LMS ships built in the late 1920's. On the channel the NORMANIA was a modern replacement for the London & South Western Railway's HANTONIA of 1911. There was also a replacement programme for a series of elderly cargo ships. A total of 18 vessels were constructed between 1953 and 1959. There were all conventional general cargo ships with the Humber vessels as part of Associated Humber Lines having some capacity for passengers as well. A dozen ships were for Humber services and there were two each for Harwich, the Channels Islands and Irish routes. As has been said Ripley and Rogan comment on the poor commercial remit for these ships and the failure of the

[250] NRM G5A/162 BTC *Register of ships 1963*

managers to anticipate the growth of the ISO container[251]. Indeed all these are often described as out dated when they were built and an example of old fashioned thinking by the BTC. When looking at the passenger ships built in the 1950's there was a very limited car trade but a substantial passenger one, airlines were not yet the dominant feature of European travel and many old ships had to be replaced. Without control of all the harbours full scale route modernisation was not an option so the modernising of what was in place was perhaps the only option available. The passenger ships built in this period were also all able to be rebuilt as car ferries.

The general cargo trade was living on borrowed time though again the criticism of the BTC's renewal programme could be made of almost all the UK's shipping companies. Alfred Holt and Co (Blue Funnel Line), William Thomson & Co (Ben Line) and John Swire and Co (China Navigation) which were all major shipping lines are just three examples of British shipping companies that had no container vessels in this period[252]. Only in the 1960's did the container ship take over from the general cargo ship. The BTC was in a difficult position with these freight routes, the ships that were replaced were old coal fired steamships and, but for the war, would have gone some time ago. They were ships like the HODDER, a coal fired cargo vessel built for a subsidiary of the Lancashire and Yorkshire Railway in 1910[253]. If the replacement programme had taken place 5 years later a very different set of vessels would likely have emerged. The traffic they were built to carry was in many respects a marine version of the wagon load train and their decline mirrors the decline of wagon load freight on the railways. The Humber ships had a short life of 12 to 15 years on the North Sea though at times they did operate on other routes[254]. A similar fate befell the Channel Islands ships but the Harwich and Irish Sea ships had more successful careers of up to 21 years. The small general cargo ship was caught in the middle; traffic was transferring to ISO container. The wagon load freight from the railways which had fed it was going and this meant there was no interest from the railway

[251] Ripley & Rogan *Designing ships for Sealink*, 19-22
[252] B Moody *British Ocean Cargo Ships, British Ocean Liners* (Shepperton: Ian Allan ,1962)
[253] D Haws *Merchant Fleets Vol 25* 74
[254] Ibid., 80-82

point of view in maintaining the service. For much of this cargo the way of moving it was now by road transport.

Table 6

The BTC fleet statistics for 1960[255]

Table 2

Railway Fleet in 1960	
Average Age	17.4 years
Average Size	1581 GRT
Steam Ships	54 (49%)
Diesel Ships	55 (51%)
Passenger Ships	58 (53%)
Cargo Ships	27 (25%)
Ro-Ro Ships	24 (22%)

Between 1950 and 1960 the fleet shrunk in numbers, the ships were bigger, it was younger, steam was in decline and ro-ro's were on the increase. It was the 1960's that saw the coastal shipping revolution start in earnest and the response to this was a major change in the fleet and also services. A conventional vessel can use any harbour that is big enough and deep enough for the vessel to dock there. This is not the case with a large ro-ro vessel. It can only use ports where there is a compatible ramp. The vessels were also getting more expensive and the commercial logic of this was to focus on a limited number of routes and maintain as frequent a service as possible on those routes. The availability of link spans was crucial to this a dictated how many ships could operate and at what times. Stranraer and Larne had a link span pre war, Dover and Harwich had train ferry docks which enable railway wagons, coaches and also road vehicles to be driven or shunted onto the ship. As the car ferry services expanded and more routes gained link spans the fleet changed to reflect this. The car ferry service to Calais was started by SNCF in 1958 with its vessel the COMPIEGNE. Further down the Channel with link spans installed Newhaven Dieppe had gone ro-ro in 1964. The FALAISE was converted to a car ferry for this route and in 1965 two French ships, the VILLANDRY and VALENCAY joined the

[255] Appendix 1

service to make it fully ro-ro. The car ferry expansion continued with Holyhead to Dun Laoghaire starting in 1965. Two sister ships were built, the DOVER to work logically enough from Dover and the HOLYHEAD FERRY NO 1, possibly the least imaginative name ever given to a railway ship, to open the Irish service from Holyhead. The late 1960's saw the first diesel car ferries joining the fleet, the ANTRIM PRINCESS at Stranraer and the VORTIGERN[256] at Dover for the Dunkerque train ferry route.

The 1960's also saw the introduction of the last classic passenger only ship, the AVALON on the Harwich Hook route, this ship is generally considered to be the finest passenger only ship the railways ever built but also one that should have been built as a car ferry. The arguments that applied for building passenger ships for cross channel services were no longer applicable the short life of the AVALON as a passenger ship show this. In 1968 only 5 years after the introduction of the AVALON, the ST GEORGE commenced a Ro-Ro service from Harwich to the Hook, the Dutch partner SMZ also introduced a sister ship to the KONINGIN JULIANA.

The railway's estuarial services responded to changing circumstances and the opening of the Dartford Tunnel by ending the vehicle service across the Thames at Tilbury. The old LMS vessels were replaced with three new passenger ferries of the same names EDITH, CATHERINE and ROSE. By 1967 the traffic was such that two vessels could manage the traffic and the ROSE was sold although transferred might be a better expression from the Eastern Region to the Caledonian Steam Packet Co for services on the Clyde. Renamed the KEPPEL this ship sailed on the Largs to Millport route until 1986 having spend 19 years in service on the Clyde compared with six on the Thames. The Isle of Wight's old SR car ferries were in need of replacement and an updated version of the 1959 LYMINGTON was produced though with less provision for passengers as the Portsmouth Ryde route carried the majority of the passenger traffic on this corridor. CAMBER QUEEN and FISHBOURNE entered service in 1961 and could best be

[256] Appendix 1

described as utilitarian. The contrast between these 1961 ships and the 1969 built CUTHRED is very noticeable and highlights the development of this class of ship[257]. The vehicle capacity was such that in practical terms as the third ship on the Portsmouth Fishbourne route it doubled the capacity[258], while Ripley and Rogan point out this was done on the same amount of power as the earlier ships[259]. The main lounge offered a very high level of comfort, even luxury for the time and set a standard for the future.

The final 1960 ships were SEA FREIGHTLINER I and SEA FREIGHTLINER II. These ships were, as the name implied, an extension of the freightliner network and designed to carry containers from Harwich to Zeebrugge and Rotterdam. This they did very successfully to the end and beyond the nationalisation era. A major change to the fleet at the end of the 1960's was the transfer of the Caledonian Steam Packet Co's operation to the newly formed Scottish Transport Group. The BRB had been trying to divest itself of this loss making service for some time. It also saw the removal of five expensive to operate summer only steamships from the fleet.

Table 7

The BRB fleet statistics for 1970[260]

Railway Fleet in 1970	
Average Age	17.5 years
Average Size	2354 GRT
Steam Ships	24 (35%)
Diesel Ships	44 (65%)
Passenger Ships	21 (31%)
Cargo Ships	22 (32%)
Ro-Ro Ships	25 (37%)

The 1970 started with full ro-ro services available on from Harwich, Dover, Newhaven, to the Isle of Wight, from Holyhead and Stranraer. To this were added Heysham in 1970, Fishguard in 1972, Folkestone in 1972 and

[257] FISHBOURNE & CAMBER QUEEN built 1961 carried 159 passenger in spartan accommodation at the side of the car deck. The 1969 built CUTHRED carried 400 passengers in high quality panoramic lounges with a café.
[258] D Hawes *Merchant Fleets Vol 24* 190
[259] Ripley & Rogan *Designing ships for Sealink* 46
[260] Appendix 1

Weymouth in 1973. To enable this to happen, two of the Heysham passenger ferries were converted to stern loading car ferries as was the AVALON, now no longer needed at Harwich. A new car ferry, AILSA PRINCESS was placed on the Stranraer route which enabled the CALEDONIAN PRINCESS to move to Fishguard. This ship also marked a shift in policy over ship construction. Up to this point all BTC and BRB ships had been built in the UK but AILSA PRINCESS was built in Italy. To open the drive on service from Folkestone two new ships were built, the HENGIST and the HORSA were built in France and the same shipyard at Brest also built a new ship, the SENLAC for the Newhaven Dieppe service. Traffic levels on the Harwich Hook route had built up to a point where a third ship was justified, the ST EDMUND came into service in 1974. The final major 1970's vessel was the 1976 built ST COLUMBA. This time a Danish shipyard gained the order. The ship was the last to be built as a two class vessel with a capacity of 2400 passengers with seats for 684 1st and 2259 2nd class passengers[261]. This ship cost £19 million; showing how the costs of vessel had escalated.

The second change in policy at this time was buying second hand ships. The Channel Islands were a difficult service to operate with constraints on vessel size at the harbours. A mechanical failure on the FALAISE led to the charter of the 1966 built SVEA DROTT to cover its Channel Islands services in 1974. This ship proved to be a success on the route and was then leased by the BRB, A sistership, the VIKING II, was also leased and these two became the core ships on the Channel Islands run. On the Fishguard route the converted Avalon needed replacing and a Stena[262] ship was taken on charter for this route. The STENA NORMANDICA, built in 1974, commenced sailing from Fishguard in 1979.

On the freight front for short sea services the traditional cargo ship was now replaced by the freight ro-ro though there was still container traffic to Ireland. Two ships, similar to the Harwich Sea Freightliners, were built, this time in Cork, for this service. The freight fleet was enhanced by the

[261] D Haws *Merchant Fleets Vol 25*, 192
[262] Stena was a major shipping company from the Baltic

DALRIADA at Stranraer in 1971, the ANDERIDA at Dover in 1972 and the ULIDIA at Dover in 1973. These were all Norwegian built ships and their purpose was to increase the freight capacity on the routes. The DARNIA entered the fleet in this way. Built in Linz (Austria) and fitted out on the Danube in Romania in 1977 as the STENA TOPPER it was placed on the Stranraer Larne route to increase capacity. The last vessel to be chartered in this manner was the SPEEDLINK VANGUARD. Built in 1973 as the STENA SHIPPER it had sailed in New Zealand and later for a Greek shipping company. That company failed and the vessel reverted to Stena after being arrested in Mombassa. The ship had already been lengthened and was taken to Middleborough to be converted into a train ferry. The older units at Harwich were now in need of replacement and while new ships were being considered the Channel Tunnel made this unlikely. The new Isle of Wight ferry CUTHRED had been a success and three more slightly upgraded version of this ship were ordered, CAEDMON, CENRED and CENWULF entered service in 1973. The two on the Lymington Yarmouth route remained in service until 2009[263], their 36 year life a testament to the sound design and construction of the ships in the first place. It is not as long as some of the earlier steamships lasted but with the far more intensive use today they would seem to have been of equal merit.

Table 8

BRB fleet statistics for 1980[264]

Railway Fleet in 1980	
Average Age	17.3 years
Average Size	3266GRT
Steam Ships	5 (10%)
Diesel Ships	45 (90%)
Passenger Ships	10 (20%)
Cargo Ships	4 (8%)
Ro-Ro Ships	36 (72%)

By the 1980's it was clear that Sealink would be privatised and this had an effect on the fleet. There was an understandable reluctance by the

[263] Whitelink "History" accesses 25/5/15 http://www.wightlink.co.uk/about-us/history 25/5/14
[264] Appendix 1

BRB to spend its money on assets that would be sold off with the proceeds going to the Treasury. Table 4 shows the average age of the fleet starting to increase although if the Furness Railway and LMS ships on Windermere are removed the average age drops to 13 years and the average size increases to 3931GRT. The last three years of Sealink saw just three vessels added to the fleet. The ST NICHOLAS was the largest vessel ever under British railway ownership, at 17,043 GRT this was by a substantial margin, and it set new standards for the Harwich Hook route. The other two ships were the next generation of Isle of Wight ferries, ST CATHERINE and ST HELEN. At over 2000 GRT and carrying 770 passengers and 142 cars these Isle of Wight ships were not far off the size of the cross channel ferries that the BTC inherited in the 1950's and had a bigger car capacity than the LORD WARDEN. The St HELEN is still in service (2014) with Wightlink having now been on that service for 31 years though the Furness Railway's TERN has been sailing on Lake Windermere for 123 years (2014) and counting, a record that would seem unlikely to be beaten.

This programme of change needs to be looked at in the context of the business to assess whether the decisions made were the right ones. As has been illustrated above, the initial post war need was to replace lost ships and get the service back on a reasonable footing. This did not stop development and the consideration by the BTC of a car ferry as early as 1949. The BTC had two purpose built car ferries in service on the channel and with SNCF their fleet was bigger with a wider range of services in the 1960's. The Townsend and Thoresen ships of the 1960's did not have a significantly longer career than the BTC fleet at the time. The average service life for the first four Free Enterprise vessels and the first three Viking ships was 17 years. Of the comparable railway ships the HOLYHEAD FERRY NO 1 with its 15 year life was the only ship that did not manage 17 years in service, with the LORD WARDEN having a 27 year working life. The Humber had a complete renewal of the fleet in the 1950's with the routes providing the biggest cargo trade at that point but this was later to prove the biggest failure of the BTC and these vessels all had short lives.

While the case has been made for the ships built in the 1950's as suitable for the traffic that was on offer, the decade of the 1960's is a time when ground was initially lost. The advance of the car ferry was becoming clear yet the AVALON was built as a passenger only ship. Ships were built with steam turbines when diesel engine would have been more economical and the first drive through ship as opposed to drive on ship was the ANTRIM PRINCESS of 1967. The AVALON was replaced in 1968 by the ST GEORGE opening drive through services on the Harwich route and in co-operation with SNCF. Newhaven Dieppe had gone drive on in 1964 and Holyhead in 1965 so it was not a period where nothing happened but the competitors were gaining ground. The first British drive though ferry was the FREE ENTERPRISE II of 1965 so the BRB was only 2 years behind and FREE ENTERPRISE II was not an unqualified success being on the sale list by 1970[265]. What did develop however was a fleet of ships that were to new to replace but becoming outdated. Thus the way was open for rival operators to gain an advantage. On the Dover straits Townsend building gained ground by launching a very successful series of five ships between 1969 and 1974 for its Dover to Calais and Zeebrugge services.

If the 1960's had been an era of falling back then the 1970 was moving forward again. The 1970's saw the last of the major routes converted to drive on and drive through ships were now being ordered. More conversion work on older stern loading vessels enabled them to be usefully employed for a longer period so by the end of the 1970's the fleet was now up to 80% ro-ro from 37% in 1970. The passenger only services operated to the Isle of Wight, from Tilbury to Gravesend and also on Lake Windermere so the fleet was never going to be completely Ro-Ro like other operators. New drive through ships had upgraded the Folkestone route, there were four modern car ferries on the Isle of Wight routes and the remaining freight services were container carrying. Sealink was still behind its competition on the Dover Calais route, this being the premier short sea crossing to the UK and one that any ferry operator will be judged on. It was not until 1981 that a

[265] Cowsill & Hendy *The Townsend Eight,* 27

reasonably matched fleet was able to compete there. The BRB had built four new car ferries, all similar ships though not identical, two for Dover Calais, one to go to Holyhead and one for Stranraer. On the Dover Service SNCF had also placed a new large ferry. The final fleet changes were the replacement of the ST GEORGE and ST EDMUND of the Hook route by the St NICHOLAS and the arrival of the first two of the next generation Isle of Wight ferries.

There is another fleet that the BTC were responsible for. Although not part of the "railway fleet" the BTC had purchased the Atlantic Steam Navigation Company in April 1954. This operation was sold to European Ferries Ltd in 1971. The operation of the service was left as a stand alone unit, in many ways echoing the ways the railway ships and packet ports were managed. However ship construction was centralised within the BTC with the same team responsible for these and the railway ships. Between 1957 and 1967 6 ro-ro freight ships were built. These were very successful and the first purpose built freight based ro-ro's to operate into the UK. Ripley and Rogan note that the term ro-ro (roll on roll off) was coined by the Bustard family , managers of the company chosen rather than do-do (drive on drive off) as the extinct Dodo did not seem a good symbol.[266]

The overall picture is one of a successful programme of renewal, upgrading and response to change. In 1950 there were 125 vessels with an average age of 21 years of which 14% were ro-ro's, in 1980 there were 50 ships, the average age was 17 years and 80% were ro-ro.

[266] Ripley & Rogan *Designing ships for Sealink, 18.*

Chapter 9
CONCLUSION

MV ST NICHOLAS [267]

The largest ever ship in the railway fleet, for the Harwich Hook service in 1983

With a large organisation over quite a long period of time it is unlikely that there will be a simple answer to questions about its success and efficiency. The legacy of the big four in terms of memory looms large among those with an interest in maritime and railway transport systems yet they only lasted for 25 years. From nationalisation to privatisation in July 1984 is a further period of over 35 years, almost half as much again, and yet there is little reported work on this period. The BTC took over a large fleet that mirrored the Big Four's railway services. There seems to have been in practice very little competition between the big four in the maritime sphere. Indeed, the opposite seems to have been the case, with Associated Humber Lines showing they would rather work together to ensure maximum profitability of their marine services.

[267] Image from a J A Dixon postcard L6/SP 7159

The BTC did pay attention quite early on to the shipping activities and decided to remain with the status quo and leave the ships, and what were known as the packet ports, as part of the railways. This seems to have been a quite logical decision when the big picture is considered. It may not have maximised the profitability of the shipping services, although the financial evidence does not suggest there were any problems, but it did prevent a divergence of aims. The shipping services were conceptualised as feeders or links in a railway route and were operated as such. The level of priority give to “Boat Trains” and the special stock described in this dissertation show the importance and value of the railway traffic and supports the rationaI behind the view that the ships were an extension of the railway, particularly when it is a profitable ancillary business but one that is small in size compared to the railway itself.

The comparisons with other short sea shipping operators are difficult as none had such a range of services, thus there is no simple like for like comparison. It is possible to compare specific routes but this also presents problems as the BTC/BRB’s decisions about one route were taken in the context of a large operation rather than on a route specific basis and it is unreasonable to criticise an organisation for taking a broad operational view. The withdrawal of the railway ships from Southampton is portrayed as an example of the success of private enterprise on a route where the nationalised operator could not make a success of it. However, when considered from the BTC/BRB perspective, the concentrating of the Channel Islands services at Weymouth was a much effective and indeed a more profitable operation. That left just the Le Havre service which in many ways was an expensive duplication of the Newhaven route. Also, in terms of large scale investments that would be needed, the other cross channel routes offered better opportunities. There were two other major closures by the BRB, Heysham to Belfast and all the Humber services. Heysham to Belfast just seems to have been a victim of changing travel patterns partly due to the political situation in Northern Ireland. With the Southampton and Heysham Belfast services a strong case can be made that closure was the best option and it should also be pointed out that there are no private sector operators on

these routes today (2014). The Humber services are a different case with North Sea Ferries starting up as the BRB operation closed down. The Humber is now one of the major ports for short sea services to mainland Europe and there were clearly commercial opportunities there.

Considering the other cross channel and Irish routes in the period this dissertation covers, they all show a move to ro-ro vessels, more sailings and more intensive use of the assets. Harwich Hook: Dover Calais: Folkestone Boulogne; Newhaven Dieppe; Weymouth to the Channel Islands; Fishguard to Rosslare and Stranraer to Larne all had major increases in service, as well as in the capacity of the vessels, and by the time of privatisation, were operating drive through ships. Sealink was in open competition with other operators on the North Sea, Dover Straits and Irish routes and was able to provide a service that was competitive with its rivals. The traffic figures show a massive growth over this period when like for like services are compared. The argument that Sealink lost market share is true but this was in an expanding market where there were new entrants so that was probably inevitable. While the market was growing it should not be thought it was "easy pickings", for example, in 1985 P&O withdrew from the English Channel and sold its operation there to European Ferries Ltd[268]. There was even some growth in 1979 as Sealink acquired a controlling share in Manx Line and railway ships returned to the Isle of Man, on a route previously operated by the Midland Railway. Even on internal services the Isle of Wight's growth continued, with a round the clock service operating, coupled with larger vessels and improved port facilities.

The services provided by the BTC and BRB took place in a period of transition from the classic foot passenger and cargo ship to the multi purpose ro-ro vessel. The services used a wide range of ports with a variety of owners who in the early years displayed differing attitudes to the provision of link spans, which are an essential component for the operation of a ro-ro ship. The only private sector operator with a wide range of routes that made this

[268] P&O later brought European Ferries and re branded them as P&O

transition from a traditional classic ship operator to a modern ro-ro operator in the Northern European area without being taken over or having other major changes in its structure is the Danish company DFDS.

The second criticism to be addressed is that the BTC/BRB had commissioned outdated ships. Again it is important to compare like with like. The LORD WARDEN was the first purpose built cross channel car ferry, the BARDIC FERRY built for Atlantic Steam Navigation, a BTC subsidiary, was the first purpose built freight ro-ro. On the shorter crossing the BTC/BRB drive though ferries to the Isle of Wight were of a more advanced design than the private sector Red Funnel ships. The BTC and BRB built or purchased 98 ships[269] . The evidence does suggest some poor choices were made. Two ships in particular stand out as not proving cost-effective , in Scotland MAID OF THE LOCH could be considered virtually a throwback to the Victorian era, particularly in the light of the diesel ships on Windermere. At Harwich by the time the AVALON was being built for the route a car ferry was clearly needed. The batch of small cargo ships built in the early 1950's also showed a lack of foresight in not being designed to take ISO containers. The final issue is the retention of the steam turbine as the power plant for the cross channel passenger ships into the 1960's with the last steam turbine vessels launched in 1965[270]. It would clearly have been a better idea to have built a diesel ship at this point in time but the BTC/BRB were not the only operators still building steamships at that point. The Isle of Man Steam Packet co BEN-MY-CHREE entered service in 1966 powered by steam turbines and as an illustration of the link span issue as late as 1975 the LADY OF MANN was not a fully ro-ro ship, some 12 years after the BTC/BRB built their last classic vessel. The low cost of fuel in the 1970's meant that there was little pressure on companies to operate diesel ships in the way that became crucial by the 1990's. The Townsend fleets, held up as a shining example of private sector innovation, had vessels that turned out to have been poorly specified. The long service life of many of the BTC/BRB ships and their continuing service post privatisation seems to be an indicator of sound design and commercial

[269] Appendix 1
[270] DOVER and HOLYHEAD FERRY No 1

suitability. The 1970's and 1980's Isle of Wight ferries fall into this category as do the ST ANSLEM; ST DAVID; ST CHRISTOPHER and GALLOWAY PRINCESS from the late 1970's and early 1980's as well. The average service life of these 98 ships on the routes they were designed for (excluding periods when sold on to work in other areas) was 19 years, a very respectable timespan.

The last other major criticism of nationalised industries is that they are loss makes or at least poor financial performers. The annual reports show this to be untrue. In the early days of the BTC, when there was little competition from the airlines, and when the motor car and lorry were still not established as the default mode of transport, shipping activities were highly profitable. This is despite operating what were in effect loss making social need services on the Clyde in particular. The BTC also had a buy British policy which stayed until 1971 even though despite the costs of ships from British shipyards were becoming higher by comparison with other suppliers. The shipping services were able to grow revenue and contain costs with the average profit being 5.6% of income. It is also noticeable how on the two occasions the operations were in deficit there was a rapid recovery showing the ability to make changes and respond to the marketplace. This was not always the case with private sector operators.

From 1st January 1948 to 27th July 1984 the BTC and BRB ships provided a vital and profitable lifeline for the British Isles. This was accomplished under constraints that its rivals did not have and at a time of substantial change in the transport market. In July 1984 Sealink Uk Ltd was sold for £65.7 million to Sea Containers Ltd of Bermuda[271]. This was seen as an 'outsider' beating the favourites. The sale included 37 ships and 10 harbours. Later the company would trade as Sealink British Ferries. In 1990 a hostile takeover of Sea Containers Ltd saw the Sealink part of the business sold to Stena for £259 million with another £200 million of Sealinks debt[272].

[271] T Gourvish *British Rail 1974-972*,42 (Gourvish notes that at this time they were the only bidder)
[272] Cowsill & Hendy *The Sealink Years* 80

This sale did not include the ports of Heysham, Folkestone, Newhaven, development land at Harwich, the Isle of Wight services, Hoverspeed and Sealinks holding in the Isle of Man Steam packet Co. The 1984 sale for £66 million has been described as the "sale of the century"[273] , it probably was.

In summary, this dissertation has provided evidence that the BTC/BRB had a number of successes. It ran a profitable service for 35 years. It built on the early car ferry experience of the LMS and SR to build some very successful vessels and through its Atlantic Steam Navigation subsidiary developed the UK's first commercial vehicle ro-ro vessels. The routes chose for development have been shown by the test of time to be the right ones and finally the operation successfully managed a major shift in its customer base as the transition from rail delivered passengers and cargo, to car and commercial vehicle traffic took place. Overall the information suggests that the BTC and the BRB operated a successful shipping arm. The value the market placed on the company shortly after it was privatised also supports this view.

This dissertation has focused on how the BTC and BRB performed, particularly in comparison with Townsend Thoresen. A broader based comparison of all the post war operators may well bring to light evidence of good and bad practice both in the BTC/BRB sphere and also how it compared with other operators. The variety of state and private sectors companies operating on the short sea sector into the UK over this period is considerable and may well enable wider conclusion to be drawn. It is now some 30 years since the privatisation of Sealink took place. Since then the ferry market has had to deal with greater European integration, the abolition of duty free goods, the Channel Tunnel, low cost airlines, and security issues post 9/11. The changes in the market and travel patterns warrant more research. The decline in the number of routes now operated suggest that the 1980's might have represented a "high water mark" for the UK short sea passenger. Another area that merits investigation is the heavily subsidised

[273] Ferry Crossings "The rise and fall of Sealink" accessed 14/8/14 http://ferrycrossings.org.uk/ferry-operators/history-sealink-ferry/

island services in Scotland (the former Caledonian Steam packet, David MacBrayne and Northern Isles routes.) in comparison with the unsubsidised services to the Isle of Wight, Scilly Isles, Western Ferries Dunoon Gourock and Orkney ferries commercial operations. Are the subsidies necessary, have they distorted the market and do they represent values for money. In *Who Pays the Ferryman*[274] by Roy Pedersen it is suggested that the Scottish ferry services could be delivered in a much better and cheaper way. A final consideration is that all the major advance in car ferry design construction and operation up to the 1970's were at the hands of railway companies from a variety of countries, none came from private sector shipping operators.

[274] Roy Pederson *Who Pays the ferryman* (Edinburgh: Birlin, 2013)

APPENDIX 1

BTC and BRB Railway Fleet

SHIP	YEAR	GRT	ENGINES	TYPE	BUILDER
Lucy Ashton	1888	224	ps	pass	Seath
Tern	1891	120	sr	pass	Forrest
Princess May	1898	256	ps	pass	Inglis
Swift	1900	203	sr	pass	Seath
King Edward	1901	502	st	pass	Denny
Rose	1901	259	sr	pass	Robertson
Solent	1902	161	ps	pass	Mordey Carney
Catherine	1903	259	sr	pass	Robertson
Duchess of Fife	1903	329	ps	pass	Fairfield
Duchess of Argyll	1906	594	st	pass	Denny
Irwell	1906	1040	sr	cargo	Swan Hunter
Sir Francis Drake	1908	478	sr	pass	Cammell Laird
Accrington	1910	1629	sr	pass	Earle's
Bury	1910	1686	sr	pass	Earle's
Dewsbury	1910	1686	sr	pass	Earle's
Hodder	1910	1016	sr	cargo	Wm Dobson
Alt	1911	1067	sr	cargo	Wm Dobson
Edith	1911	283	st	pass	Robertson
Hantonia	1911	1595	st	pass	Fairfield
Prince Edward	1911	304	ps	pass	Inglis
London Istanbul	1913	1384	st	pass	Cockerill
Macclesfield	1914	1049	sr	cargo	Swan Hunter
Rother	1914	1098	sr	cargo	Clyde Shipbuilding
Biartitz	1915	2495	st	pass	Denny
Essex Ferry	1917	2683	sr	train	Armstrong Whitworth
Felixstowe	1918	905	sr	cargo	Hawthorne Leith
Antwerp	1919	2957	st	pass	John Brown
Cambria	1920	3462	st	pass	Denny
Hibernia	1920	3467	st	pass	Denny
Harrogate	1922	1063	sr	cargo	J Duthrie
Selby	1922	1063	sr	cargo	J Duthrie
Slieve Donnard	1922	1116	sr	cargo	Vickers Armstrong
Dearne	1924	1116	sr	cargo	Vickers Armstrong
Dinard	1924	1769	st	pass	Denny
Don	1924	1095	sr	cargo	Vickers Armstrong
Shanklin	1924	399	ps	pass	Thonycroft
Tessa	1924	368	sr	roro	Lytham
Glen Sannox	1925	690	st	pass	Denny
Haslemere	1925	832	sr	cargo	Henderson
Hebble	1925	1078	sr	cargo	Beardmore
Hythe	1925	700	sr	cargo	Henderson
Isle of Thanet	1925	2789	st	pass	Denny
Roebuck	1925	866	sr	cargo	Swan Hunter
Sambur	1925	866	sr	cargo	Swan Hunter
Skye	1925	7	d	roro	Miller
St Helier	1925	1949	st	pass	John Brown
St Julien	1925	1943	st	pass	John Brown
Whitstable	1925	865	sr	cargo	Henderson
Maidstone	1926	8744	sr	cargo	Henderson
Minard	1926	241	sr	cargo	Scott

Ringwood	1926	755	sr	cargo	Henderson
Sheringham	1926	1088	sr	cargo	Earle's
Fishbourne	1927	136	d	roro	Denny
Freshwater	1927	264	ps	pass	White
Mime	1927	368	sr	roro	Lytham
Ardyne	1928	242	sr	cargo	Scott
Deal	1928	829	sr	cargo	Henderson
Duke of Argyle	1928	3799	st	pass	Denny
Duke of Lancaster	1928	3838	st	pass	Denny
Duke of Rothesay	1928	3805	st	pass	Denny
Kyleakin	1928	11	d	roro	Webster
Merstone	1928	342	ps	pass	Caledon
Wootton	1928	149	d	roro	Denny
Worthing	1928	2343	st	pass	Denny
Canterbury	1929	3071	st	pass	Denny
Melrose Abbey	1929	1941	sr	pass	Earle's
Sir John Hawkins	1929	930	sr	pass	Earle's
Aire	1930	1116	sr	cargo	Cammell Laird
Blyth	1930	1122	sr	cargo	Cammell Laird
Duchess of Montrose	1930	794	st	pass	Denny
Hilsea	1930	149	d	roro	Denny
Isle of Gurnsey	1930	2189	st	pass	Denny
Isle of Jersey	1930	2180	st	pass	Denny
Slieve Bloom	1930	1297	st	cargo	Denny
Whippingham	1930	825	ps	pass	Fairfield
Autocarrier	1931	822	sr	cargo	Henderson
Jennie Deans	1931	839	ps	pass	Fairfield
Princess Margaret	1931	2838	st	pass	Denny
Sir Richard Grenville	1931	901	sr	pass	Earle's
Duchess of Hamilton	1932	801	st	pass	Harland & Wolff
Isle of Sark	1932	2233	st	pass	Denny
Slieve More	1932	1370	st	cargo	Denny
St Andrew	1932	3035	st	pass	Cammell Laird
Brittany	1933	1522	st	pass	Denny
Great Western	1933	1742	sr	pass	Cammell Laird
Kildonan	1933	208	sr	cargo	Ardrossan Dockyard
Queen Mary II	1933	1014	st	pass	Denny
Caledonia	1934	623	ps	pass	Denny
Hampton Ferry	1934	2989	st	train	Swan Hunter
Princess Maud	1934	2917	st	pass	Denny
Sandown	1934	648	ps	pass	Denny
Tattershall Castle	1934	556	ps	pass	Wm Grey
Twickenhan Ferry	1934	2839	st	train	Swan Hunter
Wingfield Castle	1934	556	ps	pass	Wm Grey
Duke of York	1935	4325	st	pass	Harland & Wolff
Marchoness of Lorne	1935	427	ps	pass	Fairfield
Shepperton ferry	1935	2996	st	train	Swan Hunter
Slieve League	1935	1369	st	cargo	Denny
Talisman	1935	544	d	pass	Inglis
Wee Cumbrae	1935	35	d	pass	Denny
Arran Mail	1936	137	d	cargo	Denny
Countess of Breadalbane	1936	106	d	pass	Denny
Marchoness of Graham	1936	585	st	pass	Fairfield
Moil	1936	10	d	roro	Mclean
Slieve Bearnagh	1936	1485	st	cargo	Denny
Swan	1936	251	d	pass	Vickers Armstrong
Teal	1936	251	d	pass	Vickers Armstrong

Jupiter	1937	642	ps	pass	Fairfield
Ryde	1937	566	ps	pass	Denny
Slieve Bawn	1937	1573	st	cargo	Denny
Ashton	1938	38	d	pass	Denny
Leven	1938	38	d	pass	Denny
Lymington	1938	275	d	roro	Denny
Invicta	1940	4191	st	pass	Denny
Lincoln Castle	1940	598	ps	pass	Inglis
Cullin	1942	24	d	roro	Denny
Londres	1943	2444	st	pass	Forges et Chantiers
Princess Victoria	1946	2694	d	roro	Denny
Arnhem	1947	5008	st	pass	John Brown
Coruisk	1947	19	d	pass	Yorkshire
Falais	1947	2416	st	pass	Denny
Farringford	1947	489	d	roro	Denny
St David	1947	3783	st	pass	Cammell Laird
St Patrick	1947	3482	st	pass	Cammell Laird
Suffolk Ferry	1947	3134	d	train	John Brown
Waverley	1947	693	ps	pass	Inglis
Winchester	1947	1149	d	cargo	Denny
Brading	1948	837	d	pass	Denny
Southsea	1948	837	d	pass	Denny
Cambria	1949	5284	d	pass	Harland & Wolff
Hibernia	1949	5284	d	pass	Harland & Wolff
Maid of Orleans	1949	3777	st	pass	Denny
Amsterdam	1950	5092	st	pass	John Brown
Brighton	1950	2875	st	pass	Denny
Norfolk Ferry	1950	3157	d	train	John Brown
Lochalsh	1951	24	d	roro	Denny
Portree	1951	53	d	roro	Denny
Shankiln	1951	833	d	pass	Denny
Lord Warden	1952	3333	st	roro	Denny
Normania	1952	2217	st	pass	Denny
Arran	1953	568	d	roro	Denny
Broadford	1953	57	d	roro	Denny
Maid of Argyll	1953	508	d	pass	Inglis
Maid of Ashton	1953	508	d	pass	Yarrow
Maid of Cumbrae	1953	508	d	pass	Ardrossan Dockyard
Maid of Skelmorlie	1953	508	d	pass	Inglis
Maid of the Loch	1953	555	ps	pass	Inglis
Bute	1954	569	d	roro	Ailsa
Cowal	1954	568	d	roro	Ailsa
Fountains Abbey	1954	1197	d	cargo	Hall Russell
Whitby Abbey	1954	1197	d	cargo	Hall Russell
Duke of Argyll	1956	4797	st	pass	Harland & Wolff
Duke of Lancaster	1956	4797	st	pass	Harland & Wolff
Duke of Rothesay	1956	4780	st	pass	Denny
Kirkham Abbey	1956	1372	d	cargo	Austin & Pickersgill
Byland Abbey	1957	1372	d	cargo	Austin & Pickersgill
Essex Ferry	1957	3242	d	train	John Brown
Glen Sannox	1957	1107	d	roro	Ailsa
Lochalsh	1957	60	d	roro	Ailsa
Bolton Abbey	1958	3268	d	cargo	Brooke Marine
Container Enterprise	1958	982	d	cargo	Ailsa
Container Venture	1958	982	d	cargo	Ailsa
Darlington	1958	963	d	cargo	Lamont
Isle of Ely	1958	866	d	cargo	Goole shipbuilding
Wakefield	1958	1113	d	cargo	Inglis

Colchester	1959	866	d	cargo	Goole shipbuilding
Elk	1959	795	d	cargo	Brooke Marine
Freshwater	1959	363	d	roro	Ailsa
Harrogate	1959	963	d	cargo	Lamont
Leeds	1959	1113	d	cargo	Inglis
Maid of Kent	1959	3920	st	roro	Denny
Melrose Abbey	1959	3269	d	cargo	Brooke Marine
Moose	1959	795	d	cargo	Brooke Marine
Selby	1959	963	d	cargo	Lamont
York	1959	1087	d	cargo	Inglis
Caesarea	1960	4174	st	pass	White
Kyleakin	1960	60	d	roro	Ailsa
Slieve Donnard	1960	1598	d	cargo	Ailsa
Caledonian Princess	1961	3630	st	roro	Denny
Camber Queen	1961	293	d	roro	Philip
Catherine	1961	213	d	pass	White
Edith	1961	213	d	pass	White
Fishbourne	1961	293	d	roro	Philip
Rose/Kepple	1961	213	d	pass	White
Sarnia	1961	4174	st	pass	White
Avalon	1963	6584	st	pass	Alexander Stephen
Cambridge ferry	1963	3294	d	train	Hawthorne Leslie
Earl William	1964	3756	d	roro	Kaldnes
Dover	1965	3602	st	roro	Swan Hunter
Holyhead Ferry 1	1965	3879	st	roro	Hawthorne Leslie
Portree	1965	65	d	roro	Lamont
Broadford	1966	64	d	roro	Lamont
Caledonia	1966	1156	d	roro	Langesunds
Earl Godwin	1966	3999	d	roro	Oresundsvarvet
Antrim Princess	1967	3630	d	roro	Hawthorne Leslie
Sea Freighliner 1	1968	4034	d	cargo	Swan Hunter
Sea Freightliner 2	1968	4034	d	cargo	Swan Hunter
St George	1968	7356	d	roro	Swan Hunter
Coruisk	1969	60	d	roro	Ailsa
Cuthred	1969	704	d	roro	Richards
Vortigern	1969	4371	d	roro	Swan Hunter
Brian Boroime	1970	4098	d	cargo	Verolme
Rhodri Mawr	1970	4098	d	cargo	Verolme
Ailsa Princess	1971	3715	d	roro	Breda Cantieri
Anderida	1971	1601	d	roro	Trosvik Verkstad
Dalriada	1971	1600	d	roro	Brodrene
Ulidia	1971	1599	d	roro	Kristiansands
Hengist	1972	5590	d	roro	Arsenal de Brest
Horsa	1972	5590	d	roro	Arsenal de Brest
Caedmon	1973	764	d	roro	Robb Caledon
Cenred	1973	761	d	roro	Robb Caledon
Cenwulf	1973	761	d	roro	Robb Caledon
Earl Granville	1973	4477	d	roro	Meyer
Senlac	1973	5590	d	roro	Arsenal de Brest
Speedlink Vanguard	1973	2514	d	roro	Vuyk & Zonen
St Brendan	1974	5607	d	roro	Rickmers
St Edmund	1974	8987	d	roro	Cammell Laird
Darnia	1977	2807	d	roro	Osterricheische Schiffw
St Columba	1977	7836	d	roro	Aalborg
Galloway Princess	1980	6506	d	roro	Harland & Wolff
St Anslem	1980	7405	d	roro	Harland & Wolff
St Christopher	1980	7399	d	roro	Harland & Wolff

St David	1980	7196	d	roro	Harland & Wolff
St Nicholas	1982	17043	d	roro	Gotaverken
St Catherine	1983	2036	d	roro	Robb Leith
St Helen	1983	2036	d	roro	Robb Leith
St Cecilia	1987	2036	d	roro	Cochrane
St Faith	1990	2036	d	roro	Cochrane

BTC and BRB ASN Fleet (1954-1971)

SHIP	YEAR	GRT	ENGINES	TYPE	BUILDER
Empire Baltic	1945	4157	sr	LST	Canadian Vickers
Empire Cerdic	1945	4291	sr	LST	Yarrow Esquimalt
Empire Celtic	1945	4291	sr	LST	Davie Lauzon
Empire Doric	1945	4291	sr	LST	Harland & Wolff
Empire Cymric	1945	4291	sr	LST	Harland & Wolff
Empire Gaelic	1945	4291	sr	LST	Davie Lauzon
Empire Nordic	1945	4295	sr	LST	Blyth Dry Dock
Baltic Ferry	1943	1909	sr	LST	American Bridge Co
Celtic Ferry	1944	5556	sr	LST	Newport News
Bardic Ferry	1957	2550	d	roro	Denny
Ionic Ferry	1958	2548	d	roro	Denny
Cerdic Ferry	1961	2563	d	roro	Ailsa
Doric Ferry	1962	2573	d	roro	Ailsa
Gaelic Ferry	1963	3316	d	roro	Swan Hunter
Europic Ferry	1967	4190	d	roro	Swan Hunter

Year is year built and may not be the same as year of service entry
GRT is Gross registered tons and is a measurement of ship size
Engines sr steam reciprocating; st steam turbine; ps paddle steamer; d diesel
Type pass ship built mainly for the carriage of passengers; cargo ship built mainly for the carriage of cargo; train ship built to carry trains; roro ship built that vehicles can drive on and off; LST ex military large landing craft.

Sources
Duckworth and Langmuir, *Railway and other steamers*
D Haws, *Merchant Fleets Vols 24,25,26*
Clegg and Styring, *British Railway Shipping and Allied Fleets*
BTC *Register of Ships*

Appendix 2

Sources BTC and BRB annual reports 1948-1983

Income from BTC and BRB shipping services								
Year	passenger	parcels and mails	merchandise	livestock	Misc	Income	Costs	Profit
1948	£5,292,349.00	£1,215,803.00	£3,189,079.00	£114,656.00	£516,726.00	£10,328,613.00	£7,388,726.00	£2,939,887.00
1949	£5,694,408.00	£1,358,265.00	£3,406,002.00	£149,137.00	£456,826.00	£11,064,638.00	£7,951,467.00	£3,113,171.00
1950	£5,582,210.00	£1,367,054.00	£3,716,779.00	£167,668.00	£578,341.00	£11,412,052.00	£8,562,042.00	£2,850,010.00
1951	£5,688,164.00	£1,688,586.00	£4,308,536.00	£202,508.00	£685,052.00	£12,572,846.00	£9,695,813.00	£2,877,033.00
1952	£5,479,853.00	£1,731,905.00	£4,197,935.00	£211,939.00	£545,530.00	£12,167,162.00	£10,281,769.00	£1,885,393.00
1953	£5,475,427.00	£1,762,025.00	£4,148,900.00	£178,908.00	£658,548.00	£12,223,808.00	£11,273,082.00	£950,726.00
1954	£5,753,782.00	£1,956,577.00	£4,361,949.00	£277,272.00	£711,195.00	£13,060,775.00	£11,954,554.00	£1,106,221.00
1955	£6,207,945.00	£2,216,954.00	£4,862,900.00	£285,233.00	£774,190.00	£14,347,222.00	£12,333,600.00	£2,013,622.00
1956	£6,349,293.00	£2,474,780.00	£5,227,460.00	£379,128.00	£935,373.00	£15,366,034.00	£13,586,061.00	£1,779,973.00
1957	£6,888,753.00	£2,678,551.00	£5,568,236.00	£409,195.00	£1,074,741.00	£16,619,476.00	£14,729,771.00	£1,889,705.00
1958	£6,918,076.00	£2,766,947.00	£5,479,838.00	£357,573.00	£1,116,169.00	£16,638,603.00	£14,293,869.00	£2,344,734.00
1959	£7,477,873.00		£9,314,470.00		£1,490,953.00	£18,283,296.00	£14,401,496.00	£3,881,800.00
1960	£7,414,845.00		£10,188,329.00		£1,582,049.00	£19,185,223.00	£15,271,178.00	£3,914,045.00
1961	£7,896,214.00		£11,038,745.00		£1,649,399.00	£20,584,358.00	£16,709,915.00	£3,874,443.00
1962	£8,165,547.00		£11,831,007.00		£1,679,223.00	£21,675,777.00	£17,395,161.00	£4,280,616.00
1963	£8,266,000.00		£11,354,000.00	£733,000.00	£429,000.00	£20,782,000.00	£16,083,000.00	£4,699,000.00
1964	£8,272,000.00		£12,056,000.00	£761,000.00	£403,000.00	£21,492,000.00	£16,358,000.00	£5,134,000.00
1965	£8,485,000.00		£12,451,000.00	£666,000.00	£368,000.00	£21,970,000.00	£17,085,000.00	£4,885,000.00
1966	£7,894,000.00		£11,572,000.00	£701,000.00	£390,000.00	£20,557,000.00	£16,830,000.00	£3,727,000.00
1967	£8,725,000.00		£13,479,000.00	£817,000.00	£350,000.00	£23,371,000.00	£18,624,000.00	£4,747,000.00
1968	£9,620,000.00		£14,926,000.00	£800,000.00	£389,000.00	£25,735,000.00	£21,099,000.00	£4,636,000.00
1969	£9,718,000.00		£15,444,000.00		£1,731,000.00	£26,893,000.00	£22,382,000.00	£4,511,000.00
1970	£10,462,000.00		£16,680,000.00		£1,579,000.00	£28,721,000.00	£25,542,000.00	£3,179,000.00
1971	£11,335,000.00		£18,321,000.00		£1,732,000.00	£31,388,000.00	£29,428,000.00	£1,960,000.00
1972	£12,563,000.00		£19,431,000.00		£2,526,000.00	£34,520,000.00	£31,216,000.00	£3,304,000.00
1973	£14,697,000.00		£22,129,000.00		£1,935,000.00	£38,761,000.00	£36,201,000.00	£2,560,000.00
1974	£27,077,000.00		£18,878,000.00		£2,624,000.00	£48,579,000.00	£50,404,000.00	-£1,825,000.00
1975	£36,505,000.00		£24,118,000.00		£4,241,000.00	£64,864,000.00	£70,091,000.00	-£5,227,000.00
1976	£42,603,000.00		£29,643,000.00		£7,208,000.00	£79,454,000.00	£81,692,000.00	-£2,238,000.00
1977	£53,436,000.00		£40,774,000.00		£8,962,000.00	£103,172,000.00	£96,694,000.00	£6,478,000.00
1978	£63,970,000.00		£45,222,000.00		£14,466,000.00	£123,658,000.00	£114,565,000.00	£9,093,000.00
1979	£96,298,000.00		£56,992,000.00		£20,208,000.00	£173,498,000.00	£163,908,000.00	£9,590,000.00
1980	£108,316,000.00		£61,032,000.00		£26,845,000.00	£196,193,000.00	£193,671,000.00	£2,522,000.00
1981						£202,000,000.00		-£4,500,000.00
1982						£232,000,000.00		£2,900,000.00
1983						£264,800,000.00		£12,800,000.00

Appendix 3

Passenger number per year (millions)	
Year	Passengers
1948	
1949	
1950	16.13
1951	17.00
1952	16.89
1953	16.72
1954	17.10
1955	18.87
1956	18.69
1957	19.20
1958	
1959	
1960	
1961	
1962	19.00
1963	18.55
1964	17.82
1965	17.23
1966	16.38
1967	16.76
1968	17.02
1969	13.99
1970	13.62
1971	13.10
1972	15.20
1973	15.81
1974	16.06
1975	16.91
1976	16.50
1977	17.40
1978	18.30
1979	18.10
1980	18.40
1981	
1982	
1983	

source BTC and BRB annual reports

When looking at these figures note that in 1956 the Dart Ferry, Gravesend Ferry, Humber Ferry and Clyde passenger services accounted for over 50% of the passenger totals. By the end of the Sealink era only the Gravesend route remained and that was no longer carrying large numbers of passengers.

Appendix 4

Acts of Parliament relating to railway shipping services[275]

LMS Group

Furness Railway Act, 1845
Furness Railway Act, 1855
Furness Railway Act, 1862
Furness Railway (Steamboats) Act, 1872
Furness Railway (Steam Vessels) Act , 1902
Lancashire & Yorkshire and London & North Western Steam Vessels Act, 1870
Lancashire & Yorkshire and London & North Western Steam Vessels Act, 1892
Lancashire & Yorkshire Steam Vessels Act, 1892
Lancashire & Yorkshire Steam Vessels Act, 1902
Lancashire & Yorkshire and London & North Western Steam Vessels Act, 1903
Lancashire & Yorkshire Steam Vessels Act, 1904
London & North Western Railway (Steam Vessels) Act, 1898
Glasgow & South Western Railway (Steam Vessels) Act, 1891
Highland Railway Acts, 1893 & 1877
Midland Railway (Steam Vessels) Act, 1902
Portpatrick Railway (Steamboats) Act, 1864
Dumbarton & Balloch Joint Lines Act, 1892
London Tilbury & Southend Railways Acts, 1852; 1875; 1880; 1884; 1885; 1886
Thames Conservancy Act 1894
Gravesend Town Pier & Quay (Sale) Act, 1884
Port of London (Consolidation) Act , 1920

LNER Group

Great Eastern Railway (Steamboats) Act, 1863
Great Eastern Railway (Steamboats) Act, 1867
Great Eastern Railway (Steamboats) Act, 1904
Manchester Sheffield & Lincolnshire Railway (Steamboats) Act, 1864
Manchester Sheffield & Lincolnshire Railway (Steamboats) Act, 1889
North Eastern Railway (Steam Vessels) Act 1900
North Eastern Railway (Steam Vessels) Act 1905
Hull & Barnsley Railway (Steam Vessels) Act, 1905
North British Railway (Steamboats) Act, 1863
North British Railway (Steam Vessels) Act, 1902

GWR Group

Great Western Railway (Steam Vessels) Act, 1871
Great Western Railway (Steam Vessels) Act, 1909
Fishguard & Rosslare Railways & Harbours (Steam Vessels) Act, 1895
Fishguard & Rosslare Railways & Harbours Act, 1898

SR Group

London Brighton & South Coast Railway (Stations etc) Act, 1862 Section 30
London Brighton & South Coast Railway (Steamboats) Act, 1864 Section 2
London Brighton & South Coast Railway (Steam Vessels) Act, 1894 Section 2
London Brighton & South Coast Railway (Steam Vessels) Act, 1911 Section 4
London & South Western Railway Co's Amendment Act, 1848 Section 47
South Western Railway (General) Act, 1860 Section 54
Lymington Railway Act, 1859 section 22
South Western & Brighton Railway Companies' (Steam Vessels) Act, 1879 section 4
London Chatham & Dover (Metropolitan Extension) Act, 1860 section 142
London Chatham & Dover (Various Powers) Act, 1861 section 19
London Chatham & Dover Steam Boats Act, 1864 section 3
South Eastern Railway Amendment Act, 1861 section 3
Isle of Wight Railway (Steamers) Act, 1863
Brading Harbour & Railway Act, 1896

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Definitions

Ship names in capitals	NAME OF SHIP
Drive on	A ship that vehicles can drive onto but only from one end
Drive through	A ship that can be driven on at one end and off the other
ro-ro	Roll on roll off, a general term for ships that can be driven onto
Double ended	A ship that can operate equally well in either direction
Passenger	A ship primarily intended to carry foot passenger traffic
Cargo	A ship primarily intended to carry cargo
Excursion	A ship primarily intended to serve excursion passengers
Big Four	The four post grouping railway companies, GWR: SR; LMS & LNER

Abbreviations

British Railways Board	BRB
British Transport Commission	BTC
Civil Aviation Authority	CCA
Coras Iompair Eireann	CIE
European Ferries Ltd	EFL
Great Western Railway	GWR
Gross Registered Tons	GRT
International Organization for Standardization	ISO
London Midland & Scottish Railway	LMS
London & North Eastern Railway	LNER
London & North Western Railway	LNWR
London & South Western Ralway	LSWR
North British Railway	NBR
Regie voor Maritiem Transport	RMT
Société Nationale des Chemins de fer Français	SNCF
Southern Railway	SR
Stoomvaart Maatschappij Zeeland	SMZ

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AN83/8	Shipping services records and statistics 1957/58
AN83/9	Shipping services records and statistics 1958/59
AN83/10	Shipping services records and statistics 1959/60
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BR/2/10	BTC annual report 1957
BR/2/11	BTC annual report 1958
BR/2/12	BTC annual report 1959
BR/2/13	BTC annual report 1960
BR/2/14	BTC annual report 1961
BR/2/15	BTC annual report 1962
BR/2/16	BRB annual report 1963
BR/2/17	BRB annual report 1964
BR/2/18	BRB annual report 1965
BR/2/19	BRB annual report 1966
BR/2/20	BRB annual report 1967
BR/2/21	BRB annual report 1968
BR/2/22	BRB annual report 1969
BR/2/23	BRB annual report 1970
BR/2/24	BRB annual report 1971
BR/2/25	BRB annual report 1972
BR/2/26	BRB annual report 1973
BR/2/27	BRB annual report 1974
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