World Ship Society
Southend Branch

News and Views

Newsletter Edition 26

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Thanks also go to, Tony, Colin, Stuart, Eddie, Phil and Geoff for their contributions

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Kent Refinery

Shipbuilding – Part 4 Swan Hunter Wallsend 1945-59

Short History of a Line British and BP Tankers

Notes

Ray Palmer

It is with regret that we announce the death of Ray Palmer, past Chairman of the Branch who passed away at his nursing home
Ray had caught Covid a couple of weeks ago which made him very poorly and was rushed immediately into hospital. Unfortunately, he was so poorly that they could not do anything for him so was sent back to his nursing home.
Ray would have been 97 next month, and he was already thinking about his 100th birthday and holding a big party.
We are not sure when Ray joined the World Ship Society but I know it was over 50 years ago.

We will make a donation in his memory to a Local Charity.

One year on

Well, this is our 26th Edition which means that we have been going a year –a sad commemoration but in a way, we have survived probably against expectations. We thank you all for your support and intend to continue in whatever form we can

Colin Paynter

Has stayed out of hospital with his mobility improving only slowly his interest in shipping continues unabated

News

Southwold - What a difference -only one or two!

Kastelorizo Built 2019 62508 GRT

Eva Usuki Built 2020 11773 GRT

Mystic Cruises refits newly acquired ship Vasco da Gama

Mystic Cruises is refitting its cruise ship Vasco de Gama at Lisnave Shipyard in Setúbal, Portugal, after acquiring the vessel at auction in November 2021.

Vasco da Gama will receive five selective catalytic reduction systems to bring her emissions below the International Maritime Organization's Tier III standards, in a project led by marine engineering consultancy TecnoVeritas. The vessel will also receive a new sewage plant, while its interiors will be redesigned.

Freeport at Tilbury, London Gateway and Ford

International port operator DP World and Forth Ports has won a bid to create a Thames Freeport with London Gateway, with the Thurrock-based Port of Tilbury and Ford's Dagenham engine plant at its heart.

Announcing a number freeports across the country, Mr Sunak said the special economic zones with different rules would "make it easier and cheaper to do business" laying the ground for an economic boom in the region.

The joint bid by DP World and Forth Ports in partnership with Ford and Thames Enterprise Park will see a Thames Freeport, with Thurrock at its heart, attract billions in private sector investment over the next 25 years.

The freeport policy's special economic measures will turbocharge the best of the private sector, attracting value add manufacturing activity to the ports, the Thames Estuary and the wider South East, alongside supporting key infrastructure projects in the coming years. The Thames Freeport will be that catalyst to level up the left behind communities along the estuary."

Steel-cutting ceremony held for P&O Cruises' Arvia

The first steel for P&O Cruises' second Excel-class ship, Arvia, has been cut in a ceremony at the Meyer Werft shipyard in Papenburg, Germany.

"The steel cutting marks an extraordinary milestone for the future of P&O Cruises," said Paul Ludlow, president of P&O Cruises. "Whilst Arvia may have a different look and feel to Iona, being built to sail in the sun, the inherent DNA is the same. It is one which exemplifies design excellence, forward-thinking power generation and future-focused experiences. I would like to thank the entire team at Meyer Werft for their partnership and dedication as we begin the build of another spectacular ship."

The Latin name Arvia, meaning 'from the seashore', will join the P&O Cruises' fleet in December 2022.

Svitzer aims to launch world's first fully remotely controlled tug

Named the Recotug project, the aim is to develop a remotely controlled tug boat that will be able to perform a full towage operation with all operations controlled from a remote operations centre.

The solution and achieved safety level are aimed at permitting Svitzer to conduct commercial remote tug operations in Denmark's Copenhagen port. The project is expected to run for the years to come.

While Svitzer is bringing the needed operational experience, a newly built tug with crew as well as tug-specific technical solutions, Kongsberg Maritime will provide the remote-control systems and the autonomous technology and lead the integration of systems and technology. ABS will bring the guidance and expertise necessary to obtain regulatory approval.

The Maersk Eindhoven is waiting to berth at the Port of Yokohama having lost 260 containers overboard on 17 February.

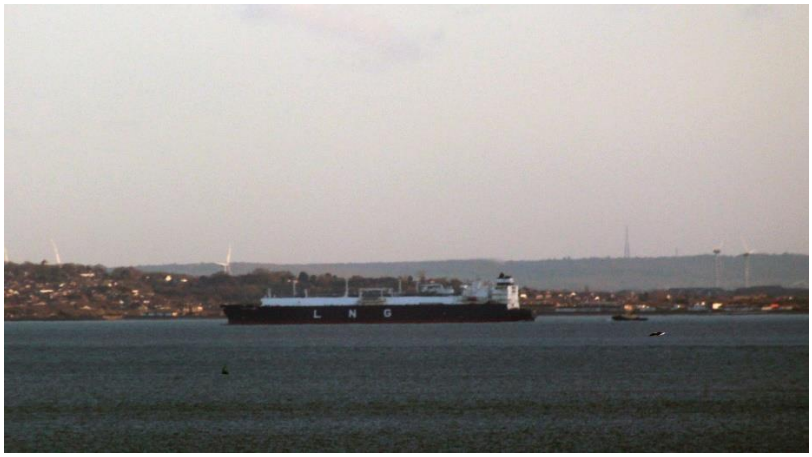
The 13,100 teu Maersk Eindhoven is waiting in Japanese waters to berth at APM Terminals Yokohama on 25 February.

The vessel lost engine propulsion for 3-4 minutes in heavy weather 45km north of Japan on 17 February and severe rolling caused the containership to lose 260 boxes overboard and damage to a further 65 containers.

Visitors

Chiquita Trader ex Maersk Nashville Crystal Bay Built 2005 27059 GRT

Current Position En route to Puerto Moin



Clean Planet Built 2014 105943 GRT

Current Position en route to Murmansk

FOS Express Built 2008 54675 GRT

Current Position En route to Vercruz

Gaslog Westminster Built 2020 120709 GRT Owner Gas- Thirty Ltd

Current Position En route Cameron USA

MSC Flaminia Built 2001 75590 GRT Owner c//o NSB Niederelbe

Current Position en route to Gemlik

Sten Bergen Built 2009 11935 GRT Owner Stentank A/S

Current Position en route to Amsterdam

Will

 recent visitor to Northfleet-Not Seen

Uni Sunshine Built 2018 22374 Owner Yamsa Shipholding

Current Position En route to Aviles

recent visitor to Tilbury

Hannah Built 2008 17018 GRT Owner Heta Shipholding

Current Position En route to Santarem


recent visitor to Sheerness

Strategic Fortitude Built 2016 23237 GRT Owner Kotobulk

Current position En route to Hereke

Chacabuco Built 2006 66289 GRT Owner Hapag- Lloyd

Current Position En route to Le Havre

Arklow Arrow Built 2021 5078 GRT Owner Abbey Shipping c/o Arklow

Current Position en route to Rotterdam

Fluvius Teign ex Ovar ex Bestevaer Built 2005 2437 GRT Owner Amasus Shipping BV

Current Position En route to A Coruna

Recent Visitor to Tilbury

Saga Monal Built 1996 36463 GRT

Current Position En route to Varberg

WSS Quiz Questions Edition 26

1. Who was the first officer on RMS Titanic?

2. Which ship was built in Jackson, Florida, and ran aground steaming from the Delaware river to the Thames Estuary?

3. Bartholomew Roberts was a pirate during the early 1700s, especially successful in the Caribbean. By what name was he also known?

4. A fishing boat with the registration HH is based in which port?

5. Born in Canada, in 1839, he was awarded the first British transatlantic steamship mail contract, and in the following year, formed a company in Glasgow with shipowner Sir George Burns and the engineer Robert Napier. Who is he?

6. Which ship is next in this sequence: Lusitania, Mauretania, Bremen, Normandie?

7. There are five fighting arms of the Royal Navy – Fleet Air Arm, Royal Navy Surface Fleet, Royal Navy Submarine Service, Royal Marines, and which other?

8. The Royal Navy aircraft carrier, HMS Queen Elizabeth, is capable of carrying how many aircraft – a) 40, b) 60 or c) 80?

9. If you took a river cruise down the river Danube, from Passau in Germany to the delta in Romania, how many capital cities would you pass through?

10. Southend Pier was taken over by the Royal Navy in the Second World War. What name was the pier given?

ELBE No. 5 PILOT SCHOONER

2002

TRANSPORT ACROSS ATLANTIC

The Elbe No.5 was built in 1883 by Gustav Junge at the Stulcken Shipyard in Hamburg. She was Number 5 of 11 pilot schooners serving Hamburg at that time. She was built of Oak, although sheathed in copper below the waterline. The length of the hull is 25.32M, her beam is 5.95M and her draught 3.66M. She is of 52 gross tonnes and her sail area is 360 square metres.

She was retired from service as a pilot vessel in 1924. In 1928 she was bought by an American journalist Warwick Tompkins, and in 1929 she emerged as the cruising yacht and sail training vessel Wander Bird. Under his ownership, she made 13 Trans-Atlantic crossings and sailed east to west round Cape Horn in 1936. In 1941, she was laid up in Sausalito, California, and became a houseboat for Tompkins' ex-wife.

In 1969, she was bought by H & S Summers who began restoring her. An engine, a General Motors 471 Diesel of 158 HP, was installed. She sailed again for the first time in 1981. She was put up for sale in 1992. She sailed to Seattle in 1998 for chartering based there owned by a Jim Flury and David Cook.

In October 2002, she arrived back in Hamburg, having been bought for 800,000 euros by the Hamburg Maritime Foundation. She was carried on the voyage as deck cargo on the Rickmers Tianjin. In 2005/6 she underwent major refurbishment, and her engine was replaced with a pair of Volvo-Penta DS130, of 130 HP each. Since 2004, she has been available for charter for day trips and longer voyages. In September 2018 she started a renovation programme lasting 8 months at the Hvide Sande Shipyard in Denmark. She was given a new stern and new outer planking in a contract worth 1.5 million euros, and was relaunched in May 2019.

On 9th June, just a few weeks after her re-launch, she was in collision with the feeder container ship Astrosprinter in the river Elbe near Stadersand. There were 43 on board, including 14 crew, and several people were injured. She was able to move under her own power to shallow water nearby, where she sank. She was raised and temporary repairs to the hull were carried out by the nearby Peters Yard in Wewelsfleth. On 22nd October, she was towed into Hamburg by the tug Johannes, and on 23rd, she was loaded on the Danish ship Rix Spring for the voyage back to Hvide Sande for repairs funded by the Federal Government.

THE COLLISION WITH ASTROSPRINTER

After completion of these repairs, she was towed back to Hamburg by the Bugsier 15 in October 2020. She is the last wooden sea-going vessel associated with the Port of Hamburg. A report on the cause of the collision is still awaited, but it would seem that the Elbe 5 might be at fault in not keeping clear of the larger ship in confined waters.

SHIPS INVOLVED WITH THE ELBE No. 5 STORY

1. RICKMERS TIANJIN Summer dwt 30,507. Built in 1979 in Japan as the Hoegh Cairn. Bahama flag.
2. ASTROSPRINTER 9526 Summer dwt. 809 TEU She was built in China in 2007 as the Transanund J.B. A MAK Diesel gives her a top speed of 17 knots. Cyprus flag.
3. RIX SPRING 2489 Summer dwt. Built in 1995 in Slovakia as the RMS Algol. Powered by a Deutz Diesel. Cyprus flag at the time.
4. JOHANNES Pusher tug built in 1949. 29 x 8 x 3.4M German flag.
5. BUGSIER 15 Vorth-Schneider Tractor Tug. 239 grt. Built in Germany in 191

Colins Pictures

Malevita Twenty-One Great Yarmouth

Christian Radich Canvey Island

CSCL Indian Ocean Felixstowe

Eems Sprinter Gravesend

Gad Qidne Thorpe Bay

Morning Chant Thorpe Bay

Ships Davits

“A device used to move or store items on a ship e, g boats and anchors”

18th and 19th century ships had rudimentary davits typically beams over the side or athwartship at the stern on RN vessels. Boats were carried primarily as tenders and for towing in becalmed situation or for anchor handling when kedging. SOLAS was not a high priority.

As the size of ships increased so did regulation for the carriage of lifecraft, the number of boats to be carried was related to the tonnage of the vessel and not the number of passengers carried the max g.r.t. catered for was 10000 tons Titanic at 46000 tons was outside the tables but only required to have the max lifeboats for a vessel of 10 000 tons I e 1060 souls she in fact had boats for 1178 people-v-3330 on board

Simplest form of davit is the gooseneck type, they have rope falls, these are the lowering lines, the boat is secured on its mounting by the gripes once, hoisted overboard tricing lines haul the boat into the side of the ship where it is secured by frapping lines to enable embarkation.

Various Acts of Parliament attempted to legislate: The 1849 Passenger Act spelled out the amenities to be provided, medical care, food, etc but scant attention to life boats or numbers thereof, amended in1855 & 1866 to include the number and capacity of life craft to be carried (Cargo ships were covered under the Merchant Shipping Act of 1854

1870 the Board of Trade reports “that in their opinion it would be difficult to compel ships to carry enough boats for all passengers

1887 Select Committee “without great inconvenience that many passenger ships could not carry sufficient life boats.

After the tragedy of Titanic:

1914. January, 13 nations meet for the inaugural meeting of the SOLAS Convention which was to enter force in 1915 however WW1 intervened and it was not until 1929 that it was ratified, Amendments followed in 1948,1960,1974,1988,2010

Article 6 1914 “At no moment of its voyage shall a ship have more passengers and crew than there is accommodation for in Life craft.

Goose neck davits remained in vogue for many years two companies were at the forefront in the development of davits, Welin and Schat. Welin designed the davits for the Titanic and both were supplying davits to the offshore industry in the 1980`s. Their designs have been “adopted” by ship yards

SOLAS limits the capacity of a life boat to 150 people. Schat have developed and had approved a new mega lifeboat capable of taking 370 passengers Oasis of the Sea would require 44 conventional boats as opposed to the 18 mega craft fitted

1983 SOLAS Amendment requires all life boats on passenger ships to be partially or totally enclosed

Boats must be on both sides of a vessel and able to accommodate 50% of the passengers per side, there are to be, in addition life rafts for 25% of the total Pax & crew A life boat must be capable of being loaded in ten minutes A rescue boat must also be carried

Current thinking is that the ship itself is the best lifeboat and the design of the vessel should render safe haven until a port can be reached or assistance arrives

Davits in use today.

Gravity/roller arm or telescopic: Used on most cruise ships Passengers loaded on the ship and the loaded craft lowered to the water some of the “falls “ are inertia type or hydraulically powered winches, when the craft reaches the water disengaging gear is deployed to release the craft from the fall hooks, some craft are fitted with a safety device that utilises a hydraulic lock so that when the craft enters the water a column of water is forced through a vertical cylinder in the boat the pressure engages the link between the fore and aft releasing cables this inhibits premature release of the hooks before the craft is in the water. This method is called offload release

Another method “On load” release allows the craft to be released whilst above the water.

Fixed Davits: Used on offshore platforms the craft can be boarded from both sides and when lowered is oriented to face away from the platform, life craft have to be totally enclosed and able to withstand fire. Some have Hyperbaric cells to accommodate divers working off the platform

Free fall: These are fairly recent innovations and can be seen on most merchant vessels.

Whilst davits are meant to be part of the saving of life at sea, they have been the highest cause of injury and death during maintenance, training and launching, some 12 deaths and 87 injuries in 10 years

MAIB carried out a survey of accidents involving davits and life craft it concluded that most problems can be attributed to:

Poor training

Lack of maintenance.

Difficult maintenance.

Complex/ Unclear operating instructions and manuals

On load hook arrangements with no safety interlock

Strange though it may seem for most seafarer’s free fall is gaining in popularity due to its simple operation (terrifying to me though) and easy maintenance

HAL Volandam Lyttleton Christchurch NZ whilst greasing the fall cables of a lifeboat the fall cable parted at one end of the boat one seaman drowned and one was injured it was found that whilst the ship maintained a regular maintenance schedule, they had not been able to grease the cable over its entire length and it had corroded, subsequent examination found that a further 10 falls were corroded, the davits had been designed and manufactured by the ship yard, Fincantieri,

A Free Fall Davit

Cruise ship gravity multi pivot.

Shipbuilding at Leigh on Sea in the Twentieth Century

Shipbuilding has always played an important part in the development of Leigh as a Port and a Fishing station. Going as far back as the Sixteenth century, vessels of up to 300 tons were built for commercial trade which could easily be turned into Men of War at times of need. At this time Leigh was a deep-water harbour and easily accessible with the South Westerly winds which encouraged trade and especially ship repairs. This further encouraged the boat yards to develop their skills in Boatbuilding.

However, in the seventeenth century the vessels were getting larger and too big to berth at the small village port of Leigh. This caused the silting up of this open port and Leigh lost its importance as a major shipbuilder. The eighteenth and nineteenth centuries saw little change in the size and population of Leigh. Fishing was gathering pace and some small fishing craft were built locally at the two shipbuilders in the town for estuary fishing, although many craft were built further around the Essex coast.

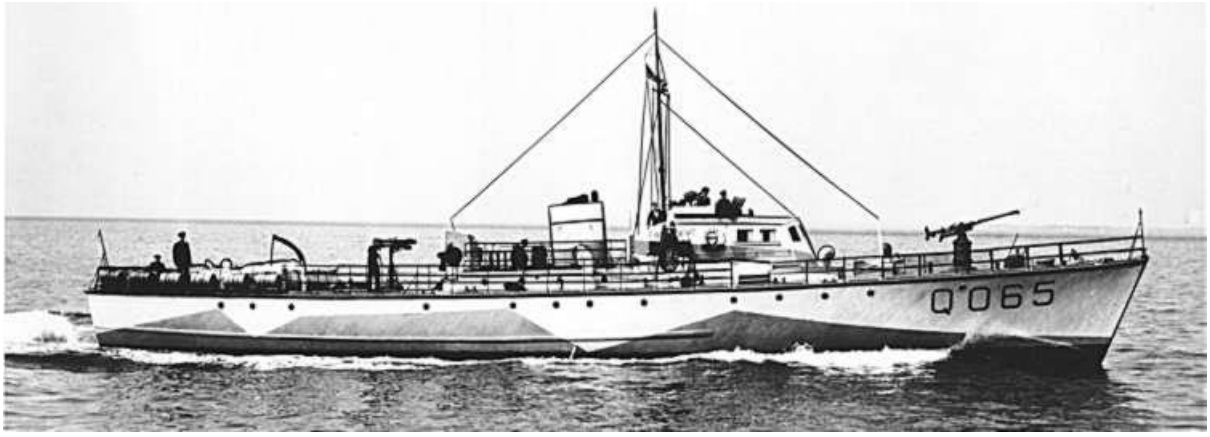
Storm now a bawley yacht

The twentieth century saw an increase in the number of shipyards in Leigh, early boatbuilders were namely Bundock Brothers at 10 High Street, Samuel Jas Peters at 39 High Street and Henry Thompson Boatbuilders of High Street and 7 New Road. Bundock's were builders of both yacht and fishing vessels and were still prominent in Leigh in the 1950's, before being incorporated into Seacrafts.

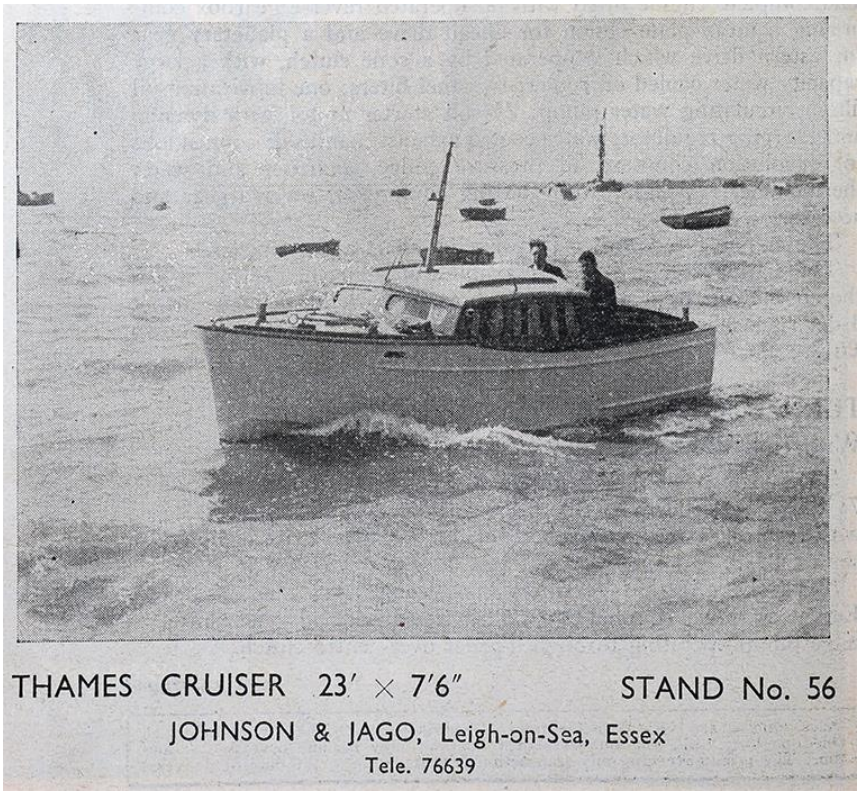
Yachts such as "Tewk" built at Bundocks in 1909 was still in service and owned in Connecticut, USA in 2001, another 7-ton yacht was owned by Maurice Griffith, the noted yachtsmen, boat designer and writer on sailing subjects.

Another Company that started in the boat building trade was H. E. Cole & Sons located near the strand between 14 & 16 High Street, this same company merged to become Cole Wiggins & Wiggins trading at Victoria Wharf before leasing marshland at an annual rate of Gbp25.00 per annum from the Salvation Army in 1920 with a name change to Cole & Wiggins.

Amongst other craft Cole & Wiggins built were the Dunkirk veterans Endeavour LO 41 and Defender LO 504. Endeavour is still fully operational after a total rebuild and can be found today along the Leigh Foreshore, whilst Defender was lying in a derelict condition is St. Aubin's harbour, Channel Islands in the early 1990's.



Fairmile Type B



The site of Cole & Wiggins was taken over by Johnson & Jag's in the late 1930's, Johnson & Jags had commenced boatbuilding in 1932 in land adjacent to them, and operated until the company called it a day in the Mid 1980's. During the war years Johnson & Jagos were contracted by the Admiralty War Department to build a range of Small naval craft, these included Thirty-Five "Fairmile B" 112ft Motor Launches, Twelve 45ft M.F.V's and Five 65ft M.F.V's. After the war Johnson & Jagos designed and built a number of Thames Motor Cruisers, the designs were branded as the "Thames Major", "Thames Minor", Thames Cruiser", "Thames 23" & "Thames 26".

Another prolific builder of fishing craft was Arthur Thomas Parsons (1882 – 1964) whose premises were sited at the Strand, he passed the lease to Sydney Clayton and moved to premises opposite the Peter Boat public house. These premises proved too small for the Bawleys that were built there, each time a Bawley was ready to be moved to the Strand for

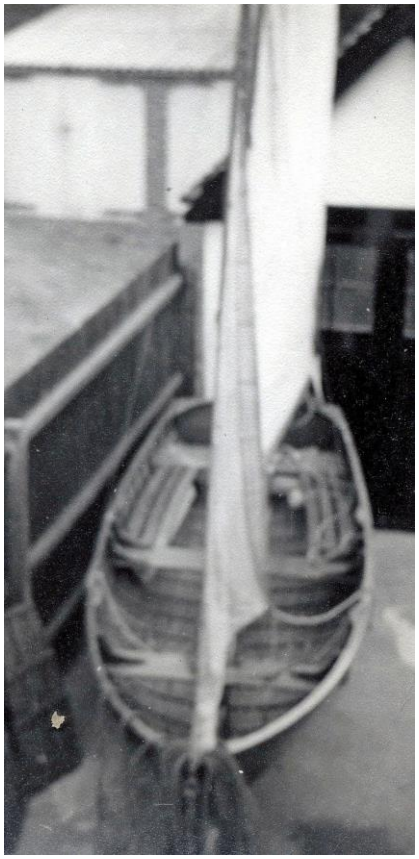
launching they had to knock down part of the front wall. During the war years they were contracted to build dinghies and similar craft for the admiralty. The final move was to 8 High Street when Arthur and his son Frank traded under the name “Seacrafts”. which saw them build a large number of Shrimp and Cockle boats. The last vessels to leave Seacrafts were a pair of new builds “Paul Peter” & “Three Sons” for the Gilson family of Southend in the mid-sixties one was fully completed and the other partly completed as the yard had gone bankrupt, this hull was towed to Suttons of Gt Wakering for completion.

On a smaller scale in the mid 1920’s was a boatyard located near the Strand owned by Sydney James Clayton who designed and built the “Dauntless” range of clinker-built sailing Yachts. Reg Patten was foreman at Dauntless until the 29th October 1958 when he left to set up Sea-kings. Dauntless moved to Welshpool at the outbreak of the Second World War and after the war they relocated to Benfleet Creek and moved to the site occupied by the Dauntless yard today.

Types of craft built by Dauntless apart from Dinghies were the Dauntless 20’ and 21’ cruisers and the 17’ and 20’ yachts.

Other Boatbuilders setting up after the war were Sea King (Boatbuilders) Ltd. founded on the 3rd December 1958 by Reg Patten who originally worked for Sidney Clayton. Sea Kings went onto build many Seaking 24ft Clinker built motor sailors which were similar to the Dauntless design. Reg Patten died in February 1976 and his son Keith took over the helm until the 1990’s.

Finally, a boat builder of a smaller class of yacht was L.H..Walker & Co. who started out in the old Fire Station building in West Street. Lew Walker had also worked for Sidney Clayton building Dauntless dinghies and after the war decided to go on his own. He modelled his own boats on the Dauntless design. Early Walker boats were ranged from 8ft to 14ft all with varying fixtures and fittings. However, it soon became clear that the most popular craft was the 12ft Gunter sloop. The first one was built in 1954 and by 1960 there were three variations, the “Popular”, “ De-Luxe”, and the “Super” Walker Tideway’s, with at least 504



My Daisybelle in 1962

“Tideway’s” being recorded as built. The company also built a 16ft Walker Fisherman clinker-built skiff. Walkers continued to build these fine craft until 1979 when the ceased trading.

The Branch chairman has 2-3 examples of Tideway’s

NOSTALGIA CORNER 11

HMS ARK ROYAL

The Ark Royal was an Audacious class aircraft carrier. She was built by Cammell Laird of Birkenhead as the Irresistible, but the name was changed to Ark Royal prior to her launch. The original plan was for 4 ships, but the Africa and the original Eagle were cancelled when WW2 ended.

She was laid down on 3rd May 1943, launched on 3rd May 1950 and commissioned on 22nd February 1955. Her standard displacement was 36,800 tons. She was powered by 8 Admiralty 3-drum boilers in 4 boiler rooms with 4 sets of Parsons geared turbines on 4 shafts giving 152,000 SHP and 31.5 knots.

As built, she had a 5.5-degree angled flight deck, 2 steam catapults and a mirror landing system, and could accommodate 50 aircraft, comprising Sea Hawks, Sea Venoms, Gannets, Skyraiders as well as helicopters. Her armament was 16 x 4.5", 52 x 40mm and 4 Sea Cat SAMs.

In 1967-70 she underwent a major rebuild costing £30 million to be able to carry Phantoms. The angle of the flight deck was increased to 8.5 degrees and new more powerful steam catapults were installed. Her Air Wing after 1970 comprised 14 Buccaneer S2s, 12 Phantoms, 5 Gannets, 7 Sea Kings and 2 Wessex helicopters.

Intensive maintenance kept her in commission until late 1978, and she was decommissioned on 14th February 1979. She arrived at Cairnryan for scrapping on 28th September 1979. She saw no combat duty, but took part in many Royal Navy and NATO exercises. She took part in the Beira Patrol naval blockade of Rhodesia in 1965. In 1977 she led the Royal Navy's celebration of the Queen's Silver Jubilee at Spithead.

HMS ZEST

The Zest was a “Z” class destroyer, ordered under the War Emergency Programme. She was built by Thornycroft at Southampton, being laid down on 21st July 1942, launched on 14th October 1943 and commissioned on 12th July 1944. Her standard

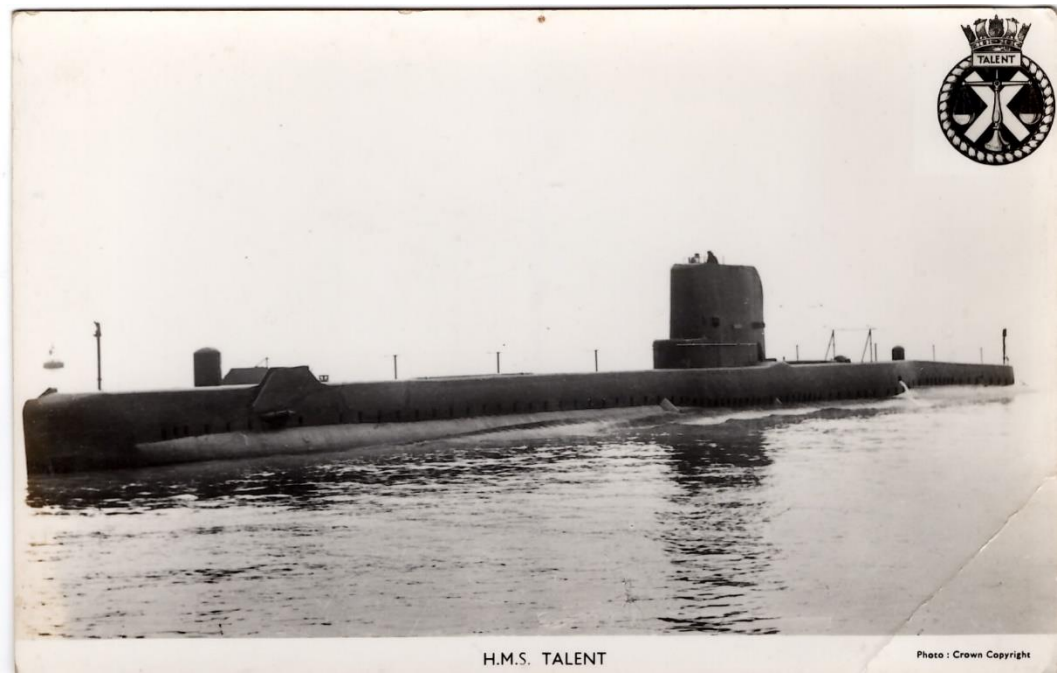
displacement was 1710 tons. She was powered by 2 Admiralty 3-drum boilers and 2 Parsons single-reduction geared steam turbines giving 40,000 SHP on 2 shafts and 36 knots. Her armament was 4 x 4.7”, 4 x 2 pdr., 8 x 20mm and 8 torpedo tubes. She carried two depth charge racks and 70 depth charges.

She served in the Home Fleet for the latter part of the war in the North Sea and Arctic waters and this continued until 1947. In 1947 she began serving as a torpedo training ship at Portsmouth, and this continued until 1952, when she went into the Reserve Fleet at Chatham Dockyard, remaining there until February 1954.

Between 1954 and 1956 she was converted at Chatham Dockyard into a Type 15 Fast Anti-Submarine Frigate, one of 23 similar destroyers to be so converted. The conversions were a stop-gap attempt to counter the new Russian Whiskey class submarines until the new-build Whitby and Blackwood classes were developed. The conversion included extending the raised foredeck aft, providing an enlarged bridge, installing improved radar and a pair of the new Limbo anti-submarine mortars aft. The displacement was increased to 2300 tons, which with the same machinery reduced her top speed to 31 knots, still ample for anti-submarine work. The gunnery armament was reduced to a pair of 4” and a twin 40mm.

Between 1956 and 1968 she served in the Mediterranean, Far East and West Indies, but in July 1968 she was paid off into reserve at Plymouth. In 1969 she was placed on the disposal list, and she was broken up by Arnott Young at Dalmuir in 1971.

HMS TALENT



The Talent was one of the third group of the “T” class submarines. She was built by Vickers Armstrong at Barrow, and was originally to be named Tasman. She was laid down on 21st March 1944, launched on 13th February 1945 and commissioned on 27th July 1945. Her displacement was 1290 tons surfaced and 1560 tons submerged.

Her machinery consisted of 2 diesels of 2500 HP each and 2 electric motors of 1450 HP each, giving her a surfaced speed of 15.5 knots and a submerged speed of 9 knots. She was tested to a depth of 300 feet. Her armament was 11 torpedo tubes, a 4” gun and 3 machine guns.

Her first commission was in the Far East, but later ones until 1954 alternated between the Home and Mediterranean stations. She took part in the 1953 Spithead Review. Between 1954 and 1956 she was reconstructed in Chatham Dockyard; her hull and fin being streamlined and her gun removed. Unlike most of the “T” class modernisations, her battery bank was not increased, and her underwater speed was only marginally improved. On 15th December

1954, during the modernisation, she washed out of a dry dock at Chatham and was not found until the next day, and 4 lives were lost in this accident.

In May 1956 she was damaged in collision whilst submerged off the Isle of Wight. She was refitted in Malta in 1960 / 61 and was then Mediterranean based until returning to the UK in May 1962.She was decommissioned on 19th December 1966, and scrapped at Troon arriving there on 1st February 1970.

HMS HOUND

The Hound was a Algerine class ocean minesweeper. 119 of this class were built in the UK and Canada, half with reciprocating engines and half with turbines. The Admiralty requirement was for ships capable of sweeping moored, magnetic and acoustic mines in up to Sea State 5, and to be capable of anti-submarine duties. HMS Hound was built by Lobnitz & Co. at Renfrew, being laid down on 2nd December 1941, launched on 29th July 1942 and commissioned on 11th December 1942.

Her displacement was 1030 tons standard, and she was powered by 3 Admiralty 3-drum boilers and 2 vertical triple expansion steam engines on to 2 shafts producing 1400 IHP and 16 knots. She was armed with 1 x 4”AA and 8 x 20mm guns, and 2 rails of depth charges. She took part in Arctic convoy work in 1943, and she was involved in the Normandy landings. In September 1958, she took part in the First Cod War against Iceland. She was scrapped in 1962.

NRP SAGRES

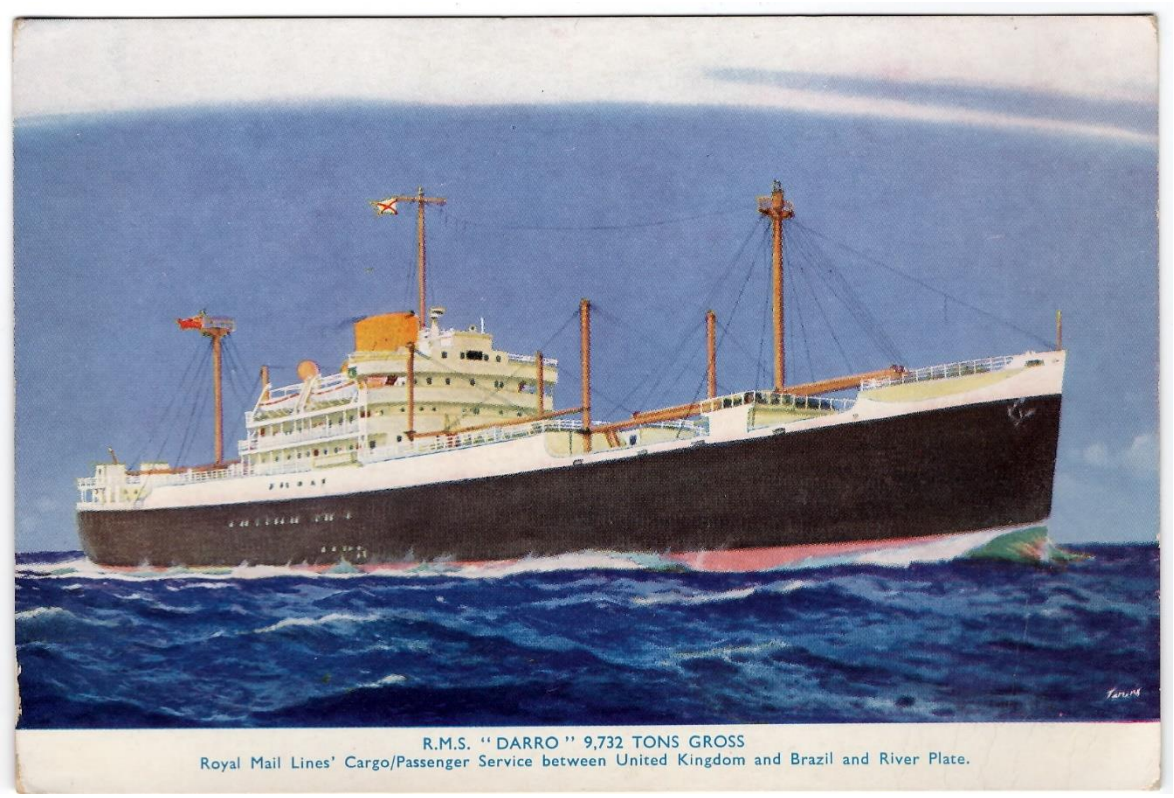
The Sagres was a Portuguese sail training ship. She was built by the Rickmers shipyard in Bremerhaven as the Rickmer Rickmers for the Rickmer Line, and was launched in August 1896. She was originally rigged as a fully rigged ship, that is she was square rigged on all three masts. She was of 3067 tons deadweight.

In1912 she was bought by Hamburger Reederei Carl Christian Krabbenhoft and renamed Max, for their Hamburg – Chile run. Early in WW1 she was captured in the Azores by Portugal, and loaned to

Britain as a war aid. She sailed under the UK flag as the Flores until the end of the war. She was then returned to Portugal, becoming a Portuguese Navy training ship named NRP Sagres. A 350 HP Krupp diesel engine was installed in 1930. At some stage she was reduced to a three masted barque, square rigged on two masts only.

In the early 1960s she was retired and she became a depot ship until finally decommissioned in 1975. In 1983 she was bought by Windjammer fur Hamburg e.V. and her name was changed back to Rickmer Rickmers. She is now a floating museum ship in Hamburg.

RMS DARRO



The Darro was a refrigerated cargo/ passenger ship. She was built by Cammell Laird for Shaw Savill in 1956 as the Carnatic. Her gross tonnage was 9733. She was laid up in the Blackwater between

August 1965 and January 1966. In 1969 she was transferred to Crusader Shipping. In 1973 she was transferred to Royal Mail Lines and renamed Darro. In 1976 she was transferred to the Ardgowan Shipping Co. Ltd, but a year later she was sold to a Cyprus company and renamed Litska K. In 1979 she was sold to Greek owners and renamed Dimitra. Later in 1979 she was scrapped in Greece.

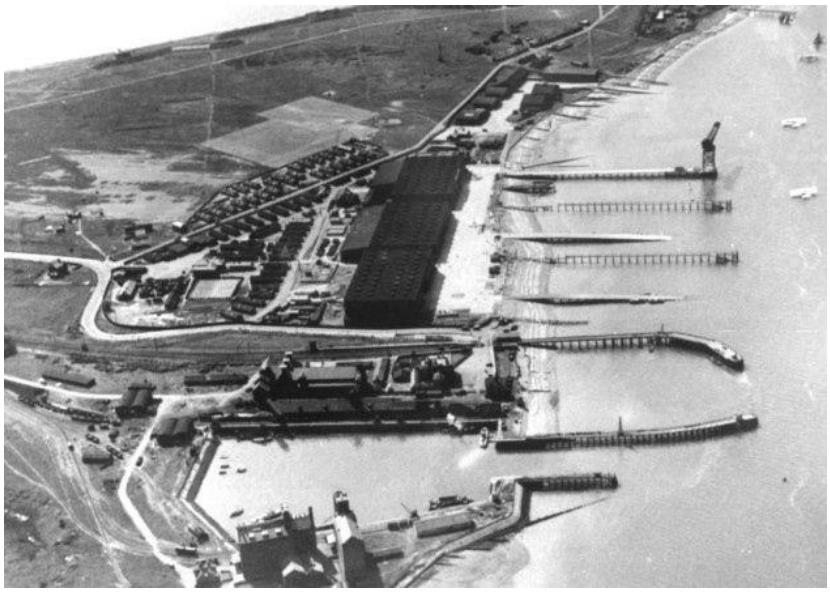
SS PINJARRA

The Pinjarra was built by Sir J. Laing & Sons at Sunderland, being launched on 25th February 1944 and completed in July 1944 as the Empire Paragon for the Ministry of War Transport. She was of 9888 gross registered tons and was powered by steam turbines. In July 1946 she was bought by P & O. In 1962 she was sold by P & O to International Export Lines of Hong Kong and renamed Hong Kong Importer. On 26th December 1969 she arrived at Kaohsiung for breaking up.

MV FREDERICK T. EVERARD painting by Frank Mason

She was built by Goole Shipbuilders for FT Everard, being completed in September 1954. She was of 3299 tons deadweight, and was powered by a 6-cyl 2SA “P” type oil engine by Newbury Diesel giving 1600 BHP and 10.5 knots. In March 1972 Everards sold her to Greek owners, and she was renamed Emilia G. In 1975 she was renamed Alexis G. In 1981 she was bought by another Greek concern and renamed Athens Luck. In 1982 she was sold to Panamanian owners and renamed Anna Kassiani. She was broken up in Moita, Portugal, where she arrived on 30th July 1982.

Before there was a Port at Felixstowe



1933

In 1912, surveys began for a site for a base for Naval hydro-aeroplanes, with Shotley or Mistley on the River Stour. In the end Felixstowe was chosen for the formation of the new Naval Air Station, with another at Great Yarmouth It was, to be designed along the lines of the station on the Isle of Grain.

The unit at Felixstowe was commissioned 5 August 1913 on the River Orwell

RNAS Felixstowe was created soon after the outbreak of World War I following the formation of the Royal Naval Air Service , from the Naval Wing of the Royal Flying Corps (RFC). Three large hangars 300 feet long and 200 feet wide, with slipways were built by Boulton & Paul and camouflage paint applied; the base became the largest operational seaplane station in the United Kingdom

felixstowe F2B s starting out , in the foreground some of the boats that towed them and a converted seaplane lighter with a f;oght deck

The unit designed seaplanes and flying boats. These were generally known by the Felixstowe name although, apart from the prototypes, these flying boats were built by aircraft manufacturers such as Short Brothers, Dick, Kerr & Co. and Phoenix Dynamo Manufacturing Company (the latter two forming part of English Electric in 1918–1919).

The station was initially equipped with Curtiss flying boats. With their hull designs improved , before developing the Felixstowe flying boats The craft were flown on long-range patrols to spot the German High Seas Fleet and Zeppelins, with many based at RNAS Felixstowe.

A seaplane carrier, HMS Vindex was based at Felixstowe to operate against the Zeppelins; the aircraft, two Bristol Scouts, which took off from a short improvised runway on the forward deck. The station also serviced aircraft of the carriers Engadine and Campania.

On 24 April 1916 trials were run in conjunction with the Submarine Service at Parkeston Quay to test the carriage and launching of 2 Sopwith Schneider seaplanes carried on the deck of submarine E22 E22 was sunk the following day off Great Yarmouth

To begin with the flying boats had little success against U-Boats until the introduction of the "Spider web" system of patrolling. The patrols capitalised on the practice of U-Boats signalling by wireless their homing position, which could be picked up by stations at Hunstanton, Lowestoft and Birchington. The "Spider Web" used the North Hinder Light Vessel, a Dutch maintained light ship 55 miles from Felixstowe and the Hook of Holland as a centre point. An octagonal figure was drawn with eight arms radiating out from a distance of 30 miles from the centre. A set of circumvential lines then joined the radial arms at 10, 20 and 30 miles making eight sectors, each sector divided into three sections. As the patrolling flying boat flew up and down each sector line, the area was surveyed twice on any patrol and two sectors of the web could be patrolled in under five hours. A flying boat would take off from Felixstowe and head for the North Hinder Light Vessel then fly along a sector line, determined by previous instructions gained from wireless plots, and then along the patrol lines of the sector. "Web" patrols commenced 13 April 1917.

To increase the range of the aircraft, experiments were carried out in the launch and retrieval of flying boats and bi-planes from specially designed lighters towed behind destroyers of the Harwich Force.[

On the formation of the Royal Air Force in 1918, the unit was renamed the Seaplane Experimental Station, Felixstowe and disbanded in June 1919.

The base and its facilities were later used by the Marine Aircraft Experimental Establishment . From 1 April 1924 until the Second World War. It was also used as a base by the Schneider Trophy team, the High Speed Flight.

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Seaplane patrols were used to spot the German High Seas Fleet and Zeppelins, with many based at RNAS Felixstowe.

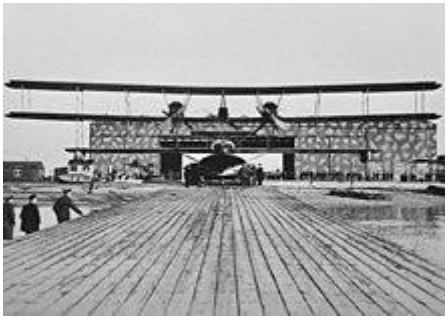
The base and its facilities were later used by the Marine Aircraft Experimental Establishment from 1 April 1924 until the Second World War. It was also used as a base by the Schneider Trophy team, the High Speed Flight.

The Felixstowe F.4 Fury (serial *N123*), also known as the Porte Super-Baby, was a large British, five-engined triplane flying-boat designed by John Cyril Porte at the Seaplane Experimental Station, Felixstowe, inspired by the Wanamaker Triplane/Curtiss Model T. At the time *the Fury* was the largest seaplane in the world, and the first aircraft controlled successfully by servo-assisted means

Super-baby was a huge aircraft by the standards of the time, with a wingspan comparable to the monoplane flying-boat designs of the 1930s.wing at Felixstowe. The hull, claimed to be the best of all Porte's designs, was planked diagonally with cedar wood forming a very wide, slightly concave v-bottom with large fuselage chines. Previous Felixstowe hulls used a straight edged section. Experiments on the effect of different steps in the hull were carried out on a model in the Froude tank at the National Physical Laboratory first with one, then two and three, finally reverting to two steps.[

The test-flying programme demonstrated the aircraft's suitability for long-distance flight, On 11 August 1919 (the eve of a planned flight from England to South Africa) it stalled and crashed into the sea after take-off, killing one member of the crew and suffering irreparable damage

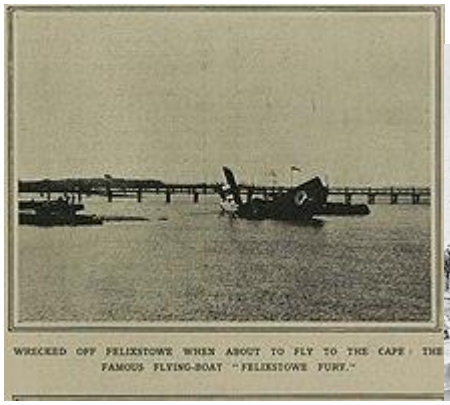
Delivered on 31 October and its first flight was on 11 November Armistice Day. The fury did not see active service although armed with Lewis guns. The focus was therefore on civilian uses



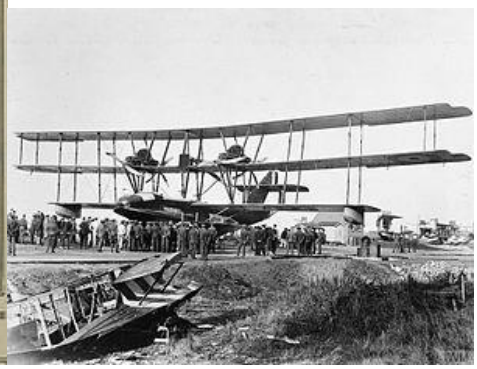
The Fury's unstaggered wings comprised the 3-bay lower wings, mounted near the top of the hull, and a pair of 4-bay upper wings of larger span. All were supported by pairs of vertical struts and diagonal cross-bracing. The original design specified three 600 hp (450 kW) Rolls Royce Condor engines, but these were not available and five 334 hp (249 kW) Rolls-Royce Eagle VII engines were fitted instead. These were mounted on the middle wing and supported by additional struts, configured as two outboard tandem tractor/pusher (push-pull) pairs and one central pusher. In addition to its triplane wing configuration, the Fury had a biplane tailplane with three rudders, mounted on a single vertical fin similar to the Curtiss triplane. The Fury was initially provided with servo-motors for the main flight control surfaces, designed by Major Arthur Quilton Cooper, but these were removed later without compromising the pilot's ability to control this large aircraft. At some point the engines were replaced with more powerful Eagle VIIIs.

On 24 April 1919, the Fury performed a 7-hour flight. Flown initially with a designed weight of 24,000 lbs its overload weight was 28,000 lb, and the aircraft performed well at both limits.

With the intense competition in early 1919 to achieve the first transatlantic flight, it was planned to join other teams in the race by shipping the Fury to Cape Broyle, Newfoundland The intention being a non-stop flight, however the aircraft's size presented a problem as no vessel with a capacity large enough could be found as transport and the project was officially opposed on grounds of expense, despite the crossing being well within the Fury's capabilities; fuel capacity was 1,500 gallons The Air Ministry's preference to leave the non-stop achievement to a commercial venture, led to the abandonment of the attempt about the third week of May 1919, when flight tests resumed.



WRECKED OFF FELIXSTOWE WHEN ABOUT TO FLY TO THE CAPE: THE FAMOUS FLYING-BOAT "FELIXSTOWE FURY."



Plans were then made for the 8,000-mile flight from England to Cape Town, South Africa via Gibraltar, Malta, Alexandria, Khartoum, Victoria Nyanza, Lake Tanganyika, Lake Nyassa, Beira and Durban. This was due to start from Plymouth [1] refuelling and revictualling depots were established throughout the journey supported by detailed meteorological reports Final preparations were being made on 11 August at Felixstowe when the aircraft side-slipped at low altitude and crashed at 90 mph shortly after take-off, breaking up on impact.

The crash was a surprise as the Fury was subject to exhaustive tests in the 12 weeks prior to the flight, surpassing the crew's expectations who had every confidence in the aircraft. Flight tests were in accordance with RAF safety margins,

The Felixstowe Fury was the last aircraft to be designed by Porte at Felixstowe;

A research and test organisation originally formed as the Marine Aircraft Experimental Station in October 1918 at RAF Isle of Grain, , to design, test and evaluate seaplanes, flying boats

On 16 June 1924 the Establishment moved to the former Seaplane Experimental Station seaplane base at Felixstowe. It carried out research and development work on water-based aircraft for service needs and also on their equipment and on air-sea rescue apparatus. The Establishment's work grew during its early years and by 1930 it was carrying out acceptance tests and trials on flying boats, seaplanes, and their associated equipment and armaments.

With the start of the Second World War the Establishment was moved to the more secure and safer location of Helensburgh in Scotland, and in 1940 was put under the control of the Ministry of Aircraft Production.

In August 1945, the MAEE returned to Felixstowe, and soon after came under the Ministry of Supply, which was taking control of most military research establishments. Reduced interest in flying boats meant the link with the Royal Air Force ended in 1953, when flying ended. From then the Establishment was responsible for testing and evaluating prototype marine

craft and air-sea rescue apparatus and associated equipment to determine whether they complied with the development specifications and to advise when they could be handed over for Service trials.

The MAEE was closed down in March 1956, its remaining activities being moved to the Air Ministry and the Aeroplane and Armament Experimental Establishment at Boscombe Down. The model workshop remained on site and came under the control of the Royal Aircraft Establishment, Farnborough.

THE HIGHLAND SEABIRD

HIGHLAND SEABIRD AT THE OLD ERSKINE FERRY SLIPWAY. 1982

A recent feature on Metcalf Motor Coasters in a ships comic reminded me of one of the more interesting episodes in my professional career. The client in question was to run trials on the Thames for a fast commuting / cruising service using a catamaran called Highland Seabird. The local agent and logistics man at Gravesend was one Tertius Metcalf. It was Spring / Summer 1982.

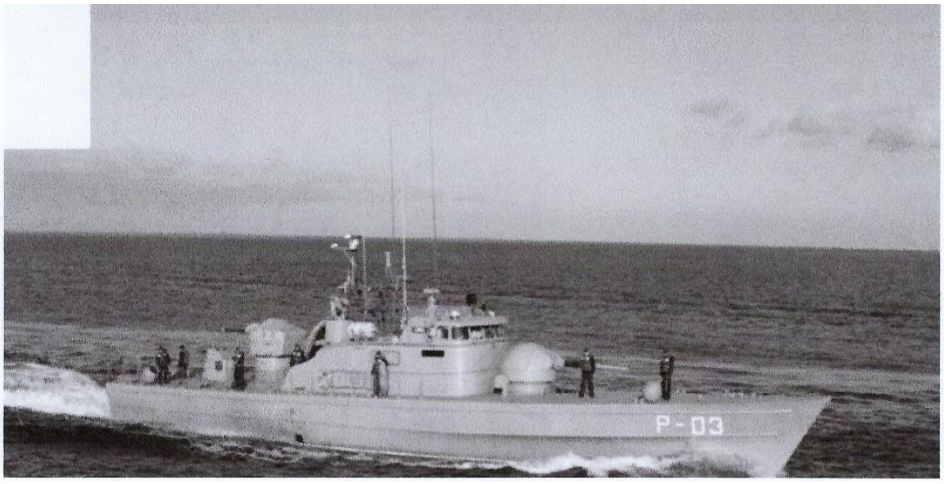
I had for a few years been involved in the regular routine maintenance and repairs to the floating landing stages at Seacombe and Woodside on the Wirral side of the Mersey. This mainly consisted of monthly inspections of the substructure and bridges, and specifying repairs where needed, mostly to the wrought iron longitudinal girders, or kelsons, which spanned across numerous steel pontoons. In both cases the structures were well past their “sell-by date”, requiring extensive repair works each year.

ROYAL IRIS in 2012

Our client for this was the Merseyside Passenger Transport Executive, who ran the Mersey Ferries, the users of the two terminals. The vessels involved at this time were the three ferries themselves, the Overchurch, Woodchurch and the Mountwood, together with the Royal Iris, the “Fish and Chip Boat”. Two out of the three of the ferries operated a 20-minute service between the two terminals and the Liverpool Landing Stage, with the third as a backup. The Iris was used for cruising and as a floating lunchtime restaurant berthed on the Liverpool stage. These were all foot passenger boats, as the vehicular ferries, or “Luggage Boats”, had finished many years beforehand, after the Mersey Tunnels opened.

The vessels were all getting rather long in the tooth, the Mountwood and Woodchurch of 464 gross tons having been built by Philips at Dartmouth in 1960, and the Overchurch by Cammel Laird in 1962, whilst the Iris of 622 gross tons, was even older, having been built by W.Denny of Rosyth in 1951. The MPTE were, therefore looking at replacing the ferries with smaller but faster ships that would be cheaper to operate. The ferries still were important for commuters going across the Mersey, but they were operated mainly as a tourist attraction. The ferry service had to be heavily subsidised by the various local authorities involved. The Mountwood and Woodchurch are still in service, renamed Royal Iris and Snowdrop respectively, their original two Crossley diesels of 680hp per shaft having been replaced in 1999 by Wartsila NSD 700kw engines. The third ferry, the Overchurch, later renamed Royal Daffodil, was withdrawn in 2012, and is to form a floating leisure attraction, in Liverpool’s Canning Dock. The Royal Iris, the Fish and Chip boat, which was diesel-electric, has been on the Thames at Woolwich since 2002, in an increasingly derelict state.

The Senior Partner of my firm, Roy Farran, and I went up on early 1982 to Old Kilpatrick on the Clyde to look over a catamaran called Highland Seabird, which was laid up, high and dry on the slipway of the old Erskine Ferry service. Co-incidentally, I knew the spot well having worked on the Erskine Bridge, which replaced the ferry some years before. The Highland Seabird was owned by Western Ferries {Clyde} Ltd, having been built in Norway in 1976 by Westamarin A/S for Western Ferries. She was built entirely of aluminium, was of 202 gross tons, being one of their successful W86 class. She was 89 ft x 29 ft and powered by twin 2200 bhp MTU diesels, giving a top speed of 28 to 30 knots. She could carry 160 people seated.



STORM CLASS

Her design was a development of the Storm class of Fast Patrol Boats, and the Seabird was essentially a Storm hull cut in two longitudinally, with a central deck and superstructure added. The inner sides of her hulls were completely straight. She had been used for ferry services in the Firth of Clyde and the Western Isles for a few years, with mixed success due to strong winds and tides.

The outcome of the visit was that the Seabird was chartered by the MPTE for trial ferry services across the Mersey, with regular excursions along the North Wales coast, calling at Rhyl, Llandudno, Bangor and Beaumaris. For this purpose, I had to design minor modifications to the jetties and piers at each location, as well as balanced pedestrian ramps on each side of the Seabird. It was found that, once again, conditions were too severe for a reliable ferry schedule based on the Seabird to be viable. The successors to the MPTE, Mersey Ferries, are still trying to obtain suitable replacements to their vessels.

HIGHLAND SEABIRD RUNNING TRIALS AT GRAVESEND IN 1982 WITH BALANCED PASSENGER GANGWAYS VISIBLE NEAR THE STERN

The Seabird was then chartered for some trials on the Isle of Wight ferry service, for which we were not involved.

In 1982 the Seabird was then taken round to the Thames, and she was trialled for some weeks for a fast ferry service between Westminster and Greenwich, using various existing piers. The trials also extended to Gravesend, Southend and the Medway.

These trials found that the excessive wash produced by the Seabird at speed in the upriver areas was unacceptably high for moored boats etc. It would be interesting to compare her wash with that of the current MBNA Thames Clipper fleet, which are similar in speed and beam, but rather longer at125 feet.

TRIDENT 2

In 1985, the Seabird was sold to Emeraude Ferries in the Channel Islands and renamed Trident 2, and used on their Granville to St. Helier route. She was sold again in 1989 to Regie de Vendee and renamed Cap Suriot. She must have performed well for Emeraude Ferries as she was replaced with two larger (W95) Westamarin vessels. In 1990 she was sold again to Yeu Contenant Compagne and renamed Dumont d'Urville. In 1997 she was transferred to the West Indies.

Back now to Mr T. J. Tertius Metcalf, who was the third son of the Metcalf Motor Coasters family. He was the Director of Crawley & Co, which was split from the coaster company in 1970, when Metcalf Motor Coasters joined with S. William Coe, of Liverpool to become Coe Metcalf Shipping Ltd. Later, the combined company was taken over by the sugar manufacturer Booker McConnel.

Crawley & Co had a large fleet of bunkering tankers, supplying fresh water and fuel oils to shipping on the Thames.

Maggie and I met Tertius several times during those trials on the Thames. He was tall and thin, and, despite being very well spoken, he habitually wore very shabby top hat and tails.

He once gave Maggie a visiting card on which he offered “Virgins converted and Whiskey galore”. He had been Master of the Honourable Company of Watermen and Lightermen a couple of years beforehand, and he had been very involved in the running of skiff racing on the river, including the reinstatement of the “Great River Race”, from Richmond to Greenwich, and Gravesend Regatta. He died in 1996.

SITMAR LINE

Tony mentioned in his presentation on CMV ships that their latest acquisition had been originally ordered for the Sitmar line. MV Columbus

SITMAR Societa Italiana Transporti Maritimi

This is a tale of opportunism, ingenuity, business acumen, Vlasov was the Laker of the cruise industry, ships were far from luxurious but offered good value, We came home to the UK in 1965 Noelle, myself and two infant children a four-berth cabin, no en suite in those days, excellent food and service 6 weeks Auckland, Sydney, Melbourne, Adelaide Freemantle, Singapore, Colombo, Aden Suez, Naples then Southampton. All for £309!!

SITMAR was founded in 1935 by a Russian Alexandre Vlasov, Vlasov traded as a coal broker, he traded around the Med chartering ships as needed. As the business grew, he transferred two ships from a British Company that he owned, the Campden Hill Steamship Company, both ships were lost during the war.

After the war there were thousands of displaced persons in Europe, many of whom were selected to emigrate to Australia, Vlasov won contracts from the Intl.Refugee Organisation to transport these migrants, two ex US Navy troop ships were purchased and refitted for the contract.

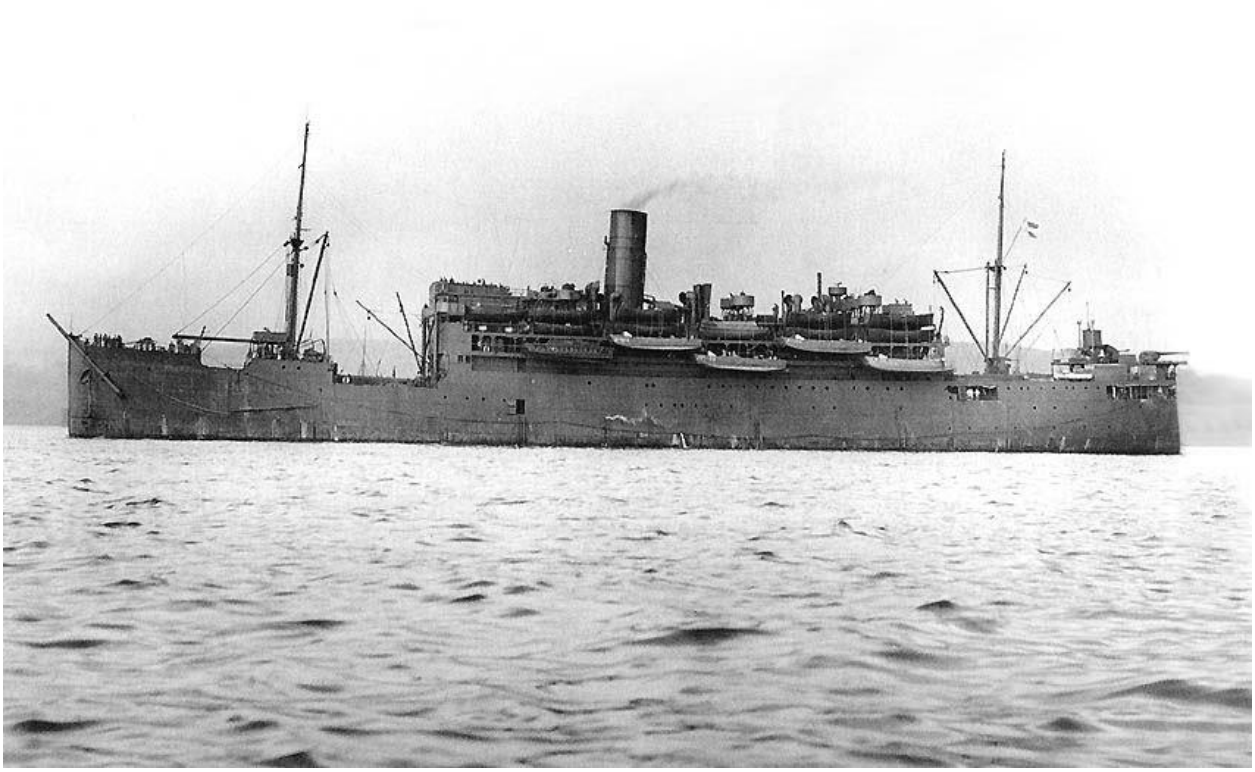
C3 transport ships were Victory ships, these succeeded the Liberty ships, the last of which was built in 1944. USS Charger became the Fairsea initially converted to carry 1900 passenger in very austere conditions to Australia and North America, a stipulation of the contract was that the return trip was to be made without passengers.

In 1955 SITMAR won a five-year contract from the Australian Govt for the passage of emigrants, the famous “£10 Poms” by this time Sitmar had expanded the fleet,

Fairsea had been refitted, the second C3 converted to Fairsky, Castell Felice Ex British India Kenya, Fairstar a Bibby line troopship, Oxfordshire, followed in 1963. These ships maintained regular service to Australia and NZ up until 1970 when the Aus. Contract was lost to Chandris, Castell Felice was scrapped, Fairsea having been scrapped in 1969 after an engine room fire.

SITMAR Entered the north American Cruise market with two refitted Cunard ships where they were very successful, other ships operated out of Australia, again, very successfully so that in 1982 their first new build was ordered the Fairsky4, Fairmajesty launched in1988 but was part of the P&O acquisition of SITMAR and Princess Cruises becoming Star Princess, Arcadia, Ocean Village, Pacific Pearl and finally Columbus. In 1960 P&O were the world`s largest shipping company,

Castell Felice berthed at Southampton

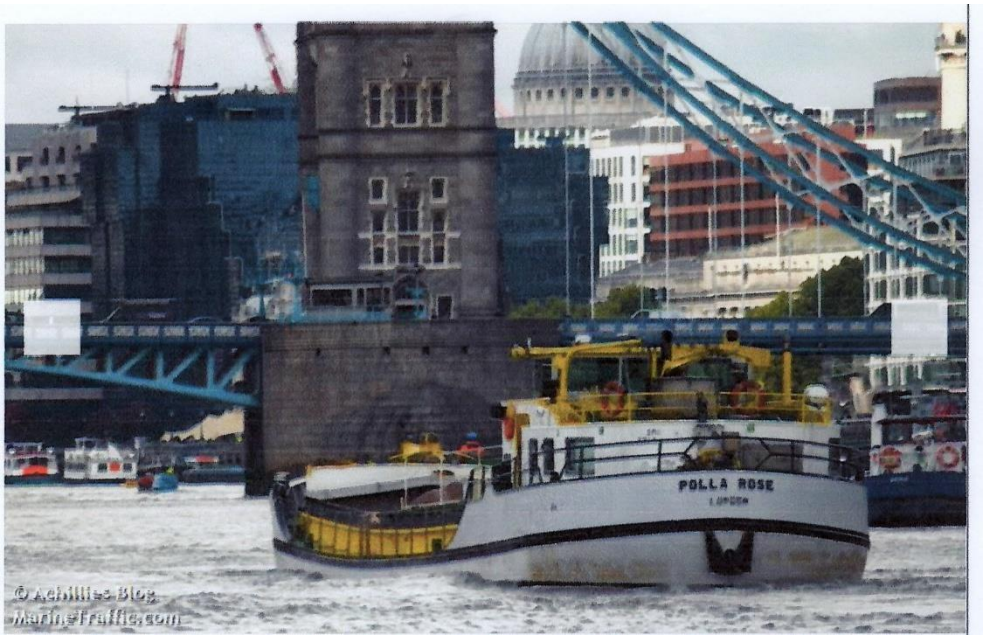


As H.M.S. Keren, infantry landing ship, formerly British India`s Kenya before conversion to Castell Felice !

TWO ROSES BETWEEN THORNS

General carrier Polla Rose on the River Thames - YouTube

Polla rose coming off the slip at Denton on the Thames - YouTube



A recent Tony Robinson television programme featured the coaster Polla Rose working in central London. I thought it was time for a short piece on the Polla Rose and a sister ship Yasam Rose, which have been quietly working on the Thames for several years.

In 2008, the Polla Rose was laid up in the Manchester Ship Canal, having been working in the inland grain trade there for E. Muller since 2002. She was bought by L.Brown and M.Lee of Thames Shipping Ltd, and towed round to the Medway by the Griffin tug Princeton. She was slipped for a refit and MCA Inspection at the Acorn Shipyard in Rochester. She was put into the aggregate trade, running from J>J> Prior's quarry at Fingringhoe to Mohawk Wharf at Silvertown, where Euromix Concrete had a concrete batching plant. The arrangement for manning her was to have two crews of 3, working one week on and one week off, on a 7 day working basis.

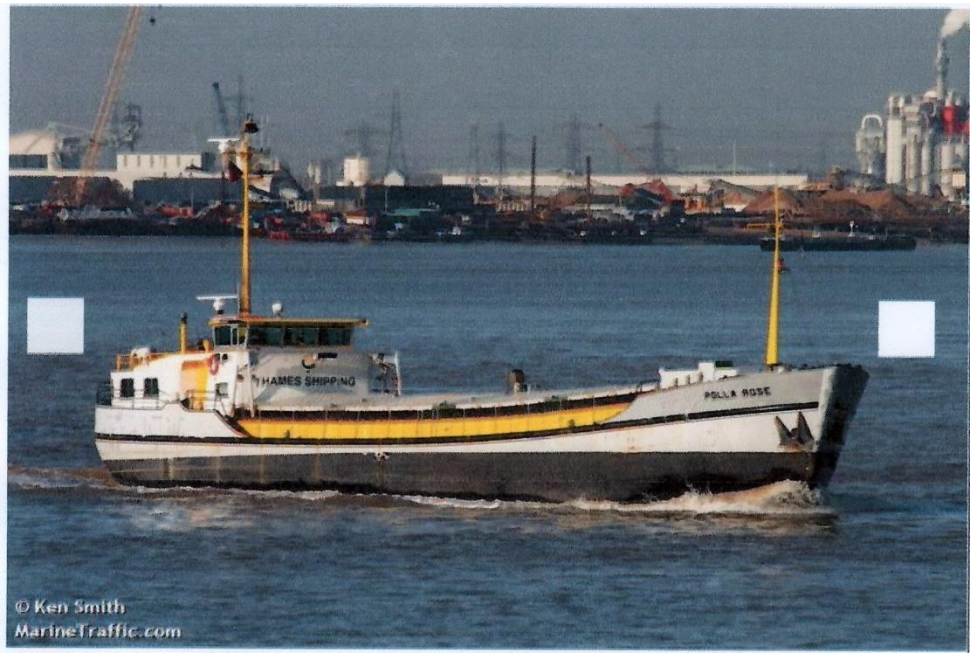
In 2013 Thames Shipping acquired a second ship, the Yasam Rose for the same aggregate run. Both ships also regularly brought aggregate from Fingringhoe to RMC's plants (later Cemex UK's) at Battersea and Fulham. In November 2016 the crew of Polla Rose rescued a drowning man from the river near Wandsworth Bridge, and all three received awards from the Royal Humane Society.

In August 2017, Thames Shipping Ltd. announced on Twitter that having lost all their trade, their vessels would be laid up and for sale or charter until further notice. This was presumably because of the planners' refusal for the extension of JJ Prior's quarry at Fingringhoe. Thereafter, both vessels seem to have had occasional freights taking aggregate from Dagenham to Fulham for Cemex UK.

In early December 2020, the Polla Rose was acquired by HCH Marine, and after a slipping at Denton, she has since been operating a twice daily run from the Tilbury Grain Terminal to the Erith Oil Jetty for ADM's processing facility nearby. This cargo is carrying imported oilseed rape because of poor UK harvests recently, and may not continue in future years.

HCH Marine was established in 1990, initially operating a fleet of tugs. In 2004 they acquired the Purgo. They then had her converted in Lowestoft from a dry bulker into an edible oils tanker with stainless steel tanks. She runs regularly from Jurgen's jetty at Purfleet to the ADM plant at Erith. The Yasam Rose has been lying on a mooring at Denton since last March.

DETAILS OF SHIPS INVOLVED



POLLA ROSE

1. POLLA ROSE She was built in 1971 by Scheepswerven West-Vlaamse at Oostkamp in Belgium as the DOLFIJN. Her Summer deadweight her7.22m x 1.6m.

2. PRINCETON She was built in 1965 by Werft Schulte & Bruns at Emden as the KAPITAN ENGLER. She is of 148 grt. Her dimensions are 28.71m x 6.94m x 3.3m. She was bought by Griffin Towage & Marine in 2005 and renamed PRINCETON. She was still working for Griffin in 2014, but appears to have been scrapped since.

YASAM ROSE

3. YASAM ROSE She was built by the North Sea Shipyard at Ringkobing in Denmark in 1983 as the BOISTERENCE for the London & ROCHESTER TRADING Co. Ltd. Her deadweight is 1020 tonnes. She has a 468 bhp 4-stroke Callesen diesel engine giving 10 knots. Her dimensions are 58m x 9m.

PURGO

4. PURGO She was built in 1962 by Groninger Scheepswerf & Handel at Appingedam in the Netherlands as the EXODUS. Her Summer deadweight is 580 tonnes, and her dimensions 55m x 7m. Her engine, fitted in 2004, is a 12 cyl 510hp Caterpillar diesel giving 10 knots.

Kent Refinery

Arrival Of First Tanker To Kent Refinery (1952) - YouTube

Arrival Of First Tanker To Kent Refinery (1952) - YouTube

The BP Refinery (Kent) was on the Isle of Grain in Kent. It was commissioned in 1953 and had a maximum processing capacity of 11 million tonnes of crude oil per year. It was decommissioned in August 1982.

The oil industry was first established on the Isle of Grain in 1908 when, in association with the naval dockyard at Sheerness, the Admiralty constructed an oil storage and ship refuelling depot on the Medway. In 1923 the Medway Oil and Storage Company (MOSCO) constructed an oil refinery and tank farm adjacent to the Admiralty site. MOSCO was absorbed into the Anglo-Persian Oil Company (APOC) in 1932 after which oil refining at Grain ceased. (APOC was renamed the Anglo-Iranian Oil Company in 1935, then British Petroleum Company in 1954).

Further up the Medway at Kingsnorth, Berry Wiggins and Company started constructing an oil refinery and tank farm in 1930. This refinery was expanded both before and after the Second World War, and finally closed in 1977

In 1943 a spur pipeline (T/D/G) was constructed to the Isle of Grain from off the Thames to Dungeness pipeline (T/D) which fuelled **DUMBO**, part of Operation Pluto[The spur line to Grain provided access to the Admiralty oil storage facility

The BP Refinery (Kent) was one of several oil refineries – including Esso Fawley on Southampton Water – which were built in the post-war period for the production of refined petroleum products..

The post-war refineries changed Britain's coastal geography: they required large amounts of land and were built in previously rural coastal areas. The refineries also provided feed-stock for the land-hungry and intrusive petrochemical industry often built adjacent to refineries. Despite reservations about these developments, the UK government approved the Kent and Fawley refinery plans in 1947, although the developments took some years to be built.

The Anglo-Iranian Oil Company started construction of the Kent Refinery**,** also unofficially known as Grain Refinery, in 1950. The managing agent was the Badger Company with construction undertaken by McAlpine and Wimpey.

Pre-construction groundwork on the South of the site including the filling-in of several unwanted watercourses including Well's Fleet, Littlechalk Fleet and most of Greatchalk Fleet, this entailed the use of one million cubic yards) of soil obtained from higher ground to the north of the site. Towards the south-east of the site the ground level was increased with six feet of compacted sand, dredged from the sea.

Initially five new jetties were constructed on the River Medway with the capacity to handle ships of 32,000 tonnes A deep-water channel was dredged to allow ships to access the jetties from the Thames Estuary. This channel was 4 miles long and 800 feet (244 m) wide and was dredged to give a minimum water depth of 28 feet (8.5 m) at low water.[

At its peak the construction activity on the site employed 8,000 workers; 1,500 were housed in a construction camp at Wallend in the centre of the site.

In 1952 the Thames to Grain pipeline was recommissioned to carry refined fuel from the BP Kent refinery to the Walton storage depot. The movement of fuel was now in the opposite direction to that originally designed.

The first phase of construction cost around £40m

The first tanker containing 27,000 tonnes of crude oil from the Middle East arrived at the refinery in October 1952.

The initial phase of the refinery was commissioned in several stages: Stage 1 – the No. 1 crude distillation unit plus the product sweetening and blending plants, in February 1953.

The East Coast floods of January 1953 inundated the refinery site, covering it in water and mud.[5] The flood displaced some of the pipes on the pipe tracks. Nevertheless, the refinery went on-stream three weeks later in February 1953.

The refinery had an initial throughput capacity of four million tonnes per year of crude oil. Crude oil mainly came from the Middle East with smaller amounts from Libya, Nigeria and South America.

Following the initial phase of commissioning the refining capacity was increased and new processes were planned, constructed and commissioned over the period 1956-60.

The availability of suitable feed-stock on the site lead to the construction of several facilities adjacent to the refinery. The South Eastern Gas Board SEGAS constructed a gas-from-oil plant in 1957 The gasification plant had a projected capacity of 80 million cubic feet, gas mains were laid from the Isle of Grain to Strood to feed gas into a trunk main system to provide gas south of the Thames A petrochemical plant to manufacture synthetic fibres, a joint venture by BP and California Chemicals known as BP-California Ltd, was planned and constructed from 1960.

By 1961 the cost of the refinery was £88 million.

In 1962 a third £3.5m catalytic reformer was built together with a £5m aromatics plant. The main products of this plant were ortho and para xylene. The para xylene was for the preparation of terephthalic acid, an intermediate in the production of

terylene. Three tall distillation columns of the orthoxylene unit, part of the aromatics plant, were constructed in 1962. By 1964 the capacity of the refinery had increased to 9.5 million tonnes per year it was the second largest refinery in the UK, second only to Fawley (11,500 tonnes per year). Kent refinery processed about fourteen per cent of the UK's oil. By 1971 it was capable of processing 11 million tonnes. The refinery began to process British North Sea crude oil from June 1975, this was with the arrival of the tanker Theogennitor with crude from the Argyll oil field.

The rising price of oil in the 1970s resulted in a slump in consumption, which meant there was a considerable excess of refining capacity throughout Europe. In August 1981 BP Oil announced that the BP Kent refinery would close in 1982 with the loss of 1,670 workers plus another 1,000 construction jobs in the area. The Kent refinery closed on 27 August 1982. The oil storage facility continued for some years; the last oil flow by rail from Grain ran in 1999. After closure some of the western part of the site was developed by British Gas as a liquefied natural gas plant Grain LNG Terminal and some as a Thamesport container terminal

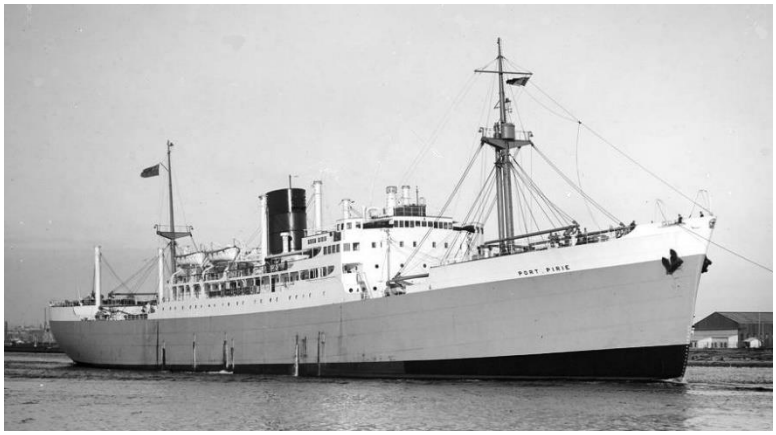
Shipbuilding Swan Hunter Richardson Part 3 from 1945 - 1959

1946 Regent Tiger for CT Bowring 9960 GRT

1954 Capulet

1966 Broken up Santander

1947 Port Pirie for Port Line Ltd 10561 GRT



1972 Broken up Castellor

1947 Port Napier for Port Line 11879 GRT

1970 Broken up Kaohsiung 1516 GRT

1948 Mercian for Ellermans 1537 GRT

1970 Rinoula

1974 Gabriella

1976 Donatella I

1977 Stabia I

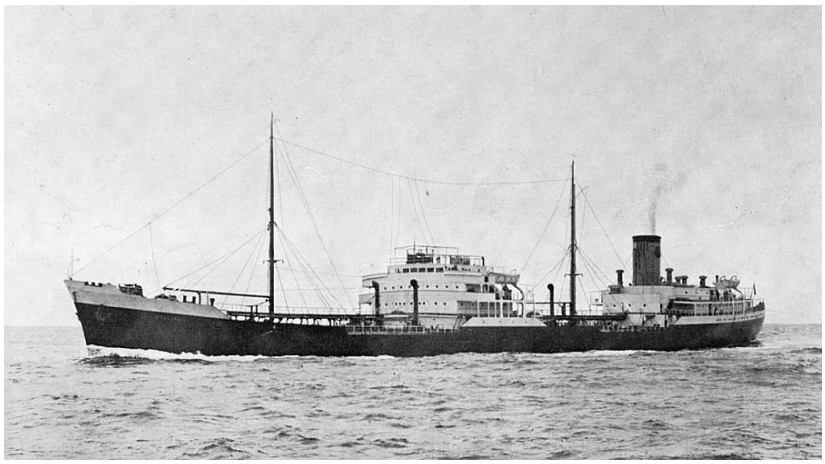
1979 Sank

1948 Foucald for Cie de navigation & vapour 9066 GRT

1967 Moselle for French Navy. Converted to accommodation ship for Pacific Test Centre

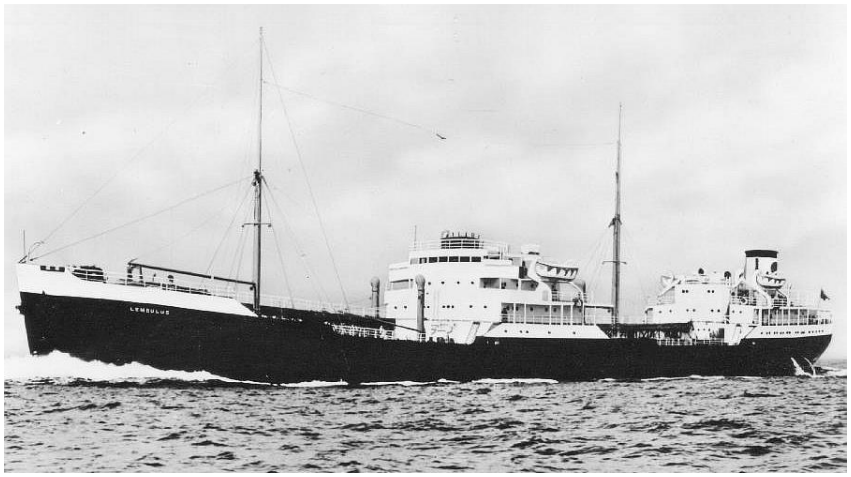
1978 Broken up Brest

1948 Hyalina for Anglo- Saxon Petroleum 12267 GRT



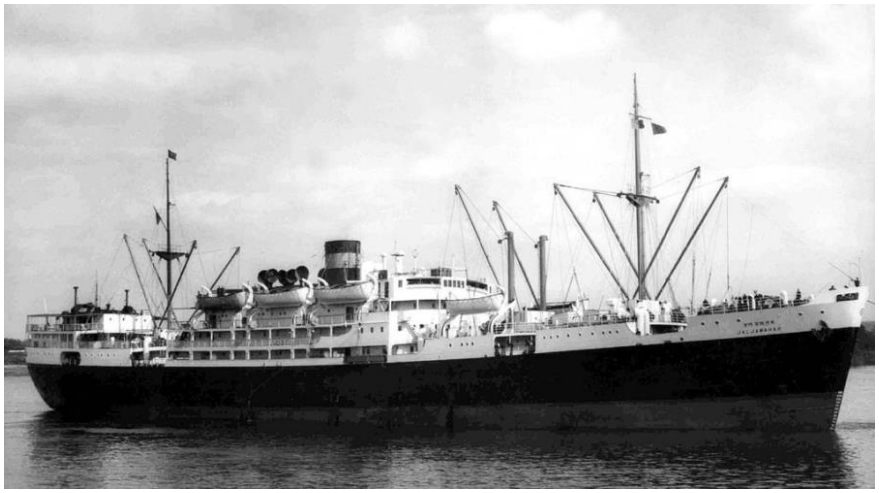
1961 Broken up Blyth

1948 Lembulus for Anglo Saxon Petroleum 6503 GRT



1960 Broken up Bruges

1948 Jaljawahar for Scindia SS 8784 GRT



1954 State of Madras

1961 Broken up Bombay

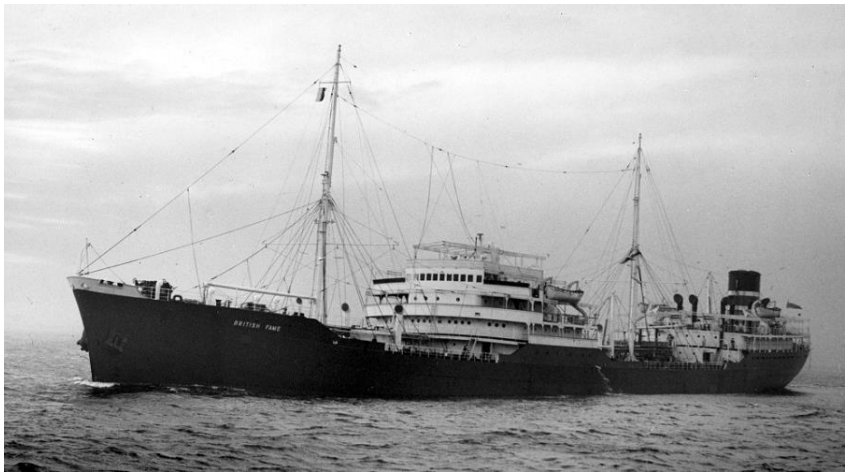
1948 Gothic for Shaw Savill & Albion 15902 GRT

1952 Refitted as Royal Yacht

1968 Serious fire en route to Wellington

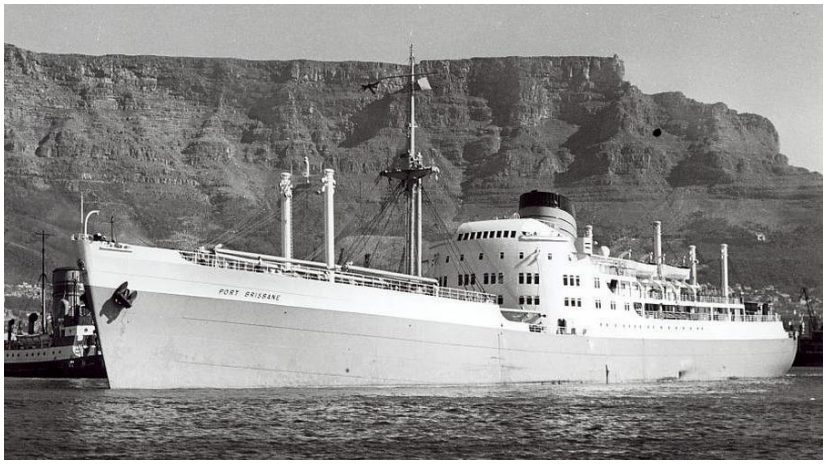
1969 Broken up Kaohsiung

1949 British Fame for British Ranker 11203 GRT



1972 Broken up T W Ward Brtion Ferry

1949 Port Brisbane for Port Line 11942 GRT



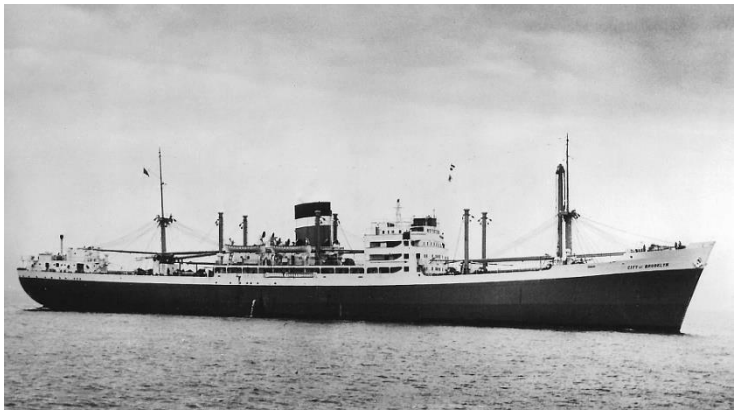
1975 Broken up Hong Kong

1949 Staland for A/S Havtank 8522 GRT

1959 Stolt Avance

1963 Broken up Alang

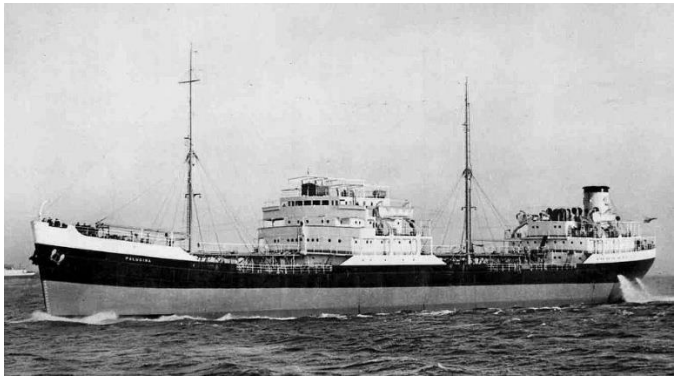
1949 City of Brooklyn for Ellermans 7557 GRT



1967 Lefkadios

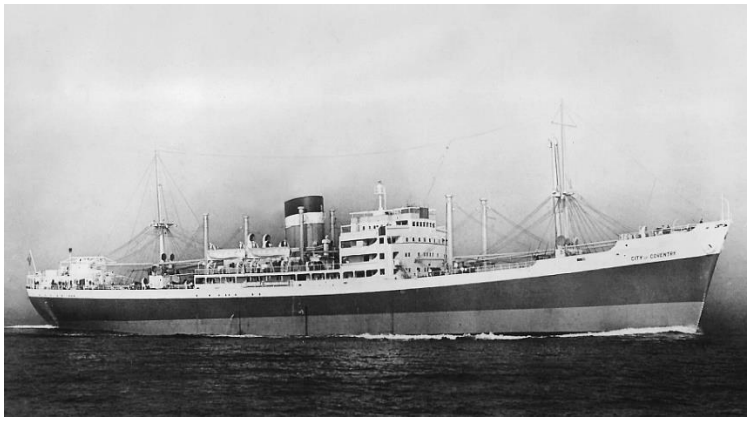
1970 Sank

1949 Paludina for Anglo Saxon Petroleum 6414 GRT



1964 Broken up Bruges

1949 City of Coventry for Ellermans 7568 GRT

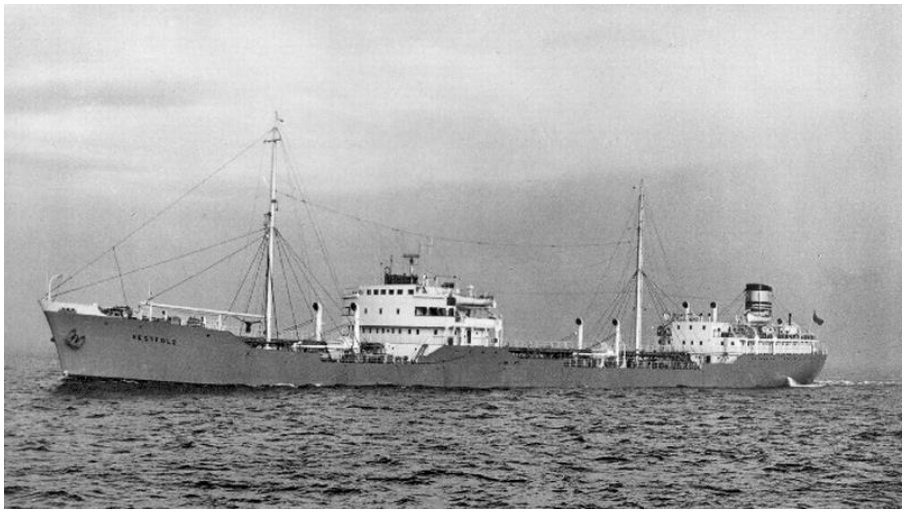


1967 Ingrid

1969 Annie

1970 Broken up Kaohsiung

1950 Vestfold for Johan Rasmussen 8776 GRT



1955 Purinfa Nederland

1960 Fina Nederland

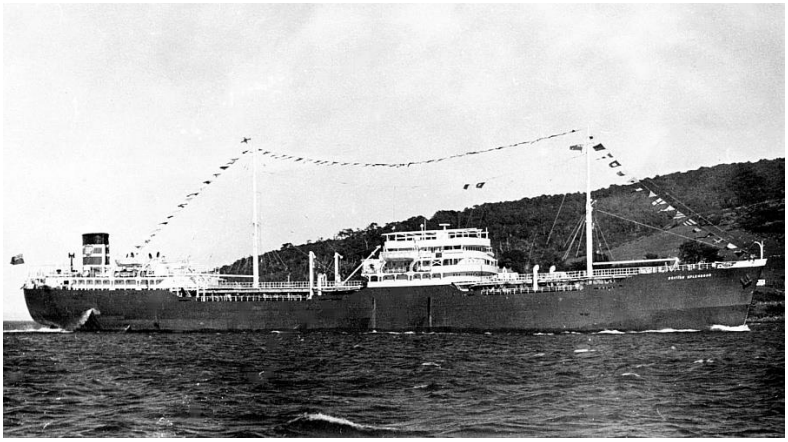
1966 Artemis

1972 Broken up

1950 Punta Medanos for Government of Argentina 7905 GRT

1988 Sank

1950 British Splendour for BP Tanker 11233 GRT



1972 Broken up Santander

1951 British Sportsman for BP Tanker 11231 GRT

1972 Broken up Inverkeithing

1950 Jason for China Mutual Ocean SS (A Holt) 10160 GRT

1972 Broken up Kaohsiung

1950 British Freedom for BP Tanker 11207 GRT

1972 Broken up Kaohsiung

1950 Velutina for Anglo Saxon Petroleum 18666 GRT

1971 Broken up

1950 Assyria for Cunard SS 8683 GRT

1963 Laertis

1970 Holy Trinity

1972 Dromon

1974 Broken up Shanghai

1951 British Bulldog for BP Tanker Co18539 GRT

1972 Broken up Castellon

1951 Port Townsville for Port Line Ltd 8681 GRT

1972 Broken up

1952 Velletia for Anglo Saxon Petroleum 11187 GRT

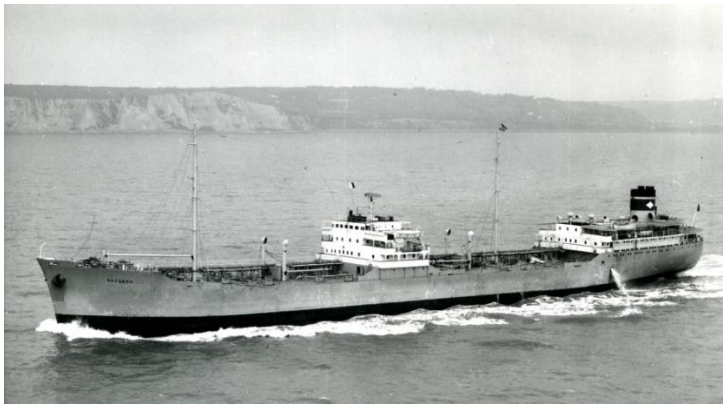
1968 Broken up Castellon

1952 Scottish Lion for Scottish Tanker Co 11169 GRT

1962 Mariverda

1969 Broken up Hong Kong

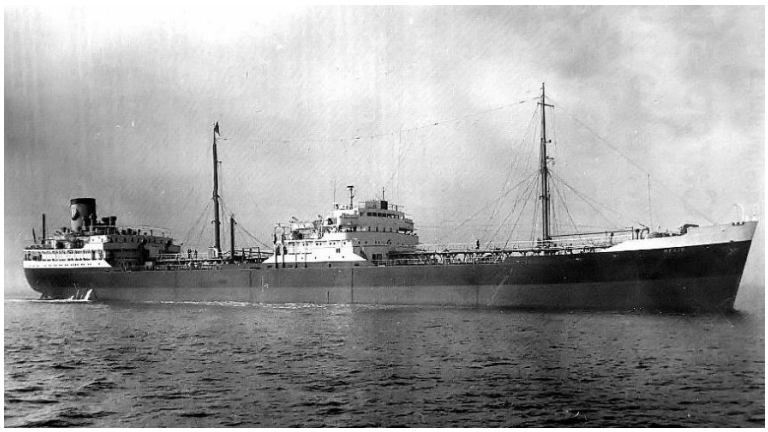
1952 Dagland for JP Pedersen 10266 GRT



1963 Cynthia

1975 Broken up Kaohsiung

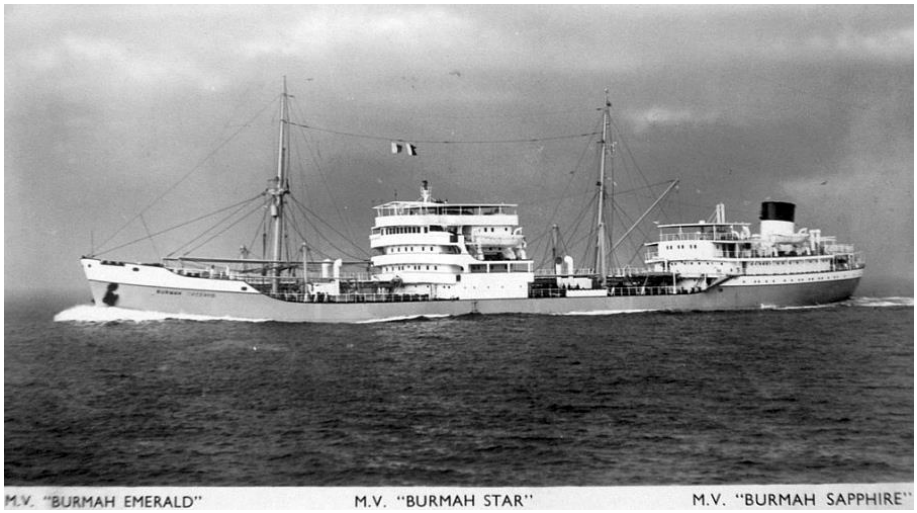
1953 Helix for Anglo Saxon Petroleum 12144 GRT



1962 Kossmatella

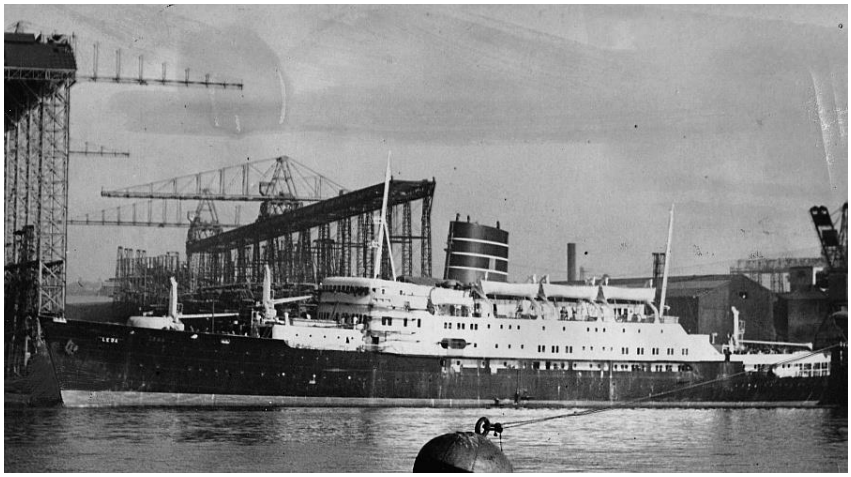
1972 Broken up

1953 Burmah Sapphire for Burmah Oil 6231 GRT



1961 Broken up Hong Kong after collision

1953 Leda for Bergen Line 5570 GRT



1979 Najla

1981 Albatros

1984 Alegro

1984 Albatros

1985 Albastross

1988 Betsy Ross

1989 Amalfi

1991 Star of Venice

2001 Broken up Aliaga

1954 British Merchant for BP Tanker Co 21064 GRT

1972 Petrola VII

1976 Petrola 7

1978 Broken up

1954 Staholm for Helmer Staubo 5520 GRT

1960 Staholm

1962 Gudvor

1972 Golden Land

1978 Broken up Hong Kong

1954 Helcion for Shell Bermuda 12091 GRT

1968 Broken up Castellon

1955 Port Sydney for Port Line 10166 GRT

1972 Akrotiri Express

1974 Daphne

1996 Switzerland

2002 Ocean Odyssey

2002 Ocean Monarch

2008 Princess Daphne

2014 Dapne

2014 Broken up Alang

1955 Heldia for Shell Bermuda 12149 GRT

1973 Broken up Inverkeithing

1955 Cretic for Shaw Savill & Albion 11151 GRT

1971 Drina

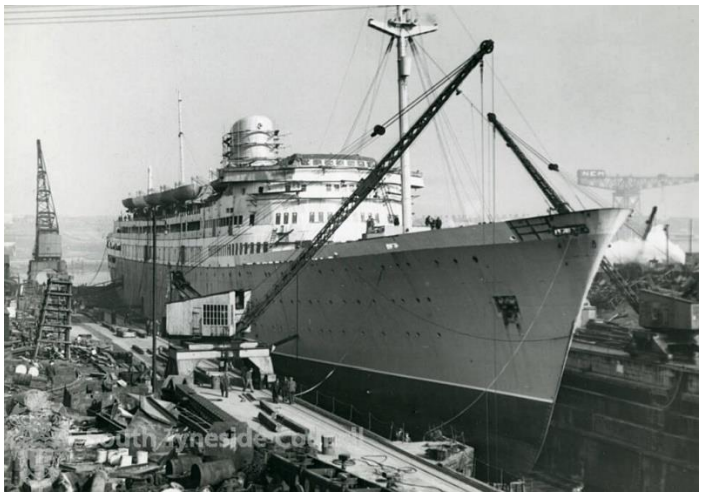
1976 United Vigour

1978 Broken up Kaohsiung

1955 Tidereach for Royal Fleet Auxilliary 13516 GRT

1979 Broken up Bilbao

1956 Bergensfjord for Norwegian American 18739 GRT



1971 De Grasse

1973 Rasa Sayang

1978 Golen Moon

1980 Rasa Sayang

1980 Caught fire

1957 British Valour for BP Tanker Co 22001 GRT

1973 Mesis

1975 Broken up Kaohsiung

1957 Zaphon for Shell Tanker 12723 GRT

1976 Broken up Santander

1957 City of Guildford for Ellerman Lines 4954 GRT

1979 Eurydice

1981 Mighty Spirit

1984 Nirav

1958 British Architect for BP Tanker Co 23124 GRT

1975 Broken up Dalmuir

1958 British Aviator for BP Tanker Co

1976 Broken up Kaohsiung

1958 Stavern for Helner Staubo 9148 GRT

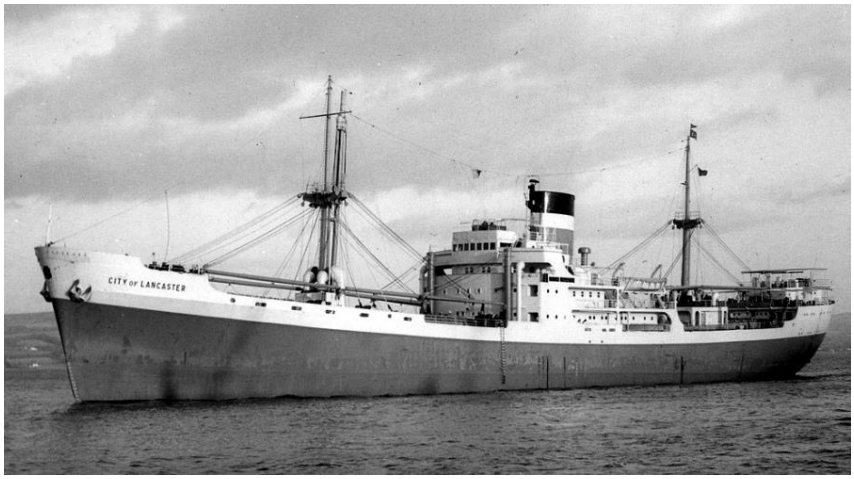
1966 Gudvin

1972 Aeinaftis

1978 Agios Rafael

1979 Broken up Kaohsiung

1958 City of Lancaster for Ellermans 4949 GRT



1979 Lancaster

1982 Broken up San Esteban

1959 British Destiny for BP Tanker 27585 GRT

1975 Agia Trias

1979 Rallytime 1

1982 Gadani Beach

1959 Ellora for British India SN 24246 GRT

1976 Broken up Split

1959 Varicella for Shell Tanker 21834 GRT

1975 Cherry Baron

1983 Broken up Kaohsiung

1959 El Lobo for C T Bowring

1976 Broken up Faslane

Short History of a Line- British Tanker Company and BP Tanker Company

British Tanker Company Limited was the maritime transport arm of the Anglo-Persian Oil Company, the forerunner of BP. Formed in 1915 with an initial fleet of seven oil tankers, the British Tanker Company became the BP Tanker Company in 1955.

From the moment oil was discovered in Persia in May 1908, the issue arose of how best to ship it back to Britain. The Anglo-Persian Oil Company (APOC) initially employed independent contractors; principally the Asiatic Petroleum Company, a subsidiary of Royal Dutch Shell, to carry the oil by sea In 1912 the company acquired its first ocean going ship, the SS Ferrara, a conventional freighter that carried oil products in metal cases. Tankers were unable to berth in Abadan owing to a natural sand bar off the coast known as the Shatt-al-Arab Bar, and often had to

anchor up to 40 miles from the port. This meant oil had to be lightered out to the ships. Accordingly, APOC made two further shipping purchases, a barge Friesland and a tug Sirdar-i-Naphte. This situation remained until the mid-1920s when the bar was eventually dredged to allow ships direct access to the port.

British Emperor, launched in 1916

The directors of APOC soon decided it would be better for the company to own its own fleet of tankers. They set up the British Tanker Company Limited (BTC) in April 1915, with an initial capital of £100,000. The BTC placed orders with two Tyne based shipbuilders, Armstrong Whitworth and Swan Hunter, for a total of seven steam-powered oil tankers. The names of the first ships bore the prefix British, and most future additions to the fleet followed the same naming convention. This acknowledged the fact that the British government had invested heavily in the fledgling company to ensure a supply of fuel oil for the Royal Navy.

BTC's first tanker was the 3,663 grt British Emperor, launched in 1916. She was employed to take oil from Abadan to the ports of Bombay, Karachi, Madras and Calcutta. She was the only BTC vessel not to be chartered by the Admiralty in World War I. Her career eventually ended in 1941, when she was sunk by the German auxiliary cruiser Pinguin, after evading all the Pinguin's attempts to capture her intact.

BTC's share capital was doubled to £200,000 in 1916, and further increased to £3,000,000 in November 1917.

In 1917 APOC made a successful offer to the British government for the assets of the former German-owned Benzin und Petroleum BP AG seized on the outbreak of war. This included the associate Petroleum Steamship Company (PSSC) whose 13 oil tankers passed into BTC ownership. The same year BTC was chosen by the Royal Navy to manage seven RFA tankers, giving it management experience that proved valuable post-war. The PSSC, now a subsidiary of BTC, took over ownership of the locally manned and managed fleet of small craft operating at Abadan.

By 1919 the fleet had grown to 25 ships, a motley collection of new and second hand vessels including the Scandinavia, the only sailing ship ever operated by BTC.[1]

Over the next decade, the demand for oil grew throughout the industrialised world, and BTC expanded its fleet accordingly. By 1924 the fleet numbered 60 vessels. The 60th ship was the new flagship, the 6,998 grt *British Aviator*. She was the BTC's first diesel engined oil tanker, and was at that time the most powerful single-screw motor ship in the world. A significant event was the signing of a contract with P&O in 1923 to supply bunkering facilities for the latter's ships.

The cargoes carried by BTC ships consisted of both crude oil and refined oil products; the main refined products being fuel oil, benzine and kerosine. During the 1920s the principal destination for BTC was the United Kingdom, which accounted

for around half of all cargoes discharged. Twice as much crude oil was delivered to the United Kingdom as refined products, with most of the crude oil being taken to the newly established refineries at Llandarcy and Grangemouth. The next largest destination for BTC was India, receiving 14% of the total cargoes carried. Cargoes discharged in Europe increased steadily, and by 1928 accounted for 13% of the total. In 1928 BTC's fleet consisted of 80 seagoing tankers, five coastal vessels and four government owned steamers, with a further 13 seagoing tankers being chartered by the BTC.

With the Great Depression in the early 1930s, the merchant navies around the world faced increasing unemployment. Through a number of strategic mergers, as well as the continuing support of the Shah of Iran, APOC managed to strengthen its position within the industry, and the BTC's fleet continued to grow until the launch of British Energy in 1931 marked the end of the post-war fleet renewal. In 1932, APOC reached an agreement with Royal Dutch Shell to combine their UK domestic marketing and distribution networks. This involved the transfer of some ships to a jointly owned company, Shell-Mex and BP. With careful management BTC only laid up six ships for an average of six weeks between 1930 and 1935. In 1935, with the Depression receding, the company started placing orders with British shipyards for a further 24 ships. The same year, at the Shah's request, the company was renamed the Anglo-Iranian Oil Company[1]

At the outbreak of the Second World War in 1939, the British government chartered BTC's whole fleet of 93 vessels to transport fuel for its armed forces. In addition the company was made responsible for the management of requisitioned ships and American assistance tonnage. By 1942 the company had 146 ships under its control. The fleet lost 44 of its own ships and six managed ships sunk during the war, many during the Battle of the Atlantic and the Mediterranean U-Boat campaign, with two others so badly damaged they could only be used as storage hulks. In addition two ex-BTC tankers operated by Italian companies were sunk by British submarines while a third was sunk by RAF Coastal Command.

Within two years of peace in 1945, BTC had restored its fleet to its pre-war total of 93 ships. This included the purchase of 10 American wartime T2 tankers and three ex merchant aircraft carriers. The recovery was further bolstered by the building of 57 new tankers, each of 8,600 grt. These new ships increased the tonnage of oil transported from the Abadan refinery, but they remained within the limits imposed by the requirement to sail through the shallow waters of the Suez Canal. At this time the company decided that the old principle of owning 90% of its required tonnage was too onerous and that chartered vessels should be employed to make up the average 50% annual shortfall.[To ease the problems of managing this large fleet an associated shipping company, the Lowland Tanker Company, was formed in association with Mathesons and Common Brothers of Newcastle to operate 10 time-chartered tankers exclusively for BTC

In 1951 the situation changed dramatically, when Iran nationalised its oil industry. AIOC removed all its staff from the country, and for a while had no access to Iranian oil. AIOC set about forming new alliances with other oil producing countries, especially Kuwait and Bahrain. The crisis led to a major emergency logistics operation being undertaken to reroute and repurpose the tanker fleet to cope with the loss of the refining capacity at Abadan. In addition, the Petroleum Steamship

Company's fleet of barges, tugs, lighters and ancillary craft was hastily evacuated to Basra and Kuwait

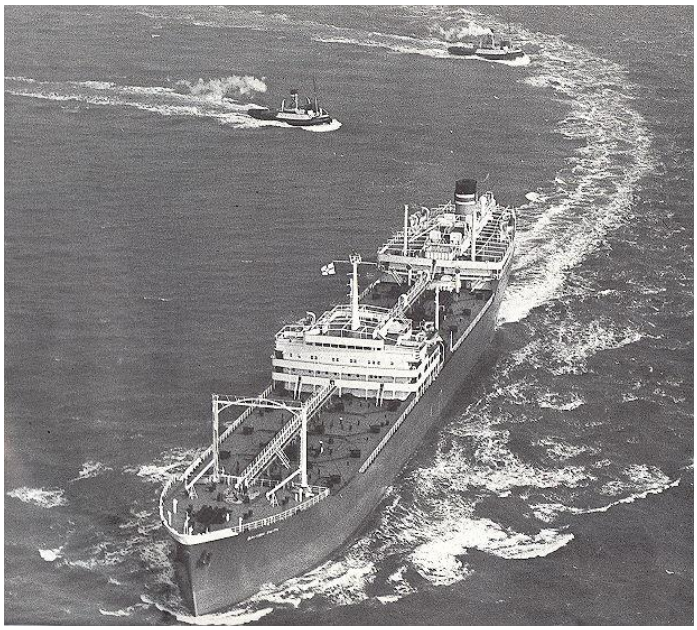
S.S. British Sovereign (1950-1959) - YouTube

In the early 1950s BTC began increasing the size of its deep-sea ships by building 13 so-called 'supertankers', each of 18,000 grt. These larger ships were particularly useful during the Suez crisis of 1956, which closed the Suez Canal and forced ships to sail around the Cape of South Africa, adding 9,000 nautical miles to their journey.

In November 1954 AIOC renamed itself the British Petroleum Company, and the BTC became the BP Tanker Company from 1 Jun 1956, British Soldier being the first

British Adventure heralded a new era for the oil tanker. At 30,000 dwt, she was the largest tanker in the world

1956 Suez crisis diverts tankers around the Cape of Good Hope. The Suez canal is closed for eight years



British Faith 1957

British Beech 1964

By its 50th birthday, the BP Tanker Company fleet amounted to 120 ships, totalling 3 million dwt

The 1970s brought an energy crisis: with the Organisation of Petroleum Exporting Countries (OPEC) members taking control of their national resources, price rises and production cuts in reaction to Middle Eastern conflicts.

British Forth 1973

There were far more ships than there was oil to carry – and the world's fleet needed to be reduced, quickly.

After the 1989 grounding of Exxon Valdez off Alaska, all tankers trading oil with the US had to be double-hulled. BP's first double hull was the 210,000 dwt British Valour.

British Progress

Century Class

The Century Class are the largest tankers to be delivered under BP Shipping's 2016-17 fleet rejuvenation project and carry crude and dirty products on BP business.

Named in commemoration of BP Shipping's proud 100-year history,

The Century class are Suezmax tankers, the largest tankers able to transit the Suez Canal in a laden condition and specifically designed to fit through the expanded Panama Canal making them particularly versatile. They can lift over one million barrels of oil and will operate worldwide, predominantly focused on long haul dirty trades.

At the time of delivery, the Century class was amongst the most technologically-advanced tankers in the world and the most fuel-efficient for their size and power.

R class crude oil tankers

The R class have names handed down through BP Shipping's proud 100-year history. This is a long-standing BP Shipping tradition with certain R class vessels having up to four predecessors of the same name. The first-in-class is named after one of BP's core values, Respect.

The R class are Aframax tankers. 'AFRA' is an acronym for 'Average Freight Rate Assessment' and denotes a category of crude oil tankers that can economically transport a significant amount of cargo from 80,000 to 120,000 tonnes deadweight. The

R class are in the upper region of this range at 109,584 tonnes deadweight and have been optimized for key BP trades. They typically carry crude oil or dirty products and operate worldwide.

At the time of delivery, the R class were among the most technologically advanced tankers in the world and the most fuel efficient for their size and power.

Mariner class carry clean products, dirty products and crude oil on BP business.

Named in honour of the many BP Shipping mariners, seafarers, engineers, officers and cadets in BP Shipping's proud history, the Mariner class have names which have been handed down through BP Shipping's proud 100-year history. This is a long-standing tradition; indeed, certain Mariner class vessels have had up to four predecessors by the same name.

The Mariner class are medium range tankers at 25,000 - 54,999 tonnes deadweight. The larger of this size are often referred to as 'Handymax' tankers. At 45,999 tonnes deadweight, but with a large cubic capacity optimized for key BP trades, these vessels have the flexibility to adapt to multiple worldwide trades, clean or dirty, long haul or short haul, east and west hemisphere.

Some were fitted with a 'Mewis duct', an energy efficiency device positioned in front of the propeller that reduces fuel consumption and emissions by up to 7%. All of the Mariner class are IMO 3 capable allowing the carriage of certain bio fuels, vegetable oils and benign chemicals.

Cloud Class

British Cumulus now Maersk Cumulus

Highly versatile, they were specifically designed for key BP trades and carry clean and dirty products and occasionally crude oil on BP business. Some of their maiden voyages saw them loading palm oil or vegetable oil in pristine tanks.

The Cloud class are medium range tankers at 25,000 - 54,999 tonnes deadweight. At 39,999 tonnes deadweight and also known as a ‘Handysize’, they predominantly operate in north Europe and the Mediterranean.

Equipped with a variety of options to specialise in key regional markets, three vessels are ice-classed, winterised with heating coils ready to operate in north European & Baltic Sea ice zones during winter months. Two have exhaust gas scrubbers, a first for BP shipping and among the first in the industry for vessels of this type/size.

The scrubbers remove sulphur oxides (SOx) and particle matter from exhaust emissions making them fully compliant with North Sea/Baltic legislation while burning heavy fuel oil. Having scrubbers also future-proofs the vessels for the global low sulphur oxide emissions legislation coming into effect in 2020. Three of the Cloud class are fitted with stern manifolds giving the ability to load/discharge from the rear of the ship - of particular importance in certain Mediterranean distillates trades.

Partnership Class

British Partner

British Contributor

At 173,400 cubic metres, they are the largest LNG vessels BP Shipping has ever operated. Substantial growth in established markets such as India, China, the US and Australia, coupled with the arrival of new consumer markets, such as Pakistan, Jordan, Egypt and Bangladesh, are significantly boosting demand for LNG.

They have state-of-the-art, tri-fuel, two-stroke, ME-GI engines that utilise boil off gas from cargo tanks as fuel. They achieve a thermal efficiency of around 51.7% making them one of the most efficient marine engines on the market today, reducing CO2, NOX and SOX and particulate emissions when operating in gas mode.

Gem Class

Can carry a cargo of 155,000 cubic metres of liquefied natural gas (LNG). These vessels are equipped with a dual-fuel diesel-electric (DFDE) propulsion system that increases their fuel efficiency and reduces fuel costs. The dual-fuel technology allows the diesel engines to run on "boil-off" gases from the cargo tanks or on conventional diesel fuel, consuming about 40 tonnes

per day less fuel than an LNGC of similar size with a conventional steam turbine propulsion system. Four diesel-electric engines provide greater propulsion redundancy and a bow thruster assists mooring operations.

The builder of these ships is Hyundai Heavy Industries Limited in Korea. They are British-flagged, with Douglas, Isle of Man as their port of registry.

WSS quiz answers - edition 26

1 Who was the first officer on RMS Titanic?

William Murdoch. He went down with the ship, and his body was never recovered.

2 Which ship was built in Jackson, Florida, and ran aground steaming from the Delaware river to the Thames Estuary?

SS Richard Montgomery

3 Bartholomew Roberts was a pirate during the early 1700s, especially successful in the Caribbean. By what name was he also known?

'Black Bart'

4 A fishing boat with the registration HH is based in which port?

Harwich

5 Born in Canada, in 1839, he was awarded the first British transatlantic steamship mail contract, and in the following year, formed a company in Glasgow with shipowner Sir George Burns and the engineer Robert Napier. Who is he?

Samuel Cunard

6 Which ship is next in this sequence: Lusitania, Mauretania, Bremen, Normandie?

Queen Mary – these were the holders of the eastbound Blue Riband for transatlantic crossings, starting in 1907 with Lusitania. Queen Mary took the Blue Riband in 1938

7 There are five fighting arms of the Royal Navy – Fleet Air Arm, Royal Navy Surface Fleet, Royal Navy Submarine Service, Royal Marines, and which other?

Royal Fleet Auxiliary

8 The Royal Navy aircraft carrier, HMS Queen Elizabeth, is capable of carrying how many aircraft – a) 40, b) 60 or c) 80?

b) 60

9 If you took a river cruise down the river Danube, from Passau in Germany to the delta in Romania, how many capital cities would you pass through?

Four – Vienna (Austria), Bratislava (Slovakia), Budapest (Hungary) and Belgrade (Serbia)

10 Southend Pier was taken over by the Royal Navy in the Second World War. What name was the pier given?

HMS Leigh