Annual Scottish Maritime History Conference

Mitchell Library, Glasgow
Wednesday 12 October 2016

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 Paul Maloney & Professor Adrienne Scullion, Queen’s University Belfast
‘It’s a Joy, Ahoy! Sailing Doon the Clyde’: the Firth of Clyde and the maritime experience in Scottish popular performance

Fiona Carmichael, Scottish Maritime Museum
SMMart: Enriching the imagery of Scotland’s maritime heritage

11.30 Coffee/Tea

12.00 Session II Chair: Professor Anthony Slaven

Dr Stephen Sambrook, University of Glasgow
From Anniesland To Jutland – Barr & Stroud, Optical Munitions And The Royal Navy

Dr Cris Mallagh
Restructuring Knowledge: The shift from the Shipwrights’ World to the Modern Era with Special Attention to Scotland
13:00 Lunch

14:00 Session III Chair: Professor Ray Stokes

Richard Blake
*From Aberdeen To Abolition And Beyond: James Ramsay and the ethical education of the Sea Service*

Professor Michael Moss, Northumbria University
*Scotland’s cotton piece goods trade with India in the Nineteenth-century*

15.00 Coffee/Tea

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

Dr Roy Fenton, Ships in Focus Publications
*Did Steam make Shipping safer? Evidence from the coastal trade in the Irish Sea*

Dr Bruce Peter, Glasgow School of Art
*Innovation and Specialisation: The story of Finnish shipbuilding*

Attendance is free but booking is essential. To book a place please contact Christine Leslie: christine.leslie@glasgow.ac.uk

_The conference is held in conjunction with Glasgow Museums, the Centre for Business History in Scotland, University of Glasgow, the Society for Nautical Research, and the Maritime Information Association_
Conference Abstracts

Session 1

Dr Paul Maloney & Professor Adrienne Scullion, ‘It’s a Joy, Ahoy! Sailing Doon the Clyde’: the Firth of Clyde and the maritime experience in Scottish popular performance

Abstract: This paper explores how, in the late nineteenth- and early twentieth-centuries, the popular phenomenon of mass seagoing, in the form of much anticipated annual trips on steamers ‘doon the watter’ from Glasgow to seaside resorts like Helensburgh, Rothesay and Dunoon, was celebrated in popular performance and especially in the fantasy world of Scottish pantomimes. Taking the long-running series of pantomimes at Glasgow’s Princess’s Theatre (1890s to 1940s) as the core texts, we explore how the urban working-classes’ relationship to the Firth of Clyde, its towns, topography and the very experience of sailing down the river to a holiday destination, were framed as sites of wonder and idealised fantasy in the popular imagination of the urban working classes via these productions’ scenic and pictorial effects and in their popular songs. An idealised experience of going ‘doon the watter’ reflected the audiences’ own experiences back to them and created a key trope in the representation of the Scottish maritime experience. Exploring how pantomimes mixed everyday reality with fantasy, weaving the familiar journey down the Clyde into the imaginative fabric of the pantomime story – which often involved setting off to find a missing diamond or rescue a princess in danger – our paper uses scripts, song lyrics and audio recordings to show how pantomimes helped to cement the place of these locations as sites of wonder and idealised fantasy in the popular imagination of urban working class audiences.

Biographical details: Dr Paul Maloney is a Research Fellow at the Faculty of Arts, Humanities and Social Sciences, Queen’s University Belfast. Professor Adrienne Scullion is Faculty Pro-Chancellor, Arts, Humanities and Social Sciences, Queen’s University Belfast.

Fiona Carmichael, SMMart: Enriching the imagery of Scotland’s maritime heritage

Abstract: In 2015, the Scottish Maritime Museum was awarded a Heritage Lottery Fund Collecting Cultures grant of £412,000 to help the Museum research and acquire maritime inspired works of art to enhance the current Collection, which is predominantly focused on machinery and engineering. The acquisition of these artworks is allowing the Museum to provide wider interpretation of this important Scottish industry and increasing opportunities to engage with visitors in interesting ways. The SMMart project focuses on the acquisition of art that will be used to better interpret, link and promote our existing collection, which celebrates and remembers Scotland’s maritime culture. This project is providing the Scottish Maritime Museum with an opportunity to address an identified gap in our Collection, which was previously heavily weighted towards engineering and machinery. The SMMart project is enabling the Scottish Maritime Museum to realise its vision of promoting our unique cultural identity whilst reaffirming its role as a leading industrial Museum.

Biographical details: Fiona Carmichael, Curator of Art at the Scottish Maritime Museum has been appointed to identify and acquire these works of art through various means including auctions, private galleries and purchases directly from artists and their estates.

Session 2

Dr Stephen Sambrook, University of Glasgow From Anniesland To Jutland – Barr & Stroud, Optical Munitions And The Royal Navy

Abstract: The importance of Glasgow and the Clyde as a locus for warship building and heavy armaments production in the early twentieth century is well known and extensively documented. What is less well known is that the city was home to a crucially important part of the UK’s optical munitions industry: the design and manufacture of the the most important item of naval instrumentation for gunnery – the rangefinder. Accurate distance measuring was, by the mid-1890s, being recognised as fundamental to successful gunnery and subsequently one Glasgow company, Barr & Stroud, established and then commanded not only a complete monopoly of the design and manufacture of rangefinders for the British Admiralty but also a dominant international position in their sale to the majority of foreign naval powers. This paper explains how two academics, Professors Archibald Barr and William Stroud, achieved the unlikely feat of establishing the world’s first – and eventually largest – specialised optical munitions manufactory in a region devoid of any tradition of sophisticated optical instrument making. It recounts how they overcame local barriers to success and how their company formed an increasingly symbiotic, and even manipulative, relationship with the Royal Navy that was
substantially skewed in the company’s favour. The presentation explores the Navy’s rationale, or its lack, in linking progress in naval ordnance to the development of more efficient rangefinders and its sustained willingness to support Barr & Stroud in favour of competitors who were developing potentially superior instruments that might have significantly enhanced the Royal Navy’s offensive capabilities by the start of the Great War. As this is the centenary year of the Battle of Jutland, it seems appropriate for the paper to pose the question of whether Barr & Stroud’s monopoly and the service’s endorsement of it may have contributed to alleged deficiencies in at least some of the Royal Navy’s gunnery during the fighting on 31 May 1916.

**Biographical details:** Stephen Sambrook is an Honorary Researcher based at the University of Glasgow’s Centre for Business History in Scotland. He is the author of *The Optical Munitions Industry in Great Britain, 1888-1923*, Routledge, London: 2016. Current research interests include the history of the optical glass industry in Great Britain and the USA as well as the interaction of the British state and its armed forces with the optical industries up to the close of the Second World War.

Dr Cris Mallagh, *Restructuring Knowledge: The shift from the Shipwrights’ World to the Modern Era with Special Attention to Scotland*

**Abstract:** Opacity in shipwrights’ knowledge systems leads to under estimation of the richness of the geometric techniques employed. Nineteenth century developments too easily are treated from a southern metro centric standpoint misreading the degree to which knowledge development now was driven by northern commercial shipbuilding. The new ship forms led to a shift from geometry to calculation. Steam for wind recalibrated the design problem by separating the variables of motive power and hull form. Iron and later steel for wood stimulated cross industry connections, knowledge sharing and industrialisation. The earliest suggested rules for classification of iron ships came out of Glasgow. Scotland played a major role in the introduction of modern mild steel for ships and boiler plate. A precocious Naval Architect on the Clyde is found in Peter Hedderwick and his treatise. Foundation of the Institution of Naval Architects was preceded by the Institution of Civil Engineers of Scotland, amalgamating later with the Scottish Association of Shipbuilders. These clearing-houses for knowledge replaced person to person shipwright communication with regular meetings for diffusion of local experience and more distant input. The drawing office provided a career route for emerging Naval Architects on the basis of the calculations now necessary. Denny’s were the first commercial firm to follow. Froude’s tank testing established effective rules for scaling up results. Froude in his beautiful account of streamlines was indebted to Rankine. The shift from the shipwright system to the modern meant not so much the advent of a new type of knowledge, rather equivalent or analogous interacting functions emerged as developing nodes in an entirely new knowledge system with formalised and symbolic connections replacing earlier person to person interaction.

**Biographical details:** Cris Mallagh qualified as an engineer in 1961. He later gained a PhD in the History of Science and Technology during the Renaissance, at the University of Leeds. He was a Research Fellow at Leeds from 1985–1988 on a project exploring the social background to the development of engineering reliability. He publishes on the history of technology and the nature of technological knowledge.

**Session 3**

Richard Blake, *From Aberdeen To Abolition And Beyond: James Ramsay and the ethical education of the Sea Service*

**Abstract:** In James Ramsay the Scottish Enlightenment interacted with West Indian slavery and the education of the navy’s officer corps. His role as a pioneer Abolitionist is recognised but his contribution to naval education and the training of young officers’ minds has suffered neglect, chiefly because his seminal treatise *An Essay on the Duty and Qualifications of a Sea Officer* published 1765 and revised 1780 was for many decades lost to view – wrongly catalogued in the Bodleian. The Navy Records Society is to publish an edited version next year in *The Naval Miscellany VIII*, allowing modern readers to appreciate the scope and originality of this remarkable work. The Essay reflects the qualities of mind Ramsay had gained through the MA degree at Aberdeen (graduated 1753) and the further intellectual honing he had experienced under the tutelage of Thomas Reid an eminent Scots mathematician and philosopher. The result is an extraordinary book on the principles of humane authority with perceptive comments on the life-long learning that an officer would need. He comments freely on ways in which the combat effectiveness of the fleet could be enhanced, with sharp observations on tactics, preparedness, gunnery training, care of gunpowder, precautions
against fire and above all on improving fleet control through a developed ‘language’ of signalling. Nor did he neglect the ethical and spiritual dimension. An officer trained in Ramsay’s style would view his calling as morally demanding. He himself was associated with some of the earliest moves against both the Atlantic slave trade and plantation slavery. He contributed to Blane’s programme of medical reforms, to the religious and medical provision for the First Fleet to Botany Bay, and to Admiral Sir Charles Middleton’s work to revise the entire Navy Board regulations which eventually led to the magisterial 1806 Regulations and Instructions for HM Service at Sea, the navy’s ruling document for the next 70 years and more. Ramsay’s influence over Middleton was profound, and these two Scotsmen collaborated to reform the navy’s ethos. It represents an astonishing achievement — and it is high time to recognise its worth.

**Biographical details:** Richard Blake is the author of *Evangelicals in the Royal Navy, 1775-1815* (Boydell, 2008) and *Religion in the British Navy, 1815–1879* (Boydell, 2014). He has also edited Ramsay’s *Essay on ..a Sea Officer* for the Navy Records Society Naval Miscellany VIII, due for publication in 2017.

**Professor Michael Moss,** Scotland’s cotton piece goods trade with India in the Nineteenth-century

**Abstract:** It is widely acknowledged that the cotton piece goods trade with India was fundamental to Scotland’s industrial prowess in the nineteenth century, but very little has been written about it because few company records survive. There is little knowledge of the profile of the trade and the balance between different products. It is possible, however, to calculate volumes from the customs records and to unravel a broad outline of the trade during the Nineteenth-century. This paper is work in progress, and a contribution to the British Academy. Second Cities in the Circuits of Empire: Calcutta, Glasgow and the Nineteenth-century Legacy of the Scottish Enlightenment.

**Biographical details:** Professor Michael Moss is a prolific author on shipbuilding and business history.

**Session 4**

**Dr Roy Fenton,** Did Steam make Shipping safer? Evidence from the coastal trade in the Irish Sea

**Abstract:** The transition from sail to steam, which in cargo-carrying took place in the last half of the nineteenth century, made shipping more efficient, more reliable and ultimately cheaper. Essentially, it laid one of the major foundations of globalisation, i.e. cheap transportation of commodities. But the question arises, did the transition to steam make shipping safer? This would have important implications, not least on those who chose seafaring for a living, but also on owners of ships, those who assigned them cargoes, plus insurers and financiers. At first glance it would appear that steamers, independent of wind and tide, should be less prone to marine accidents than sailing ships. Certainly casualty statistics suggest that accidents involving loss of ships fell over the period during which steam replaced sail. However, other factors may be involved, such as a considerably diminished number of ships, or improvements in communication, navigation and training. This paper will examine evidence from the British coastal trade, and will compare the rate of serious accidents amongst a cohort of mainly wooden sailing ships based on Irish Sea ports and in a cohort of the iron or steel steam ships which replaced sail in coastal trades. Confining the study to the coastal trade eliminates several variables, in that the officers of ships in such trades rarely if ever had formal certification, whilst coastal navigation in the steam age still demanded an intimate knowledge of coastal geography. The implications of the findings will be discussed.

**Biographical details:** Dr Roy Fenton is editor of Ships in Focus Publications, and Treasurer of the British Commission for Maritime History. He is a prolific author on shipping

**Dr Bruce Peter,** Innovation and Specialisation: The story of Finnish shipbuilding

This presentation relates to current research by Kalle Id and Bruce Peter for a book about ship design and shipbuilding in Finland since the Second World War. This will account for how the country became a major builder of innovative ships and icebreakers in a period where shipyards in several other European nations fell into decline. As part of Finland post-war settlement with the Soviet Union, it was necessary to commence a large-scale reparations programme, with new ships of various types forming a key part of the Soviet Union’s demands. As independence was at stake, the Finns made a great national effort to fulfil the requirements and, in so doing, ended up with greatly expanded shipbuilding
capacity. The Soviet Union, impressed by Finland’s economic drive, thereafter placed further orders as part of their five-year plans, ensuring Finnish shipyards continuity of employment and protecting them from the vagaries of the Western economic cycle. The subsequent specialisms in the design of sophisticated icebreakers, icebreaking ro-ro ferries and large cruise ships to place from the mid-1960s onward. With relatively good labour relations and a shortage of employees, Finnish shipbuilders invested in infrastructure to enable efficiency savings and also in design and technical development, meaning that by the 1980s, they were among the best in the western world in terms of competencies and equipment.

**Biographical details:** Dr Bruce Peter is a prolific author on ship design and on the business history of Nordic shipping companies, including DFDS.