

HVAC Refurbishment at Building 67

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Safety Officer: Peter Lucas



Client: **Royal Australian Navy**

Location: **Garden Island, NSW**

Project Cost: **\$550,000**

This project involved the rip out and replacement of several pieces of HVAC plant from an occupied building at Garden Island Navy Base. We removed and replaced two large chillers (one from within the building and one from behind the building) as well as 6 fan coil units from the Level 1 ceiling space.

The work involved a combination of mechanical, plumbing, electrical, control and general building works that had to be completed while the building was still occupied. The general building works in particular were beyond the capability of traditional mechanical contractors and the crane operations, particularly to remove the internal chiller, were extremely technical.



The internal chiller had to be removed through a small plant room door on Level 1 that was poorly aligned with the internal fixtures. A special platform was configured and utilised with a 50 tonne crane. Riggers, skids and jacks were required and care was needed to avoid fire sprinklers.



The external chiller had to be lifted over the building and positioned precisely into the space occupied by the old item. Once in place, new pumps, valves and control devices were installed and the entire system was then commissioned and added to the existing BMS.



The space in the level 1 ceiling was very limited due to the roof trusses. The old fan coil units had to be demolished and removed in pieces and the new units were knocked down on site and re-assembled in-situ in the ceiling.