Annual Scottish Maritime History Conference

Riverside Museum, Glasgow
Wednesday 22 October 2014

Programme

10.30am Welcome
Prof. Ray Stokes, Director, Centre for Business History in Scotland, University of Glasgow

10.35 Session I Chair: Dr Martin Bellamy

Dr Roy Fenton, Ships in Focus Publications
Tramps: Ocean and coastal; what we know and what we don’t know

Dr David Jenkins, National Museums Wales
Master mariner, shipowner & philanthropist – remembering Sir William Reardon Smith

11.30 Coffee/Tea
12.00 Session II Chair: Professor Stig Tenold

Dr Martin Bellamy, Glasgow Museums
Sweet Victory: William Burrell and the case of the Strathdon sugar

Ian Winkle, Riverside Museum:
Capsize of SS Daphne, 3 July 1883: A technical reappraisal of the Incident and its Impact

13:00 Lunch

14:00 Session III Chair: Professor Ray Stokes

Professor Stig Tenold, Norwegian School of Economics, Bergen
The financing and ownership of the MV Gas Lion, the first gas tanker built on the Clyde

Dr Bruce Peter, Glasgow School of Art:
From Shipping to Logistics: how DFDS went Ashore

15.00 Coffee/Tea

15-30-16-30 Session IV Chair Professor Hugh Murphy

Professor Ian Buxton, University of Newcastle
Causes of Losses of British-built Ships, 1850-1969

Dr James Wilson, University of Glasgow
An Exploration of the Portsmouth Block Mill’s Management, circa 1805-1812
Paper Abstracts

Dr Roy Fenton
*Tramps: Ocean and coastal; what we know and what we don’t know*

This paper tests the author’s impression that the bulk-carrying sector of the shipping industry - largely made up of what is often disparagingly called ‘tramps’ - has been neglected compared with the liner trade. In terms of weight and volume of cargo carried, bulk-carrying is considerably more important than other sea-borne trade sectors, and has been hugely important in industrialisation of industry, mining and agriculture. As an agent of globalisation it is at least as important as containerisation, and long predates the latter in its impact. Yet the focus of most researchers and authors in the field of steam and motor shipping is largely on the liner trades, and particularly on the very specialist activity of passenger carrying.

The paper attempts to appraise what has been written about the origins and design of the bulk carrying ships themselves, their trades, operation, and crewing. By offering a necessarily brief overview of what is known and what is still unknown, the paper will indicate areas for constructive further study.

Dr David Jenkins
*Master mariner, shipowner & philanthropist – remembering Sir William Reardon Smith*

Cardiff’s foremost 20th-century shipowner, Sir William Reardon Smith, was a native of North Devon who made good in the booming coal trade of South Wales before the First World War. But he himself, and the company he founded, had strong Scottish connections – he served for years as a master with Hogarth’s, and after his death his company was intimately involved with Upper Clyde shipbuilders in the 1960s and 70s. He was also a noted philanthropist and is particularly remembered for his generous support of the National Museum of Wales.

Dr Martin Bellamy
*Sweet Victory: William Burrell and the case of the Strathdon sugar*

In 1894 William Burrell’s *Strathdon* caught fire whilst passing through the Suez Canal. The American owner of the cargo of sugar put in a claim for loss of cargo and the loss of market value due to the delay in delivery. This resulted in a major court case investigating the cause of the fire. A model produced as part of the defence is now in the collection of Glasgow Museums and sheds light on the way in which Burrell was able to win his case.

Ian Winkle, MRINA
*Capsize of SS Daphne, 3 July 1883: A technical reappraisal of the Incident and its Impact*

This paper describes a reanalysis of the loss of SS *Daphne* by capsize following its launch in 1883 from the Linthouse Yard of Alexander Stephens, which was commissioned by the curator of ships at the Riverside Museum in Glasgow shortly before the 130th anniversary of her loss. Having reviewed Sir Edward Reed’s official Inquiry Report it was noted particularly that the actual launch process was discounted from Reed’s analysis and conclusions at the time. I have reviewed this assumption in the light of the testimony given in the Inquiry Report as well as the letters written at the time to Francis Elgar by Alexander Stephen (GU Archives) himself providing additional technical details of the state of *Daphne* at the time of her launch. These give substantial evidence for a large quantity of relatively heavy loose items on board which taken together would have a greater capsizing effect than the large number of men and boys present at the time which Reed considered the primary cause of the capsize. I have been able to show that the capsize was the result of at least four contributory factors on top of the relatively low stability level present at the time. These included: an initial offset centre of gravity due to loading other
than the result of the 195 individuals on board; a large initial capsizing moment generated by the
design of the drag and anchor system described; the movement of loose weights on the vessel
and the movement of 195 personnel and their effects.

Individually, none of these would have caused the capsize. However, the impact of this
disaster had a profound effect on the industry through the introduction of systematic stability
calculations on all commercial vessels made much more quickly and easily by the simultaneous
and universal introduction of the Amsler-Laffon Mechanical Integrator, which remained in use for
this purpose worldwide until the introduction of modern digital computing in the 1970s. At the
same time this incident provided the final stimulus to fund the world's first university chair of Naval
Architecture by John Elder's widow, Isabella, at the University of Glasgow – the first and third
holders of that chair being Francis Elgar and John H Biles respectively, the two major participants
in the Daphne Inquiry under Sir Edward Reed.

Professor Stig Tenold

The financing and ownership of the MV Gas Lion, the first gas tanker built on the Clyde

The paper focusses on the MV Gas Lion, the first gas tanker built on the Clyde, with a special
emphasis on financing and ownership. The vessel was delivered to the Bergen company Kristian
Gerhard Jebsen Skipsrederi (KGJS), as the company's first ship, from Scott Lithgow in August
1968. Although KGJS was managing owner, the company was a minor investor in the ship,
providing only eight per cent of the equity. The MV Gas Lion is a good example of the often
confusing ownership arrangements in Norwegian shipping at the time, and a closer look at the
subsequent fate of the various investors serves as a microcosm of Norwegian shipping during the
crisis of the 1970s and 1980s. The paper also traces the history of the MV Gas Lion, which was
only a limited commercial success for KGJS and the other owners. Still, it was the first step for
what four decades later had managed to become one of Norway's largest shipping companies.

Dr Bruce Peter

From shipping to logistics: how DFDS went ashore

Professors M. Wendelboe-Hansen, M. Greve and H. Schaumburg-Müller of Copenhagen
Business School have recently observed that 'the theoretical and empirical literature on the role
of transport in economic development is surprisingly weak. In general, transport is acknowledged
to play an important role as a facilitator of economic development; however the role of transport
remains ambiguous and subject to shallow interpretation.' The history of ro-ro shipping is
particularly poorly documented by maritime and business historians, yet it is presently the main
method of transporting food and many other commodities overseas.

Since the mid-nineteenth century, DFDS has made a very substantial contribution to the
economy and culture of Denmark, Britain and Northern Europe. Throughout its history, it has
carried Danish agricultural exports to the UK plus general cargo. During the 1960s, DFDS
became a pioneer of roll-on, roll-off shipping methods, bringing far greater efficiency to short-sea
shipping and, in the early-1970s, it was among the first shipping companies to develop shore-
based logistics operations with large fleets of trucks and associated infrastructure. This paper
considers DFDS’ shift from break-bulk shipping to ro-ro methods since the 1960s and the
development of its successful ‘door-to-door’ integrated transport model.

From a UK perspective, DFDS shipped ingredients of the modern British diet – Danish
bacon and Lurpak butter (both products of the co-operative farming movement in Denmark) plus
large quantities of Carlsberg lager. From the latter-nineteenth century until the 1960s, these
commodities were transported on small cargo steamers and motor ships, some of which had
refrigerated holds, from Copenhagen and Esbjerg to the Pool of London, Grimsby, Newcastle and
Leith.

In the mid-1960s, DFDS’ North Sea Freight Director, Helge Jensen, established a
‘Transport Rationalisation Department’ to revolutionise the company's approach to shipping. This
not only involved building ro-ro freight ferries and port infrastructure, but also re-training
stevedores to drive tug-masters (to pull Mafi trailers) and re-educating customers in Denmark, the UK and elsewhere about how to work with ro-ro shipping. The new ro-ro ships operated from Esbjerg to a new facility at Grimsby, from which goods were forwarded by truck to new distribution centres on post-industrial land, rather than being shipped directly to centres of population.

Next, DFDS used its long-term contracts to ship Danish agricultural exports as a means of developing its own fleets of trucks in the UK and Scandinavia – something its North Sea rivals had not dare risk due to the danger of being ‘blacklisted’ by existing freight forwarders. By the latter-1970s, DFDS Transport was established – at that time, it was a rare (but not unique) instance of a shipping company successfully moving ‘ashore.’ Riding the 1980s consumer boom, DFDS Transport grew substantially and, though take-overs and natural growth, it became one of Northern Europe’s biggest logistics companies.

In the mid-1990s, DFDS commissioned a new, very large port facility at Immingham (known as the Nordic Terminal) while similar new facilities were developed at Gothenburg (Skandiahamnen) and Rotterdam (Maasvlakte). Hidden behind security fences; these out-of-town ‘flatscapes’ are an important but hidden aspect of our contemporary consumer society, and of the European single market with its internationally distributed value chains.

Professor Ian Buxton
*Causes of Losses of British-built Ships, 1850-1969*

The British Shipbuilding Database has records of 80,000 British-built or engined ships built from the mid-19th century to date. Amongst its 100 plus fields of name, tonnage, build dates, shipbuilder, type, machinery etc are fields for the cause and year of loss. While loss data is not available for every ship, there are some 30,000 available for analysis. It is thus possible to generate tables and graphs showing the primary cause of loss, broken down by type, such as foundered, wrecked, fire, collision, war loss, broken up etc. These can be grouped by decade of year of build or year of loss, separating out the more vulnerable sailing vessels.

Dr James Wilson
*An Exploration of the Portsmouth Block Mill’s Management, circa 1805-1812*

The Portsmouth Block Mill was built in 1803 to produce pulleys for the Royal Navy. It was the first steam-powered mass production facility in the world implemented as part of Samuel Bentham’s reforms, with machinery designed by Marc Isambard Brunel and built by Henry Maudsley. The Mill is one of the best known early industrial concerns. The facility’s buildings in Portsmouth Historic Dockyard and machinery in the Science Museum are very popular displays, but virtually nothing is known about how the Mills were managed and used. Past research describes the Mill as a “production line” with analyses of its capacity and throughput. Archival materials show staff numbers, hours and work assignments providing insight into scheduling and workload management, capacity availability and use, and overall facility organization and design. A review of production records reveals items made specifically to meet individual production requirements and those made for “stock” and later use. The Mill was used in a modern “lean” production fashion and met demand as it occurred, rather than produce continually to maximize productivity, as implied by earlier analyses.