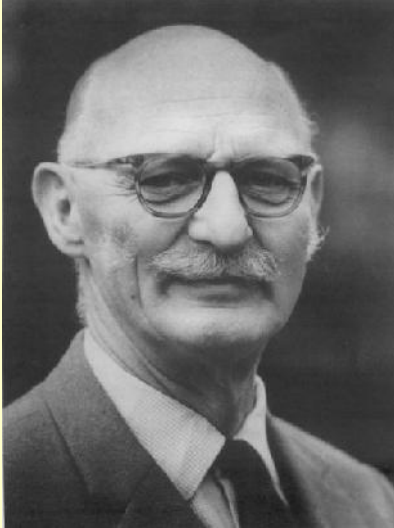


NEITHER FOWL NOR FISH

Sir Christopher Cockerell and Island Hovercraft

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Hovercraft



Although many had known about the 'ground-effect principle' for many years, it was the ideas developed by Sir Christopher Cockerell's from the early 1950's that allowed the first commercially viable hovercraft to be constructed on the Isle of Wight.

As early as 1716 Emmanuel Swedenborg, the Swedish theologian and philosopher, had come up with the design of a boat incorporating an air cushion to reduce drag. George Fellows Harrington, mentioned elsewhere, before the start of the last century had patents incorporating some of the concepts behind the catamaran in several of his patents. The secrecy of war has often robbed innovators being able to receive their rightful credit and this is certainly true with the development of air cushion vehicles. For in 1915, during the

First World War, the Austro-Hungarian Navy used a high speed rigid walled craft for an attack on a submarine. Just after the Second World War an American naval officer from New Jersey, Charles J. Fletcher, worked in this field, however the American Defence Department restricted the release of his project. In Britain Christopher Cockerell had the same problem and he had a very hard fight to get his work declassified in 1958. Its potential had not been realised, for the navy saw it as an aircraft, the air force as a boat and with the army then not interested in either his ideas were being left undeveloped. This military secrecy was later to cause a bitter and expensive dispute between the British Hovercraft Corporation and the American Defence Department over the patents of Charles Fletcher.

Just who thought of what, or infringed what, is perhaps now for most just of legal significance. The one thing that is certain is that the name 'hovercraft' was coined by Sir Christopher Cockerell himself - a word that has become synonymous with the last half of the twentieth century. Christopher Sydney Cockerell CBE, FRS, RDI (Royal Designer for Industry awarded by the Royal Society of Arts) was born in Cambridge in 1910. He read engineering there at Peterhouse and then joined the Radio Research Company. In 1935 he moved to the Marconi Wireless Telegraph Company. During the war years he worked on the development of radar. Leaving Marconi in 1950, with his wife, he bought a small boatyard in Norfolk. There his thoughts turned once again to design and he built the 'ripplecraft' in 1955. By then he had made a number of experiments on models that were to give birth to the hovercraft.



Following the declassification in 1958 of his inventions by the National Research Development Council the way was open for commercial development. Saunders Roe of Cowes - later to become the British Hovercraft Corporation - then part of the Westland Group, were chosen for this. By 31 May 1959 the SRN.1 (Saunders Roe Nautical

1) has 'flown'. It was shown to the press and the public on 11 June and by 25 June that year it had crossed the English Channel from Dover to Calais.

In the summer of 1962 from 11th to 24th August a trial passenger service was operated using the 48 seater SRN.2 from Appley Beach at Ryde across the Solent to Eastney. Also during that year a service using a Vickers VA-3 craft took summer visitor from Moreton on Mersey

By 1971 Hoverlloyd was running a regular service across the Channel and British Hovercraft Corporation was set to build ever bigger craft culminating in the large Mountbatten class. The SRN.4 was originally design to be some 165 ton and capable of carrying up to 254 passengers with 30 cars. Cowes with its long history of ship building, high speed boats, seaplanes not least the giant Princess flying boats, and many other aircraft could for a couple of decades add the *home of the hovercraft*. Despite the demand for hovercraft declining the Island can still claim the title for building still continues just along the coast at St Helen's.



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Hovertravel



In 1965 Hovertravel Ltd established a regular passenger service from Ryde to Southsea using a 38 seater Winchester class craft and for a couple of years they also ran from Ryde to Stokes Bay at Gosport. This link revived the route of many of the earlier paddle steamers when the main railway station was at Gosport in the Victorian era.

By 1966 British Rail had established Seaspeed and operated from Cowes to Southampton for a few years. The Cowes to Portsmouth link ran for two seasons from 1967 until September 1969. Sidewall

craft HM2 with 65 seats ran from Portsmouth to Ryde Pier head from 1968 but were not a successes and the connection only lasted until September 1972. Tasmanian built catamarans were later to replace them followed by the Wightlink Fast Cats.

By 8th October 1968 Hovertravel had carried its first million passengers across the Solent and was to reach twenty by 2004. It is now the only and longest serving passenger hovercraft connection in the world.

By this time the Island had become the major design centre for hovercraft for both civil and military use, with the bulk being manufactured at Cowes. With the demand ever increasing licences were granted to other firms.

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Hoverwork

Founded in 1966 and situated at St Helen's on the edge of Bembridge Harbour is the world's longest commercial operator in the field. Under licence it designed and built the first AP1-88 in conjunction with BHC and NRDC during 1981. The design went away from standard aircraft construction to using a welded hull. It has a deep low pressure skirt and with a diesel engine was much quieter



and used less fuel. Their present craft are now the world's hovercraft work horses and are built for passenger use or with half or full well decks.

But still the question arises are they fowl or fish – do they fly or are they boats? Calling them skimmers rather avoids the question!

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British Hovercraft Corporation



To many on the Island still affectionately known as Saunders-Roe, the names of this East Cowes company have come and gone over the years. It has played such a major role in the technological development on the Island that it is referred to many times elsewhere in other chapters under its numerous titles – see 'Contents' page. In 1901 S.E. Saunders moved his boatyard established in 1830 from the Thames to East Cowes where he continued to build high quality and high

speed launches. As early as 1909 an aircraft division had been established making full use of the special marine plywood 'consulta'. In 1929 the Company became Saunders-Roe and in March 1966 the British Hovercraft Corporation (BHC) was formed with Westland Aerospace owning the bulk of the shares, Vickers Supermarine 25% and the National Research Development Corporation (NRDC) some 10%. 1970 saw Westland Aerospace taking over full control of the company and expanding by buying Cushioncraft in 1971. To celebrate the Queen's Silver Jubilee in 1977 the world's largest Union Flag was painted on the hanger doors of the Columbine Works. Hovercraft production having declined the BHC works was again renamed in 1984 to Westland Aerospace. That name lasted until 1994 when it became GKN. (GKN was formed when the three long established engineering companies of Guest, Keen and Nettlefolds merged early last century)

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