



Waiheke Coastguard volunteers gather for sea trials, the first step back to frontline service after refit

# A SECOND LIFE FOR **WAIHEKE RESCUE**

BY MARGARET WIND

For a volunteer rescue unit working one of the busiest and most changeable patches of water in the country, reliability is essential.

**W**aiheke Volunteer Coastguard has been serving the Hauraki Gulf since 1990 and was formed in response to growing concern over a number of marine accidents around the island – some of them fatal. What began as a rescue arm of the Waiheke Boating Club has grown into a highly trained, tightly run Coastguard unit, proudly affiliated with Coastguard New Zealand since 1997. Today, its crews respond to more than a hundred incidents each year, assisting hundreds of people, entirely through volunteer effort. Last year alone, Waiheke Coastguard attended 111 incidents and helped 327 people across the Hauraki Gulf.

At the heart of that response capability sits *Waiheke Rescue*, the unit's 10.3m rescue vessel. Built on a robust Naiad design, she can go out when others are heading in – but like all hard-working boats, time, wear and changing standards eventually start to show.

## A TURNING POINT

The catalyst for *Waiheke Rescue*'s recent refit came during a storm that exposed a vulnerability no one could overlook.

The vessel was originally designed with a ventilation gap around the top of the cabin. It was a deliberate feature, intended to keep crews cool during long summer operations – sensible in theory, but far less forgiving when conditions turn ugly.

“In one particularly nasty storm, we took a large wave straight over the bow,” recalls Bernard Guillemin, Waiheke Coastguard's project lead. “It got well into the cabin and completely soaked the electronics.”

The damage was extensive. Most of the electrical system was compromised and beyond repair. It forced a difficult decision. The vessel had already been earmarked for replacement within the next couple of years – so was it worth investing heavily in a refit?

With funding support from Coastguard New Zealand, and additional backing from community partners, the unit instead went to tender for a full electrical rebuild, selecting Half Moon Bay Marine Electrical to take the lead.

## MORE THAN AN ELECTRICAL JOB

What unfolded was far more than a like-for-like replacement.

Aside from a couple of UHF radios and the existing radar, virtually everything electrical was stripped out and redesigned from the ground up. The scope of work included a full suite of modern systems: three 16 inch Simrad NSS Evo4 multifunction displays, a FLIR thermal imaging camera for night and poor-



The scope of work included a full suite of modern electronics



The refit included two new Yanmar engines

visibility operations, a new BEP switchboard, updated antennas and horns, and complete rewiring to commercial marine code using Lloyd's-approved cabling. Full electrical drawings were also prepared to support Maritime NZ survey and approval.

Because the vessel was 14 years old, the refit was required to meet current regulatory standards, effectively treating the electrical system as a new build.

The project also provided an opportunity to tidy, rationalise and modernise the vessel's internal layout. One of the most noticeable changes is the installation of new heavy-duty, marine-specific seating, replacing the 15-year-old truck seats previously fitted. Together, the improvements make rescues more efficient, crews more comfortable, and routine maintenance simpler for volunteer crews.

The propulsion package is being refreshed in parallel, with one of the vessel's twin engines already replaced by a new Yanmar and the second scheduled to follow later this year – a staged approach that spreads the cost without compromising reliability. Taken together, the changes make the boat easier to operate and maintain, and better suited to the demands of front-line rescue work.

"They didn't just replace what was there," says Lisa Markwick, President of Waiheke Volunteer Coastguard. "They redesigned the whole system to today's standards and made practical suggestions that improved how the boat actually works."

Just as important was how the project was managed. Working from their base at Half Moon Bay, the Half Moon Bay Electrical team coordinated other elements of the refit, including new seating, painting and antifouling, and the full survey process.

"They handled all the logistics," says Lisa, "including the complex survey approval, confirming that the structure had another eight to ten years in it," she says. "That's when we knew a full refit made sense." Although the vessel was already in survey, the crucial milestone was passing a detailed hull and fuel-tank inspection.

The work was supported by the wider Half Moon Bay Marina trades network, including engine specialists Allvo Marine, General Marine Services and The Boat Builders. When significant engine issues emerged during the refit, Grant Stanaway and his team at Allvo Marine were, Lisa says, "extraordinary in their professionalism and willingness to work things through with us".

General Marine Services, long-time supporters of the unit, carried out a comprehensive jet and driveline overhaul, removing, servicing and reinstalling the Hamilton Jet units and associated hardware. Their involvement ensured the vessel's propulsion system matched the standard of the wider electrical and structural upgrades underway.

"Waiheke Rescue was due to be replaced within a couple of years," says Lisa. "But with the quality of work that's been done,



Waiheke Rescue fit out complete

she's now good for at least another 10 years of hard-working search and rescue service."

Sea trials followed and *Waiheke Rescue* was ready to return to service stronger and safer than before.

### THE PEOPLE BEHIND THE JOB

The refit was led by Simon Jennings, owner and operator of Half Moon Bay Marine Electrical, a name well known around the marina, and someone whose background bridges both sides of the job.

Jennings' experience isn't confined to the workshop. He holds marine and electrical engineering qualifications alongside offshore master and Marine Class 4 tickets, and he has spent much of his working life on the water as well as below decks. That includes time racing offshore – twice completing the ▶

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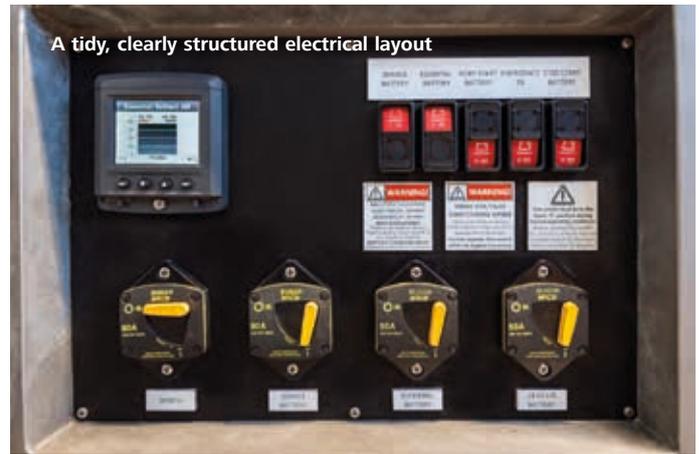
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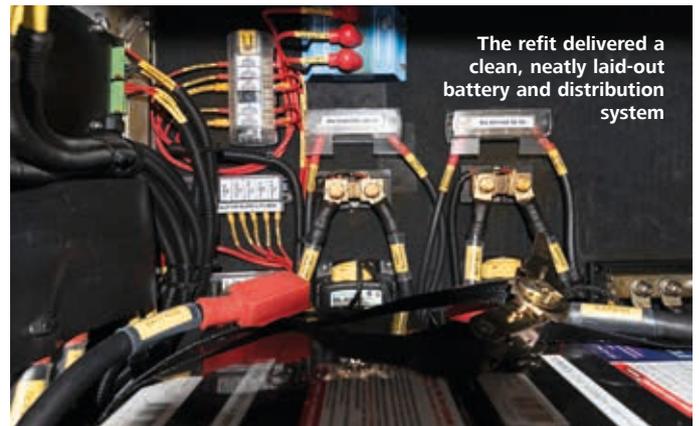
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All smiles during sea trials as Waiheke Coastguard crew put the refitted rescue vessel through her paces



A tidy, clearly structured electrical layout



The refit delivered a clean, neatly laid-out battery and distribution system

Melbourne-Osaka two-handed race – navigating competitive offshore yachts, working as an engineer on superyachts, skippering game fishing vessels, and designing electrical systems at Alloy Yachts.

That breadth of experience was ideal for a project like *Waiheke Rescue*. Systems were laid out with access, redundancy and real-world use in mind, the sort of decisions that only make sense if you've been the one fault-finding at sea yourself.

After taking ownership of Half Moon Bay Marine Electrical, Jennings built a team with similarly varied backgrounds. Senior technicians Myles Baker and Ryan Blow were the main hands on the *Waiheke Rescue* refit, putting in countless hours across the strip-out, rebuild and commissioning phases.

Myles has been with the business for more than a decade, joining as an apprentice and progressing through to senior technician and registered electrician. Ryan, who joined a couple of years ago, brought a strong industrial electrical background and, as a passionate boatie, has made the transition into marine work seamlessly.

The wider team draws on experience across commercial, industrial, automotive and marine electrical fields, supported by fully registered electricians familiar with AS/NZS 3004 marine standards and commercial survey requirements.

For *Waiheke Coastguard*, the project was defined not just by the quality of the installation, but by how the job was run. The Half Moon Bay Marine Electrical team took responsibility for coordinating the wider refit, managing survey approvals, and keeping communication clear throughout – a practical approach that reduced the load on volunteer crews already stretched for time.

As a family business firmly embedded in the local boating community, Half Moon Bay Marine Electrical also supports apprentice training and grassroots boating and fishing activity,

making it a natural fit for a volunteer rescue unit built on the same foundations.

### A COMMUNITY EFFORT

Unlike many countries, Coastguard in New Zealand is largely community funded and entirely crewed by volunteers. Locals and businesses alike contributed to the funding effort for the refit, and while *Waiheke Rescue* was off the island, crews made regular trips to and from Half Moon Bay to keep the project moving. Sealink supported that effort by providing transport during the refit period, helping reduce both cost and practical pressure on volunteers who were already giving significant time to the work.

Thanks also go to the Half Moon Bay Marina Trust, which generously – and repeatedly, in this case – provided haul-outs and dry-dock space free of charge to the unit.

By November, the boat was back in the water and home at Matiatia after nearly six months ashore. A public blessing and formal thanks are planned for 28 February, but operationally the milestone was simple: the vessel was crew-ready and cleared for service.

The refit has given her a genuine second life, addressing known weaknesses and bringing key systems up to current standards. The electrical layout is now better suited to how the boat is actually used, and routine operation and maintenance are simpler as a result. With one new Yanmar already installed and the second scheduled to follow, the work reflects a practical, staged approach that fits the realities of a volunteer-run service.

For *Waiheke Coastguard*, the outcome is straightforward. A vessel that was nearing the end of her working life now has years of front-line service ahead of her – doing the same job, in the same waters, with a little more margin built in. 