

CHUNKY BARGE SUFFERS NO NONSENSE

BY KEITH INGRAM



Nestled in a triangle between Samoa in the north, the Cook Islands in the sou' east and Tonga to the sou' west is the island of Niue, which lies in the zone of the southeast trades.

Located some 2400km nor' east of New Zealand, Niue is affectionately known as the Rock of the Pacific. Captain James Cook landed there in 1774 and met a hostile reception, so he and his men beat a hasty retreat. As a result of the experience, he named the island the Savage Island, which could not be further from the truth, as we now know that the people of Niue are friendly and warm by nature. A large proportion of the population lives in New Zealand and Australia.

With no encircling protective barrier reef, the island, which is predominantly limestone, quickly rises from the deep blue surrounding ocean, with the coral reefs supporting a healthy near-shore and a diverse pelagic fishery.

Over the years, the island's economy has suffered because of

a lack of natural resources since the fall of the price of copra. Tourism has been a basic mainstay, while in recent times, local farming has diversified into lime production and the Pacific health product, noni juice.

However, Niue also has a significantly large fisheries economic zone, and has in recent times been in a position to develop this fishery for an economic benefit. Currently reef fishing and Niue fish processors have five fishing vessels ranging in length from the 20m *Jay Belinda* to larger 30m vessels working in the surface longline fishery, targeting yellowfin, bigeye and albacore tuna, with a by-catch of marlin, broadbill, moon fish and sharks.

These vessels operate in either short trips as freshers (an iceboat which brings in the catch fresh), or more extended trips where the catch is either semi-processed or frozen on board. They deliver their catch ashore to Niue fish processors, where the catch is processed and the high-value product is airfreighted out chilled or packed frozen for transportation by ship.



ABOVE: The foredeck and longline winch
BELOW: A close-up of one of the sampson posts

Reef Shipping is one of the predominant shipping companies servicing this part of the Pacific, and regularly visits the island.

While there is a small port and wharf embuttment, this facility faces the constant strong tidal surges from the Pacific Ocean, and is not comfortable to lie alongside, no matter what the size of the vessel.

It would be fair to say that the wharf structure is unusable by large vessels for at least one-third of the year, in which case the fishing fleet goes to their moorings within 300 to 400m of the shore, and larger ships must hove-to where their cargo is unloaded by using lighters.

But we are more interested in the fishing fleet, and the recent launching of what can only be described as a solid, chunky, non-nonsense working barge with a difference.

The 11m waterjet-powered reef barge has been built specifically to service the fishing fleet with local Niue conditions in mind. Built by Commando Boats in Auckland, the design brief called for a low-speed barge capable of loading either six tonnes of bunker fuel or six tonnes of fresh water or a combination of both, in separate tanks, to service the fishing vessels moored offshore.

The barge also had to be able to load and transfer up to six tonnes of ice in Dolab bins, and return with the fish from the vessels. Food and stores would also need to be transferred. The barge would be required to have its own on-board Hiab crane so that it could load and unload her cargo.

Separate cargo, fuel and water pumps would also be required. Because of the deck cargo, a substantial bulwark needed to be incorporated, and given that she would be working the wharf during the 35 percent of the time when the fishing vessels could not because of the extensive surge, the vessel needed to be built strongly and incorporate large Samson posts and berthing bits.

These had to be big enough to take ship-sized ropes, as it was not uncommon to break 3in plaited berthing lines at the wharf.

The sea state and local trade winds mean that operating conditions are frequently less than perfect, so reasonably good handling characteristics, rugged fendering and bollards were essential.

The vessel also had to have in-built lifting lugs, as the barge would often have to be lifted onto the wharf to keep her out of harm's way during surging conditions, for maintenance, or whenever a tropical storm was approaching.

When not in use for these local roles, she would become a back-up fishing vessel, operating her own surface longline of up



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