



Bill de Beer at Port Nelson's Fishermen's Wharf.

Straight-talking engineer has helped many

Debbie Hannan

As New Zealand's deep-sea fishing industry expanded from the mid-1970s, behind the scenes fitting it with the latest technology was "honest Bill", an electronics engineer with an impressive background in post-war Britain's marine and military electronics.

Bill de Beer, his wife Fay and their two young children arrived in New Zealand in September 1973. Bill and Fay, fed up with Britain's industrial troubles at the time, wanted a new life.

With an impressive CV but no job lined up, de Beer started applying, landing one with the then AWA (Amalgamated Wireless Australasia).

Amsterdam-born, he had gained his background in electronics in post-war Britain, gained a Higher National Certificate in electrical engineering in Britain.

He had worked for the electronics company, Cossor (which supplied New Zealand's Met Office with weather radar) and Associated Electrical Industries (AEI, later Marconi Radar

Systems), while studying for his National Certificate at night. While at AEI he maintained electronics for large shipping companies and also tutored deck officers and radio officers so they could look after their electronics at sea. His work involved quite a bit of travel so he sought a transfer to the company's development department where he worked on systems for civilian and military purposes.

One of his career highlights came out of an impromptu visit from Canadian academic Dr Glen Schaeffer to his workplace, asking if they could adapt their radar for him to track birds and deduce their wingbeats. De Beer leapt on the project and worked on it with Dr Schaeffer in his spare time. Academic papers were published and the technology was used around the globe for tracking birds and locusts.

De Beer loved his work at Marconi.

"It was creative, interesting and I had excellent colleagues," he said.

But the urge to build a better life for his family was strong, leading to their 1973 emigration.

His arrival when the fishing industry was beginning to expand was perfect timing.

Originally based in Auckland, de Beer's involvement with the Nelson fishing industry began with a short trip there in December 1973 to help fit the



Bill de Beer pictured during sea trials on a vessel in Norway in 1962.

Tutor invents better radar reflectors

NELSON

Bill de Beer finishes work at the Nelson Marlborough Institute of Technology today but he is going out on a high note.

The now-former School of Fisheries electronics tutor has recently been praised for his work modifying marine farm reflectors so they can now be seen by approaching marine radar systems regardless of the weather or wave actions.

Mr de Beer said his design followed a Tasman District Council request to review available reflectors, used to mark marine farm boundaries and spat-catching areas.

Tests revealed that many did not meet international standards in adverse conditions and he set to designing one that would show up on radar regardless of how much it was bounced around.

The modest inventor, who has an extensive radar and related background, said he found octagonal-shaped reflectors better reflected signals than their standard cross-shaped equivalents.

He got the institute's engineering department to make two and



PHOTO: PETER CHRISTIAN
The better to see you with: Electronics tutor Bill de Beer with his modified marine farm radar reflector.

then tested them off Rabbit Island. The prototypes could be seen from as far as three nautical miles away.

While his design still needs to be independently tested, the Tasman council sent a copy to the Marine Safety Authority which has incorporated it into marine farming specifications.

Mr de Beer has not received anything for his efforts but he is pleased that his design met local needs.

The intention was to create something to international standards that could be manufactured in local materials by local craftspeople, he said.



Bill de Beer's radar reflector in action.

A Nelson Mail story published to mark Bill de Beer's 2001 retirement.

latest electronics to a Sealord vessel that had sunk at the wharf. Working closely with skipper Mike Connolly he was home in time for Christmas.

The Nelson manager was impressed and asked for de Beer to join him in Nelson. The family began their Nelson life a few weeks later, in January 1974.

Most of de Beer's work was on fishing vessels, earning him the trust of industry leaders and their skippers and crews.

"I used to say, when I go to a job I like to meet the people who work the equipment and those who run the organisation."

Not shy about speaking his mind, he said he would tell those who needed to hear what had to be done, no matter what their position in the company.

One of those people was the then managing director of Sealord, Charles Hufflett, telling him the old electronic gear on the company's vessels was too unreliable and frankly suggesting that while vessels with ageing technology were tied up for maintenance they could be out fishing, making money.

"We always had a good rapport."

He built similar relationships with the staff and heads of other fishing companies as well as those that serviced the shipping companies including

Nalder and Biddle.

"Dick Potton of Nalder and Biddle used to call me 'honest Bill'. I could talk to him without offending him."

During his 17 years with AWA de Beer saw the fishing industry grow in the sophistication of the technology it used along with catch sizes and prices it received for its fish.

He reckons the biggest leap forward came with Global Positioning Systems (GPS). Prior to its introduction there were a limited number of satellites and high-power echo sound gear which coincided with the roughly boom in the 1980s.

"In the early stages of GPS the vessels would have to wait for between 10 to 15 hours to get a fix."

The later speed that GPS offered in gaining a fix on a rich fishing ground meant the system would pay for itself in one trip, de Beer said.

No stranger to many of the skippers and crews, with work often taking him

to sea, he said he'd never forget a five-day trip to the Challenger Plateau on Sealord's *Seafire*, skippered by Mike Jackman.

De Beer's sea legs weren't strong. He suffered from seasickness and this was a rough trip so he took himself off

to his bunk to try and sleep through a rough patch.

On another trip on Sealord's *Whitby*, skippered by Mike Connolly, the sonar was secured through its hull with the hoist mechanism housed underneath the bunks.

The boat hit a wave, forcing the gear up through the bunk, giving de Beer

the fright of his life.

A big career highlight came when a consortium led by Robert King-Turner, gathered the money to build a new vessel, the tuna purse-seiner *Western Pacific*, at Anchor Dorman in Nelson.

"We advised on the right type of equipment and fitted out the vessel with the latest technology. It was probably

"In the early stages of GPS the vessels would have to wait for between 10 to 15 hours to get a fix."

the biggest job we did. I had several rewarding projects in my life where I felt 'this is it'. This was one of those."

The *Western Pacific* was one of two tuna purse-seiners built by the consortium. The other was the *Western Ranger*, built by the Whangarei Engineering Company and skippered by King-Turner.

AWA made the decision to get out of its interests in Nelson in 1989 – a "sad occasion" for the team, de Beer said.

He turned to freelancing before being offered a role at the Nelson Polytechnic (now Nelson Marlborough Institute of Technology). It coincided with the polytechnic's purchase of a bridge simulator which de Beer took over responsibility for, modifying it to include realistic sound effects.

During the next 10 years he not only worked on the fishing school's gear, he also trained hundreds of skippers in electronics, many of them now working across the fishing industry in New Zealand and the Pacific.

His skills were enlisted by the nearby Tasman District Council to work with it and the Maritime Safety Authority on a project to improve boating safety around marine farms. Marine radar reflectors had been around for many years, but de Beer wanted to design

something simple and inexpensive that could be made relatively cheaply by local sheet metal companies.

The design was adapted by the New Zealand Maritime Authority as part of its marine farm standards. De Beer published a paper for NMIT on the technology.

"I'm originally from the Netherlands and support the Kiwi 'can do' attitude. Why buy foreign expertise when you can produce something locally and help create work for people in your community, wherever that happens to be?"

This was the last big project for de Beer before his retirement in late 2001 and it gained local and international industry and media attention.

A retirement message from the Maritime Safety Authority's Tony Date was a fitting tribute to his contribution to the industry:


"Your way was a very special way and many seafarers owe a great debt either directly or indirectly for the contribution you have made to seafarer training."

Many who read this article may not have known Bill de Beer but the surname will be familiar – his son Robert worked for Sealord in quality assurance and customer services where he met his wife Janet Smith who worked in product

and process development. His younger son Martin works in the industry, starting at the Ministry of Fisheries, moving later to Sanford and more recently with Dave Woods on Precision Seafood Harvesting, ensuring the de Beer innovative streak continues to add value to the seafood industry.

And Bill de Beer, now 84, keeps up with the latest technology. His skills have proved helpful to his grateful neighbours (including this writer) when they need assistance with home electronics and computer systems.


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