LIVERPOOL NAUTICAL RESEARCH SOCIETY

1938…

by Alan McClelland

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During the year in which the Liverpool Nautical Research Society was founded, the British shipping industry demonstrated significant evidence of its emergence from the long slump which had afflicted it between 1930 and 1935. However uncertainties remained, including the increasing threat of war and misgivings, particularly in the tramp sector, that an improvement in trade in 1936-37 might not be sustained. Reports, such as that into the state of deep sea tramp shipping from the Chamber of Shipping of the UK in 1938, expressed concern at the decline of British Shipping since the First World War. Amongst the contributory causes to that situation was the lack of sustained, active encouragement on the part of successive governments, compounded by failure to realise the extent to which the free trade in shipping activities was endangered by the growth of economic nationalism. Matters were made worse by the conservative attitudes adopted by some shipping companies, though this judgement needs careful qualification which it has not always received.

In 1938 Merseyside and especially the Port of Liverpool remained one of the world's most important maritime centres. Well known shipping companies and financial institutions such as Martins Bank and the Royal Insurance Company had their headquarters or very substantial presences in the city. Liverpool shipowners continued to exercise much influence on developments in technology and trade, particularly in the liner sector. Across the Mersey the Cammell Laird yard launched a wide selection of vessels for commercial and naval service, some with advanced features. Of its merchant ship output the second **Mauretania** laid down for the Cunard White Star Line in 1937 and launched in July 1938 inevitably had the greatest impact on the general public. At the time of her completion she was the largest merchant vessel to have been built in England, as opposed to Scotland and Northern Ireland. Details of her construction and fitting out were widely publicised at the time, and are readily accessible in contemporary technical journals and the lay press.

Lairds produced other significant merchant ships in 1938, including the **City of Edinburgh** for Ellerman Lines, propelled by single reduction geared turbines and exhibiting a fairly complicated yet functional silhouette. In the same year John Holt & Company of Liverpool took delivery from the yard of the **John Holt** and **Jonathan Holt** for their own West African trade. These steamers were given oil-fired triple expansion engines with Bauer Wach exhaust turbines. The first British-built machinery of this particular type had been installed aboard the Booth Steamship Company's **Boniface** of Liverpoool, completed ten years earlier by R. & W. Hawthorn Leslie & Company. The Holt

ships were finished to very high standards, and were elegant in appearance, featuring raked stems and elliptical sterns. [Under the command of Captain Fuller the **John Holt** took on board over 1,000 survivors from the stricken Cunard White Star liner **Lancastria** off St. Nazaire in June 1940. Many of the men were severely wounded and Captain Fuller decided to make for England alone by the most direct route, through minefields - reaching his destination safely.]

In November 1938 the motor ship **Seaforth** was launched by the Caledon Shipbuilding & Engineering Company for Liverpool's Elder Dempster Line. Like the Holt sister ships, the **Seaforth** was designed for services to and from West Africa. As one of the numerous Kylsant group of companies, the Elder Dempster Line was amongst the first to take advantage of oil engine developments. By 1938 it was under the control of Alfred Holt & Company, and the use of oil engines was continued. Given the shallow waters off the West African coast and its numerous creeks, considerable commercial benefits were derived from the increased cargo capacities on light draughts conveyed by the employment of motor ships. John Holt & Company operating a small fleet in the same waters felt they could not risk breakdowns which were more frequent with oil engines than well-tried steam machinery. They sought to increase both efficiency and fuel economy by the addition of the exhaust turbines in their new ships.

A much larger Liverpool liner concern which continued to make use of steam reciprocating engines was that managed by Thos. & Jas. Harrison & Company. There were sound economic reasons for their policy in the inter-war era, the principal of these being their access to supplies of good quality local Haydock, South Yorkshire and Brymbo coal on favourable long term contract terms, and the fact that their ships' boiler furnaces were specially designed to burn a variety of grades of coal, including the cheapest Indian fuel. In August 1938 Harrisons took delivery of the **Scientist** from Lithgows Ltd., fitted with a triple expansion engine and a Bauer Wach exhaust turbine. Designed to operate at up to 14½ knots, at least one, if not more of the **Scientist's** powerful looking sister ships achieved 17 knots on trials, taking super-heated steam from coal-fired double-ended Scotch boilers.

The Brocklebank Line was a local enterprise which consistently devoted attention to technological developments. It experimented unsuccessfully with oil engine propulsion in the 1920s and also collaborated with the Cammell Laird shipyard in the production of the first all-welded ship, the coaster **Fullagar**. Responding to changes in trading conditions in the early 1930s it reduced the capacities of four ships built in 1920-21 after tank tests, having them shortened by Smith's Dock Company. In 1935 Brocklebanks responded to signs of improvement in world trade by assessing the effects of increased foreign competition and the latest developments in ship design and propulsion. This acitivity led to an order for Wm. Hamilton & Company to deliver the

single reduction geared turbine steamer **Malancha** in 1937, to be followed by the **Macharda** and **Malabar** the following year. The **Malancha** featured in a post war exhibition to illustrate the Brocklebank approach to ship development. She was some 6 per cent faster and used 12 per cent less fuel than the line's pioneer turbine propelled **Mahanda** of 1914, under the same operating conditions. That the **Malancha** was delayed for just two hours at sea during six years of arduous war service highlights the dependability of her machinery and the skill of those who ran it.

Two Liverpool cargo liners of most unusual appearance which appeared in 1938 were the motor ships **Devis** and **Delane** of the Lamport & Holt Line. The lead ship of their class, the **Delius** of 1937, was widely held to be one of the most notable vessels of that year built in Britain or any other country. The designer of these ships set out to make the several elements of the midships superstucture, together with the funnel, appear as one piece of architecture. The funnel proper was located at the after end of the erection, with a bridge wing emerging on each side from the forward part. Views continue to differ as to the aesthetic merits of the "D boats", but all parts of their appearance were considered in relation to that of the whole and they stimulated much favourable publicity for their owner - this in spite of criticism of the decision to equip such high class units with steam auxiliary machinery.

Two Liverpool companies commissioned steamers for deep sea tramping in the year before the Liverpool Nautical Research Society came into existence. There were the Lancashire Shipping Company (James Chambers & Company) and the Chas. G. Dunn Shipping Company. The general cargo cross trades, and in particular a round the world service for which James Chambers & Company had catered with motor ships, were very badly affected by the slump of the early 1930s. In the light of this experience the firm decided to take advantage of government assistance under stringent conditions to order the **Lowther Castle** and the **Lancaster Castle** from Sir James Laing & Sons, Ltd. Their triple expansion engines were fitted with the N.E. Marine Engineering Company's reheater system, which it was claimed would confer significant economies in fuel consumption. The **Lowther Castle** was the first ship to be so equipped. Chas. G. Dunn & Company received the **Haughton Hall** from the Laing yard in 1937, and she was followed by the **Charlton Hall** in 1940. Many British tramp shipowners failed to adapt to changes in trading conditions in the inter-war years, and in particular to the decline in the export of coal from this country and the growth in the trade of oil of one sort or another. [In 1914 the United Kingdom owned more than half of the world's tankers; by 1938 the proportion had fallen to one quarter]. One Liverpool firm which had embarked on tanker ownership as far back as 1889 was H.E. Moss & Company, and in 1938 they added the **Lucellum** from the Odense Steel Shipyard to their fleet. No companies sought to enter the fast reefer tramp market exploited by the Scandinavians.

Coastal shipping based in Liverpool displayed chalk and cheese characteristics. On the one hand the Coast Lines Group was well advanced in the replacement of steam tonnage with motor ships on all its regular services. On the other, local companies in the tramp sector displayed great conservatism in the face of admittedly difficult trading conditions (by the end of July 1938, 43 per cent of British coasting tramps were laid up and there was much complaint about the high cost of coal bunkers). In 1938 the advanced motor vessel **Munster** was delivered to the Coast Lines subsidiary British & Irish Steam Packet Company from Harland & Wolff, to join her sister ship **Leinster** on the Liverpool - Dublin overnight passenger service. These two ships were somewhat larger refinements of a concept for Irish Sea routes which first appeared in the form of the **Ulster Monarch** of 1929. They were sometimes described as cross-channel liners because of the quality of their first-class accommodation. Also completed in 1938 was the tramp **Rowanfield** for the Zillah Shipping & Carrying Company. A product of the Lytham Shipbuilding & Engineering Company, she was a steamer, and this at a time when the motor coaster with its light draught had so far demonstrated versatility, fuel economy and reliability that owners in other British ports were placing numerous orders in both British and Dutch shipyards in expectation of an upturn in business. For example in October 1938 Koster's Gideon yard at Groningen had in hand orders for 14 motor coasters for British accounts, and since 1934 the Goole Shipbuilding & Engineering Company had been further improving its 'Proficient' designs, as well as completing other motor vessels to owners' specific requirements.

Difficulties existed for British merchant shipping in 1938, and the recent slump had encouraged tendencies towards both caution and conservatism. The threat of war, shortages of skilled personnel, especially engineers (attributed at least in part to the demands of industries involved in re-armament), and the intensity of foreign competition (some of it government controlled) made decision-making difficult. Attitudes of those in government in this country were not always helpful, and were not infrequently tinged with suspicion of the motivation of shipowners. The strength of the coal lobby in some measure inhibited progressive thinking in matters of propulsion, though it was clear by 1930 that steamers, even when converted to oil burning, had difficulty in competing with motor ships in several of the long distance liner and tramp trades. However, in view of the losses to be sustained during the forthcoming Battle of the Atlantic it was as well that Britain had to hand up to date designs for relatively straightforward steamers which, after modification, readily lent themselves to mass production. ■

M.Beenstock & A.Vergottis, *Economic Modelling of World Shipping*, (1993).
C.B.A. Behrens, *Merchant Shipping & the Demands of War* (London 1955).
D.C.E. Burrell, *Scrap & Build* (W.S.S., 1983).
D.C.E. Burrell, The Nitrate Boats (W.S.S., 1995).
J.E. Cowden & J.O.C. Duffy, *The Elder Dempster Fleet History* (Mallett & Bell, 1986).
Chamber of Shipping of the UK, *Shipping Policy ... Deep Sea Tramp Fact- Finding Committee Report*, (London, 1938).
M. Davies, *Belief in the Sea* (London, 1992).
P.N. Davies, *The Trade Makers* (London, 1973).
A.C. Hardy, *Motorshipping in 1930* (Journal of Commerce, 1930).
A.C. Hardy, *History of Motorshipping* (London, 1955).
Journal of Commerce Annual Reviews - 1938 & 1939.
F.E. Hyde (contribution by J.R. Harris) *Shipping Enterprise and Management*, (Liverpool, 1967).
The Journal of Economic History.
The Journal of Transport History.
A.S. Mallett & A.M.B. Bell, *The Pirrie Kylsant Motorships*, (Mallett & Bell, 1984).
The Motor Ship Reference Book, (London, 1939).
Shipbuilding & Shipping Record.
Shipping World.
S.G. Sturney, *British Shipping and World Competition* (London, 1962).
Trans. I.N.A.
Trans. N.E.C.I.
C.V. Waime & R.S. Fenton, *Steam Coasters and Short Sea Traders*, (Wolverhampton, 1994).

The Lamport & Holt Line motorship **Debrett** of 1940 was a continuation of the **Devis** and **Delane** class of 1938