

### Attracting naval vessels for maintenance and refit across the South Pacific



FNS Vendémiaire during her 2020 8 week dry dock period

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|-----------------|----------------------------------|
| <b>Client</b>   | Chantiers de l'Atlantique        |
| <b>Contract</b> | FNS Vendemiaire Major Refit 2023 |

### Challenge

Chantiers de l'Atlantique are responsible for the maintenance of the French Navy frigate FNS Vendémiaire. They require a dry-dock and refit facility in the Pacific region capable of providing commercially competitive dry-docking and refit support, in accordance with extremely high quality and performance standards.

### Background

Chantiers de l'Atlantique is a leading European marine construction and fleet services company with expertise in design, manufacture, assembly and commissioning of highly complex vessels and marine installations. As a prime contractor to the French Navy, they provide shipbuilding, systems integration, and logistics support services.

The French Navy operate vessels based in New Caledonia including the 94 metre, 2,600 tonne displacement frigate FNS Vendémiaire.

Babcock refitted FNS Vendémiaire in Auckland in 2014 and 2017 under contract to French prime contractor Naval Group. Chantiers de l'Atlantique then became the prime contractor for FNS Vendémiaire in 2018, and Babcock were selected for the vessel's 2020 and 2023 refits. This included system and equipment upgrades and general maintenance and preservation requiring significant co-operation between Babcock and attending Chantiers de l'Atlantique specialists.

### Contact Us

General enquiries: [enquiries@babcock.com.au](mailto:enquiries@babcock.com.au)  
Marine enquiries: [shiprepair@babcockinternational.com](mailto:shiprepair@babcockinternational.com)



FNS Vendémiaire fitting galley equipment foundations



FNS Vendémiaire port aft corner of Galley on completion

### Results

An extensive refit programme was implemented in 2020 to upgrade, repair and maintain the FNS Vendémiaire with critical projects including upgrade of the vessel's galley and associated compartments and re-construction of Refrigerated Provision spaces. For the galley upgrade, this included removal of all existing equipment, ventilation, plumbing, drainage and electrical systems in the galley, bakery, scullery, compactor room and officers pantry as well as renewal of internal bulkheads and linings, prior installation new galley equipment. Support work also included hull openings for equipment removal and installation and survey, repair and preservation of the surrounding decks and structure.

The refrigerated provision spaces reconstruction involved removal of existing cold and cool room bulkheads, insulation and equipment, and installation of new evaporator units, refrigeration compressor, piping systems and insulation panels. Chantiers de l'Atlantique provided the critical componentry for these two upgrades as well as attending specialists to oversee installation and commissioning.

With the galley and fridge room upgrades on the refit critical path, the fabrication and sheet metal teams worked a two-shift system to ensure that installations and commissioning could be completed within the vessel's available yard period.

Other installations included a new chilled water plant with several fan coil units and associated pipework systems and replacement of mess room structural ventilation ducting.

### Maintenance activities included:

- › overhaul of main engine and removal of propeller shafts and fin stabilisers for survey;
- › inspection of propeller hubs and oil distribution boxes;
- › overhaul of ship's windlass;
- › electrical inspections, pump and motor overhauls;
- › hull thickness survey; and
- › miscellaneous structural repairs.

### Preservation works included:

- › underwater and topside hull;
- › tank spaces;
- › helicopter deck and superstructure deck; and
- › bulkheads and anchor chain lockers.



Babcock, Chantiers de l'Atlantique and FNS Vendémiaire officers completing pre-undocking inspection

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FNS Vendémiaire returned to Auckland for a further 12-week dry-docking and refit period in January 2023, with the critical repair activity being the replacement of the vessel's seven main and auxiliary exhaust systems. Significant out of normal hours working was required to complete the installation in the time available.

#### Other key activities included:

- › underwater hull and helicopter deck coatings renewal;
- › topside hull, general deck and superstructure preservation;
- › servicing of CPP propeller and bowthruster;
- › overhaul of port and starboard rudders;
- › servicing of pumps, motors, and ventilation fans.

As well as completing various steel repairs, general survey and preservation activities, Babcock's diesel workshop team assisted Chantiers' attending specialist complete 24,000 hours overhauling the vessel's SEMT Pielstick 6PA6 L280 main engines.

#### Success

With our growing understanding of French Navy's requirements, and excellent cooperation with Chantiers de l'Atlantique, Babcock was able to complete the challenging 2020 and 2023 projects safely, to schedule and to quality criteria.

#### The future

Since 2008, we have completed six French Navy vessel refits. With Auckland's relative proximity to New Caledonia and Babcock's combination of commercial and warship refitting experience we hope to continue co-operation with Chantiers de l'Atlantique and the French Navy vessels operating in the South Pacific.

#### About Babcock

Babcock is an international defence company operating in our focus countries of the UK, Australasia, Canada, France and South Africa, with exports to additional markets with potential to become focus countries. We meet our customers' key requirements of affordability, availability, and capability by delivering engineering, support and critical systems to defence and civil markets.

We play a critical role in international defence as a trusted guardian of national security, counted upon to protect lives and maintain our lines of defence.

Backed by decades of experience across the globe, we are Australasia's premier naval sustainment company, a leader in High Frequency Communications Systems and Australia's largest rotary wing helicopter emergency services provider.

Our customers, and the mission we share, inspire us each and every day to strive for excellence as we create a safe and secure world, together.



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