

This man's books have saved many lives

IT&O editor John McCready visited Rotterdam to meet renowned marine consultant and author, Henk Hensen, and talk about his long and varied career at the heart of the marine industry

Master mariner, marine consultant and author, Capt Henk Hensen is a man on a mission, and has been for a considerable time. That mission is to improve safety standards across the marine industry – and particularly in the operation of tugs. He is the expert that other experts turn to for advice, and his practical guides to understanding operational capabilities and, just as importantly, a tug's limitations in various scenarios, have undoubtedly saved lives.

Now aged 81 and with absolutely no intention of retiring, Hensen says knowledge of why a vessel will react in a certain way in different circumstances is vital for safety and optimal operation, adding that a lack of in-depth knowledge about the capabilities and limitations of a specific tug, as well as the effect of a vessel's manoeuvring on tugs, and of the risks involved in tug operations, is often alarmingly prevalent among even the most experienced tug masters, pilots and vessel captains.

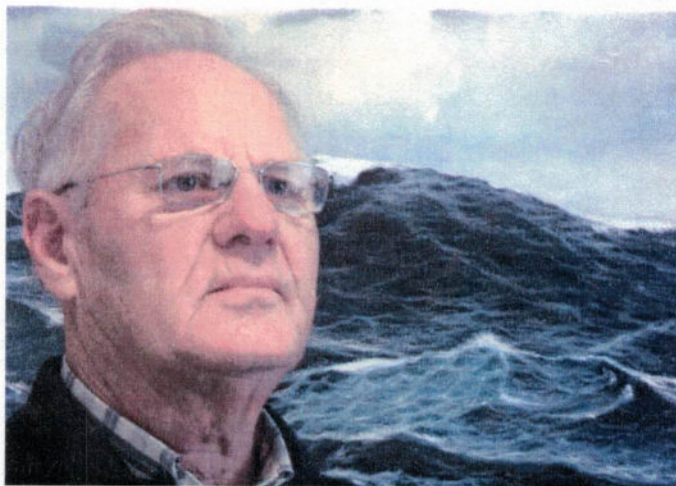
Hensen's books and monographs, including *Tug Use in Port – A Practical Guide*, *Ship Bridge Simulators – A Project Handbook*, *Bow Tug Operations with an Azimuth Stern Drive Tug – Risks and Effectiveness* and, co-authored with Dr Markus van der Laan and published by The ABR Company, *Tug Stability – a Practical Guide*, have become industry bibles, and have led to this essentially modest man being lauded and admired throughout the industry.

An example of this was when, while staying in a small harbourside hotel in Fujairah during a driving tour of the UAE with his wife, Hensen took the opportunity to visit the local harbour master. "When he saw me, he said: 'I know you', and went and got a copy of my book with my photograph on the back cover."

Another was being awarded the title of Tug Personality of the Year 2010 by the British



► Marine consultant and author, Capt Henk Hensen



Tug Owners Association, an achievement he describes as "not bad for a Dutchman".

Hensen was born close to the waterfront on the former island of Wieringen in the Netherlands, which became part of the mainland just seven years before he was born.

"I have seen many changes, including the start of containerisation, the dramatic growth in the size of vessels and the increase in the power of tugs"

Henk Hensen, marine consultant, author and former harbour pilot

Asked what his favourite activities were as a child, he said: "Just after the world war, it was not the time for favourite activities. We had to do our studying and work when free, for instance as a newspaper delivery boy, helping at a bakery and, during the holidays, working on local farms – all to bring in some extra money for my parents to pay for clothes and my education."

After attending his local elementary school and secondary school in Den Helder, Hensen went to nautical college also in Den Helder, where there is a naval base. His favourite subjects were maths, spherical trigonometry (the study of curved triangles, triangles drawn on the surface of a sphere) and astronomy.

After successfully completing his final exams at college, Hensen got his first job as mate apprentice with the Netherlands Line Royal Dutch Mail on a ship that took him to the Far East and East Coast of the US.

He said: "After college I was at sea for 15 years. Trips could last as long as a year, or even longer. It was a beautiful time. I have many memories, but perhaps the most special are sailing in the Far East, the seemingly

endless Pacific Ocean and sailing through ice in the Baltic."

However, there were also dangers: "In Indonesia in the 1950s, soon after its war of independence, you needed to be very careful, particularly on Java. One wrong word as an apprentice or mate and they would cause you serious harm."

In 1962, while berthed in what was then Saigon, Hensen witnessed the first US troops arriving at the start of the Vietnam War.

Another memorable journey was sailing a small Amsterdam harbour tourist vessel through the Bay of Biscay to West Africa in 1963, while a not-so-pleasant experience was being forced to stay in the port of Ventspils in Latvia, then part of the Soviet Union, for three months after a collision. "All the time we were under observation from guards on watchtowers. They watched us day and night. Every decision about who should pay for the damage and how and when we could get our damaged vessel back to the Netherlands had to go through bureaucrats in Moscow. It was an extremely slow and frustrating process."

During his time at sea, Hensen rose up the ranks from apprentice mate to fourth, third and then chief mate. In between, he was, for a short while, captain on a coastal tug. However, in the late 1960s the lengthy absences from home were starting to take their toll and he decided that he needed a change of direction.

Hensen had married his wife, Geeske, in 1960 in the Wieringermeer, south of Wieringen, and two years later his daughter Heleen was born, followed the next year by his son, Jan-Hendrik.

He said: "My wife is a farmer's daughter and her marrying a seaman was something her parents never expected. In the early years of our marriage she was alone for long periods while I was at sea. Luckily for me, she had no problem with this. Both sets of parents lived not far away."

From 1968 to 1990 Hensen was a pilot in the Port of Rotterdam and it was while

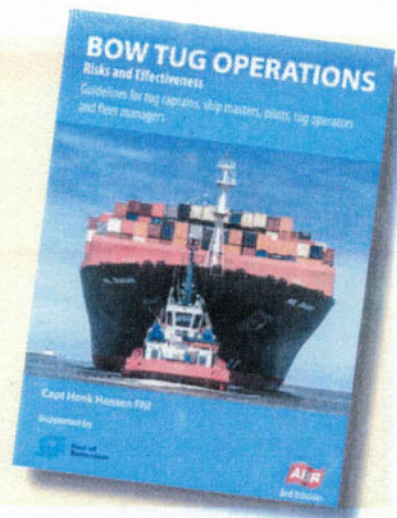
◀ Capt Henk Hensen with his wife Geeske on holiday in France

Guide to tug operations

Capt Henk Hensen's latest publication is *Bow Tug Operations: Risks and Effectiveness* – an updated and expanded version of a title originally published in 2006.

A practical book focusing on the safety of tugs, tug crews and the vessels they serve, it is written in an easily understandable way, with full-colour illustrations, providing comprehensive guidelines for safe operations at the bow.

It is available now from The ABR Company, publisher of *IT&O*, at £25, including postage and packing. To order the book online, visit www.tugandosv.com



▲ A young Capt Henk Hensen navigates without the aid of a single piece of electronic gadgetry, let alone a satellite link

working in the port that he developed his love of tugs. He said: "I have piloted all types and sizes of vessels in and out of the harbour basins of Rotterdam. During this time I have seen many changes, including the start of containerisation, the dramatic growth in the size of vessels and the increase in the power of tugs. I learned through daily practice as a pilot about the differences in tug type performance and, during four years working in the harbour office, learned about port design in co-operation with civil engineers."

Always interested in why things happened, the forces involved and the effects of variable circumstances, Hensen started to make a record of accidents and incidents for the Port of Rotterdam that took place within and near the port. In 1986, this resulted in the port setting up the first-ever pilot-tug master simulator training course. "It was pretty basic stuff when compared to today's sophisticated simulators, but it was a major step in the right direction in improving safety within the port," he said.

Hensen is a firm believer in the need for joint and complementary training for tug masters and pilots. He said: "It's about the capabilities and indeed the limitations of tugs and what they can and cannot do safely. Both pilots and tug masters need to understand this in depth." A year after the course started, Hensen was asked by the Dutch government to join a committee of experts visiting all the major ports in India, tasked with producing a detailed report on what the requirements would be for a simulator in India.

His career as an author started in a relatively humble way when, in 1988, he started to have articles published in the Dutch pilots' association magazine.

Six years later, he published the monograph: *Manoeuvring Single Screw Vessels Fitted with Pitch Propeller in Confined Waters*, followed a year after that by his influential and extremely successful guide to using tugs in port. He said: "Before this the strange situation existed that there were no books at all that focused on the specific work of tug masters. For all my publications there were always professionals, sometimes from all over the world, who were willing to help, for

which I am very grateful. Without such help, these technical maritime books just would not happen."

He is also grateful for the support and encouragement he has received from the Port of Rotterdam and from The Nautical Institute, which published many of his books.

Hensen says he has retired six times, but has now given up doing so because he is still repeatedly asked to return to contribute to one project or another. "I don't approach people, they come to me," he said.

Hensen is a Fellow of both the International Tugmasters Association and The Nautical Institute and a member of the International Federation of Shipmasters' Associations. His on-going consultancy work has seen him involved in major maritime-linked projects across the globe. These have included involvement in the design of a bridge over the meandering Suriname River, under which huge bulk carriers had to pass.

He said: "I know nothing about bridges, but I do know what design is needed for vessels to pass underneath safely, depending on the changing flow of water below the structure. This is not just theory, we test everything again and again on a simulator in the Netherlands."

Other consultancy work has seen him involved in legal cases, an investigation for the Dutch Safety Board into the cause of a fatal tugboat accident, and simulator work for port projects such as the development of an indented berth in Amsterdam to allow the possibility of loading and unloading at both sides of a ship.

In his spare time Hensen enjoys sailing, piloting a small tourist vessel near his home in the village of Maasland, close to Rotterdam, caravanning, cycling and singing in a sea shanty choir. Asked what makes the tug business so special, he said: "The

► Capt Henk Hensen with his son Jan-Hendrik and two of his grandchildren pictured during the winter of 2009



general opinion is that a tug is just a tug. This is not correct. All tug types and each separate tug has its specific capabilities and limitations. A modern tug is a complex tool. They are indispensable in the transport chain and for the safety of the vessels they assist and for the safety of the ports they work in."

Hensen's advice for anyone embarking on a similar career to his is: "Do your utmost to learn as much as you can about the job you have to carry out."

Looking to the future and the possible development of remote-controlled and autonomous vessels, including harbour tugs, Hensen is not entirely convinced that this is the way ahead, although he recognises the attractiveness to operators of hugely reduced payroll costs.

He said: "It should be studied carefully, especially the risks involved. It will not be possible for all vessels, but only for certain modern ships in a specific trade. Sailing a ship is more than just techniques. Good seamanship is also needed. It is debatable to what extent good seamanship can be incorporated into computer systems."

However, one thing he is completely certain of is the answer to the question: which person have you admired most in either your professional or personal life?

"That's easy," he said. "My wife."