

Broad Character: Industry
Character Type: Shipping Industry
National Perspective

INTRODUCTION: DEFINING/DISTINGUISHING ATTRIBUTES

The Character Type Shipping Industry includes the following Sub-types:

- Boatyard
- Shipyard
- Commercial shipping route

This Character Type refers to areas dominated by activity relating directly to the non-recreational use, maintenance, storage and administration of shipping.

A 'Boatyard' is a place where boats are built and stored (<http://thesaurus.english-heritage.org.uk>).

A 'Shipyard' is a place where boats or ships are built or repaired (<http://thesaurus.english-heritage.org.uk>).

A 'Commercial shipping route' refers to a route regularly used by ships engaged in commerce or trade. This may be defined by usage or in some areas, formally defined by regulation. It may be distinguished from broader 'navigation routes' by its specific or overwhelming association with commercial shipping as opposed to naval, recreational or ferry traffic.

The shipping industry has a substantial direct socio-economic impact for today's society. It's impact as a trade facilitator across all sectors of the economy is huge but viewing the industry in more specific terms, recent statistics have shown that the shipbuilding and repair industry employs about 25,000 people (2004 statistics, Annual Business Inquiry (ABI) 2005). Strong competition from Eastern Europe and the Far East has made commercial shipbuilding a highly challenging market for European shipyards, and there are few remaining large English shipyards operating in the commercial sector.

HISTORICAL PROCESSES; COMPONENTS, FEATURES AND VARIABILITY

Typical components of this Character Type include:

- docks
- basins
- wrecks
- wharfs, quays, jetties and slipways
- warehouses, offices, depots and travelling cranes
- dockworkers cottages
- specifically associated transport systems (such as railways, roads, tramways)

Docks are places to load and unload goods and supplies as well as areas to undertake ship repair and maintenance. Wooden ships required frequent attention to the caulking between the planks. In the days before wire rigging, the heavy hemp rope needed regular adjustment and replacement. Dry docks are particularly suitable for ship repair as ships can be floated in on high tide and propped in position. When the tide falls, the dock gates are closed and the ship is left fully accessible and dry for work to be carried out. Constant wear and tear on wooden hulls meant a steady demand for dry dock facilities (White 2004: 96).

Evidence for prehistoric and early medieval vessels in England is sparse. This is primarily due to the perishable nature of the materials from which these vessels were constructed. It is believed that log boats (canoes made from hollowed out tree trunks) and hide boats were probably very common, and used during early periods as ferries,

fishing boats, trading or war vessels (Friel 2003: 22; McGrail 2001). The remains of large Iron Age log boats have been found in Poole Harbour and at Hasholme, East Yorkshire. They continued to be used well into the medieval period and one from a tarn in West Yorkshire has been dated to the late 14th century (McGrail 2006, 32-4). Hide boats have probably been in use from the at least the Bronze Age but due to their nature survival is rare. There is documentary evidence of their use in the seas of North West Europe from writers of the Classical period onwards and a gold model boat of the 1st century BC from Brougher Ireland is thought to represent one of these craft (McGrail 2006, 30-2). Their use continued, particularly in the western parts of the British Isles, well into the medieval period and they are still being built and used in Wales and Ireland to the present day.

Although ships and boats made from wooden planks have a better survival rate than log or hide boats, few early medieval examples have been found in England. Important examples of early plank-built vessels include the Dover Bronze Age boat dated to c. 1300 BC. It was found in freshwater sediments with associated peat layers about 30m from the course of the modern River Dour. A long sequence of channel-narrowing puts the original context of the Bronze Age boat in a riverside location, with direct access to the sea. This indicates some use of the area as a refuge or landing place for that period (for further details see Clark 2004). Other plank-built Bronze Age boats include those found in the Humber such as Brigg and Ferriby.

One of the most famous examples of an early medieval boat is the Sutton Hoo ship, the ghost traces of which were discovered in an Anglo-Saxon burial mound near Woodbridge (Suffolk) (Friel 2003: 24). Other medieval ships include the Magor Pill and Newport ships from Wales but English examples are rare.

The location of shipbuilding sites seems to have been rather haphazard in England's medieval landscape. The sites themselves were rudimentary, although ships were being built in simple docks from at least the 1330s (Friel 2003). Accounts from between the late 13th and early 15th centuries state that shipbuilding was still based on clinker construction (Friel 2003; McGrail 1998; 2001).

Changes in European shipping during the 15th century were influenced by the skeleton-built Portuguese caravels. Skeleton construction involved nailing hull planks to a pre-erected skeleton of strong frames; the planks did not overlap, but were laid against each other, giving the hull a smooth exterior (Friel 2003; McGrail 1998, 2001). Other 15th century shipping changes included the introduction of two- and three-masted ships and a decline in the number of large ships. The latter may have been due to changes in the demand for goods being transported. Merchant ships of more than 100 tons were uncommon in England until the late 16th century, when they were constructed for long-distance bulk trade and war (Friel 2003; McGrail 1998, 2001).

The rapid development of the shipping industry and trade in the middle decades of the 18th century was linked to increased competition among the expanding European powers as well as processes such as capitalism and colonialism (see Davis 1962; Dellino-Musgrave 2006; Staniforth 2003). The English shipping industry underwent a particularly rapid development following the Seven Years War against France (1756-63), and the rate of English naval construction rapidly increased (see Parry 1971: 113-129). Before that war, French warships were considered to be better designed and faster than the English ships (see Lavery 1983; Parry 1971: 119). Subsequently, the English shipping industry promptly flourished since they based their ship designs on those of the French, the English becoming a maritime power from the end of the 18th century onwards. By contrast, after the declaration of the Seven Years War, the French shipping industry remained steady, and after some time, declined.

During the mid 19th century, technological and economic progress gained momentum with England as a world leader in the development of steam-powered ships and railways, and later the internal combustion engine and electrical power generation. , England became one of the leading industrial powers of the 19th century, due in no small part to the strength of its shipping industry (Hedges 1989, 5). During this period, steamships gradually replaced sailing ships for commercial shipping. Many new demands on rapid freight transport were made which could be more easily met by steam-powered vessels, especially from the 1840s when iron hulls and the screw propeller were introduced (Hobsbawm 1999; Pearsall 1985).

In the 1900s, the internal combustion engine and gas turbine replaced the steam engine in most ship applications. Trans-oceanic travel, transatlantic and transpacific, was a particularly important application, with steam powered ocean liners replacing sailing ships, culminating in the 'Superliners' such as those of the White Star Line, including the unfortunate *RMS Titanic*.

The impact of U-boats (military submarines) operated by Germany during the two World Wars underlined the importance of shipping to England's economic sustainability. In practice, U-boats were most effectively used in an economic-warfare role, enforcing a naval blockade against enemy (in this case, British) shipping. Remains of several U-boats are present in English waters, in particular on the east coast.

Although the historic importance of sea travel for passengers considerably decreased during the 20th century due to the development of road transport and especially aviation, it is still very effective for short trips and pleasure cruises. Sea transport remains the largest carrier of freight in the world, most of it international rather than between domestic ports.

VALUES AND PERCEPTIONS

Historically, the development of new technologies in shipbuilding has been perceived as a means of increasing the speed, efficiency and volume of links with distant regions, places and people.

Shipbuilding has inspired many artists and writers but beyond that, the imprints that the shipbuilding industry has left on today's landscape are widely and often proudly accepted and valued as reflecting their areas' part in England's long maritime heritage.

Today, the shipping industry is commonly perceived as a means for leisure and recreation, with many overlooking its still-vital role in facilitating the country's trade. Shipping can also be perceived as an expanding global business, offering the opportunity for commercially competitive shipping industries to share in this growth providing significant inward investment opportunities and, principally, wider economic benefits in England.

RESEARCH, AMENITY AND EDUCATION

Shipbuilding traditions have recently been explored as a social product (Adams 2003, forthcoming), helping to contextualise shipbuilding within its much broader societal roles at national and regional levels.

This Character Type contains a strong amenity value linked to recreational and leisure activities such as cruises and sailing. Related amenity and educational values can be seen through the wide range of museums and historic shipyards (e.g. Portsmouth Historic Shipyard and the National Maritime Museums at Greenwich and Falmouth). In addition the study of shipbuilding, associated infrastructure and wreck sites offers a

wealth of cross-curricular opportunities incorporating science, maths, English, history and environmental studies.

CONDITION AND FORCES FOR CHANGE

The shipbuilding industry in England is widely expressed through its components such as docks; basins; wrecks; wharfs, quays, jetties and slipways; warehouses, offices, depots and travelling cranes; dockworkers' cottages; and specifically associated transport systems (such as railways, roads, tramways). At some locations, these components have now been transformed into marinas or commercial centres, Albert Dock (Liverpool) being an example (<http://www.albertdock.com/>).

The impact of this Character Type has been mainly economic, providing employment, income resources and providing transport for the necessary import/export needs of manufacturing industry in England.

RARITY AND VULNERABILITY

This Character Type is strongly linked to the economic vitality major ports such as London, Liverpool, Southampton and Felixstowe. Its impact is seen on the links to international trade and the British Empire with many British ships having sunk overseas.

Once redundant, former shipbuilding areas form prime development land open transformation to marinas, commercial centres or even mixed use reatiki and residential areas.

Today, the shipping industry could be seen as an expanding global business and the opportunity for commercially competitive shipping industries. This potential growth offers significant inward investment opportunities as well as wider economic benefits in England. Commercial shipping routes may be subject to change as many of England's east coast harbours are being extensively developed. The largest of these is the London Gateway project but there is also development underway or planned at Felixstowe, Harwich and Great Yarmouth.

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