



Nella Dan scuttled at Macquarie Island

The *Nella Dan* was commissioned by the Lauritzen company in 1962 and named in honour of Nel Law, wife of the AAD Director at the time, Philip Law. While she followed in the footsteps of her Antarctic sisters, the *Thala Dan*, *Kista Dan* and *Magga Dan*, the *Nella Dan* set a new standard for polar vessels at the time.

In 1979 the AAD decided to participate in a marine science programme – Biological Investigations of Marine Antarctic Systems and Stocks (BIOMASS) – which kick started what is today a major marine research focus for the Division. As a result, the *Nella Dan* required significant modification, at a cost of \$1.2 million, for research-scale trawling, acoustics and oceanography. Because the ship had not been designed with marine science in mind, compromises were required. Fisheries biologist, Dr Dick Williams, says laboratories were mostly converted from small baggage rooms scattered over the ship, or housed in sea containers on the helideck. It was a tight fit all round.

'Because of the limited headroom below the helideck, there was a small gap in the stern through which to deploy

nets and other equipment,' he recalls.

'Sometimes equipment had literally to be shoehorned through the gap with a crowbar.'

The *Nella Dan* was also renowned for her habit of rolling badly, due to her rounded hull design, which was intended to minimise the chances of getting stuck in the ice.

'The *Nella* was described as being able to roll on a wet lawn,' Dick says.

'This made scientific work very trying at times; not to mention the difficulty of getting a good sleep when off duty.'

Despite these inconveniences, the new equipment worked well and valuable data were collected over seven seasons. The *Nella's* first marine science voyage sailed in early 1981 as part of the First International BIOMASS Experiment. This involved surveying a large area of ocean between Prydz Bay and Mawson, for krill abundance, and studying oceanography, phytoplankton and fish. Subsequent seasons saw a major marine science voyage in most years, principally in the Mawson-Davis area, investigating krill, fish, oceanography, marine geology, sea ice and plankton.

Top: A crew member, tethered to ship, avoids a wave crashing onto the *Nella Dan's* trawl deck.

Above: Dr John Kirkwood studies krill samples in a converted baggage room under the ship's helideck during the First International BIOMASS Experiment in 1981.

'The *Nella Dan* gave us the opportunity to be major players in Antarctic marine science at a time when few countries had a regular Antarctic marine science capability, especially in the East Antarctic region, and allowed us to make a major contribution to the knowledge of Antarctic waters outside the South Atlantic area, where most previous studies had been undertaken,' Dick says.

'Work pioneered on *Nella Dan* certainly gave us the results and credibility to succeed in getting *Aurora Australis* designed as a fully capable marine science vessel, some 10 years later.'

The *Nella Dan's* final days arrived on 3 December 1987, during the unloading of fuel for the station on Macquarie Island. According to Ms Gerry Nash, a marine scientist with the AAD and cargo supervisor on the '*Nella's*' final voyage, the weather deteriorated during the unloading and the ship drifted onto rocks. Her account of the incident, published in *The Shipwreck Watch: A Journal of Macquarie Island Shipwreck Stories* (Vol 14, 1987-88), reads 'The *Nella* was just bobbing on the waves like a little red cork; she was caught between two rocks, and was crashing in the waves from one rock to the

Above: 'CTD' probes, measuring Conductivity (salinity), Temperature and Depth, are lowered from the helideck during a 1986-87 marine science cruise.

Opposite page: After catching fire the *Nella Dan* sank off Macquarie Island on 24 December 1987. She took with her reminders of a simpler time.

other. Above the noise of the wind you could hear the screeching sound of metal pounding against rock'.

Efforts were made to salvage the ship, but the damage was considered too severe and her owners decided to scuttle her. After being towed into deep water, the *Nella Dan* remained afloat overnight in calm seas. She then caught fire and burned throughout the day. According to *The Shipwreck Watch*: 'it was not until the fire was almost out that members of the salvage crew were safe to go aboard and release the compressed air providing most of the buoyancy in the forward compartments. The *Nella Dan* sank in deep water off Macquarie Island at 17:42 pm at a position of 54 degrees 37.5 min S, 159 degrees 13.3 min E on 24 December 1987'.

The *Nella Dan* was replaced by the *Aurora Australis*, which was purpose built for the AAD by P&O Polar. With its bold orange hull, the *Aurora* is today an iconic symbol of the Australian Antarctic programme.

—WENDY PYPER

Information Services, AAD