(Derby, M., 2012a)

Story: Inventions, patents

Page 4 – Transport inventions

Pearse's flying machines

In 1906 patent number 21476 was granted to a Temuka farmer named Richard Pearse for 'an improved aerial or flying machine', featuring the first known ailerons (moveable flaps on the wings). A version of this machine is thought to have made the world's first powered flight in 1903.

Pearse later invented (but did not fly) a 'convertiplane', with a tilting engine to allow for vertical take-off and landing, and was granted New Zealand patent number 87637. His many other unpatented inventions included a power cycle, recording machine, potato planter, topdresser and two sorts of music box.

Hamilton's jet boat

mishman Creek station, a high-country sheep farm near Lake Tekapo, is threaded with mountain streams that are shallow in summer and fast-flowing at other times. In the 1950s the farm's owner, Bill Hamilton, and his employees developed and patented a plywood boat powered by a jet propulsion unit to navigate these rivers. In 2009 Hamilton Jet employed over 300 people at its Christchurch factory. It had a network of distributors in 50 countries supplying jet-boat engines for patrol boats, passenger ferries, rescue craft and recreational vessels.

Britten's Superbike

No. 8 fencing wire was one of the materials used by Christchurch engineer John Britten, when he designed a world-beating racing motorcycle in his spare time. In 1994 Britten patented some of the structural features of his V1000 Superbike, which broke several world records and is now manufactured to order in Christchurch for the international market.

Montgomery's mooring system

the 1980s, when aged 19, Christchurch man Peter Montgomery began working as a deck officer on cargo ships. A fatal accident on the Melbourne docks convinced him that the traditional method of mooring ships, using heavy ropes called hawsers, was dangerous and inefficient. After 12 years' work he invented a vacuum suction system that is far faster and safer, although initially more expensive. The following year it was installed on a New Zealand interisland ferry. In 2007 Montgomery's firm merged with a large Dutch company to market his invention worldwide.

Roycroft's amphibious car

Living at Manukau Heads, Terry Roycroft had either a short boat trip or a long car drive in order to get to Auckland. He developed and patented a car that can retract its wheels to become a jet boat. His neighbour, businessman Alan Gibbs, bought the idea and developed it into the Aquada, an amphibious sports car that can travel at 160 kilometres an hour on land and 50 kilometres an hour on water.



Richard Pears



The Hamilton jet boat



Montgomery mooring system



Glenn Martin's jetpack



Martin's jetpack

In 2009 Christchurch inventor Glenn Martin began taking commercial orders for his jetpack, an experimental ultralight aircraft. The jetpack (which does not actually use a jet or rocket motor) is the product of more

years of research.

How to cite this page:

Mark Derby. 'Inventions, patents and trademarks - Transport inventions', Te Ara - the Encyclopedia of New Zealand, updated 14-May-12 URL: http://www.TeAra.govt.nz/en/inventions-patents-and-trademarks/4

All lext licensed under the Creative Commons Altribution-NonCommercial 3.0 New Zealand Licence unless otherwise stated. Commercial re-use may be allowed on request. All non-text content is subject to specific conditions. © Crown Copyright.