

Project Profile

RAAF Base Richmond Mobile Engine Test System Dismantle and Packaging for Offshore Transport



Client	Aerotest Limited
Location	Sydney, New South Wales
Duration	August 2018
Contract	Lump Sum Construct Only
Cost	\$0.2 million

Project Overview

Aerotest Limited is a British based company that provides aero engine test facilities and ground support equipment for both civilian and military aircraft to a variety of global customers. Aerotest's Mobile Engine Test Systems (METS) is an advanced open-air performance testing system for the power plants and propellers of the Lockheed Martin Hercules C-130 and P3 Orion Aircraft.

The METS Installation at Royal Australian Air Force (RAAF) Base Richmond was designed to test the power plants and propellers of the Fleet of RAAF C-130J Hercules medium-sized tactical air-lifters operating from the Base. RAAF C-130J Hercules are utilised as an important air link for the Australian Defence Force.

Aerotest recently acquired the two Mobile Engine Test Systems to be dismantled and packaged for transport back to the United Kingdom, engaging McMahon Services to undertake the works.

McMahon Services

Head Office

T (08) 8203 3100 F (08) 8260 5210

E adelaide@mcmservices.com.au

W mcmservices.com.au RAAF Base Richmond Mobile Engine Test System Dismantle and Packaging for Offshore Transport | Page 1



Scope of Work

The project was for the dismantling and packaging of the two Mobile Engine Testing Systems and their loading into shipping containers for ultimate overseas shipping to the United Kingdom.

Works included services disconnections and making safe the METS trailer, associated Acoustic Control Cabin, cable harnesses and other components and instruments.

Acoustic Control Cabin works included the removal of mounts, ducting, floodlights, wind speed and direction indicator and speaker horn, packing all equipment into crates and their placement on transport. The Acoustic Control Cabin was filled with air bags to protect the interior during transport.

Decommissioning of METS Trailer included removal of stairs and handrails, lowering of a large wiring hoop, disconnection and stowage of harnesses, draining of hydraulic oils, and then loading the METS trailer on a truck for transport.

Other works included the dismantling of the METS screw compressor, refrigerant dryer, oil water separator, air filters interconnecting pipework, valves, ties, chain and steel tie down plates and packaging all equipment into a 20 foot container. The project team collected all spare equipment, computers, radios and chargers and also packed them into crates on truck for transport.

The project team undertook a series of critical lift studies to ensure the safe dismantling and packaging of the METS equipment. Close liaison with the RAAF Base Richmond flight control team when mobilising the crane to site ensured the project team did not impact protected air space and flight paths of RAAF operations.

Plant and equipment utilised to complete the works included at 25t Franna crane, a 2.5t forklift and a 5.7m scissor lift. Works were completed one day ahead of schedule. Workforce peaked at five and all works were undertaken without incurring any safety or environmental incidents. Aerotest provided onsite support for the appropriate dismantling and packaging techniques required for the METS equipment.

