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Defence engineering industry in New Zealand

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In this document:

- **Overview**
- **Fast facts**
- **International innovations**
- **Niche technology solutions**
- **International collaborations**
- **Industry contacts**

Overview

The New Zealand defence and homeland security industry comprises over 250 companies who have the capability and capacity to participate in international defence and security markets.

New Zealand companies have major defence acquisition and maintenance contracts with Australia, Singapore, the United Kingdom and the United States – and also export to China, Southeast Asia, South America and Europe.

Australia is the most significant market destination, accounting for almost half of all exports. The ANZAC frigates project – a joint venture between the governments of New Zealand and Australia signed in 1989 – saw New Zealand companies provide more than NZ\$800 million of work to construct 10 frigates.

Fast facts

- The large defence engineering companies are equipped for specialist manufacturing, repair and refurbishment of aircraft, naval vessels, ground transportation and other military vehicles.
- Many niche technology companies supply a wide range of technically advanced solutions to multiple global defence and homeland security markets worldwide.
- Many New Zealand companies provide through-life servicing support for components and systems supplied by international defence prime contractors.

International innovations

[Tait Radio Communications](#)

Tait Radio Communications is a global leader in designing and delivering radio solutions for a variety of industries including the national security, public safety, government and urban transport sectors. Its reliable and secure products have been used in the most challenging operational



NEW ZEALAND

environments by national security organisations around the world. Tait is based in Christchurch and prides itself on its international customer base and support network.

Right Hemisphere

Nine of the top 10 United States aerospace and defence companies – including Airbus, Bell Helicopter and Pratt & Whitney – use 3D product graphics management systems designed by Right Hemisphere. This allows them to source, sell and service products more effectively by delivering the right 2D and 3D product graphics to customers, partners and employees across their extended enterprises.

Flightcell International Limited

Flightcell specialises in sophisticated satellite communications solutions for aviation, marine, land and personal communication. Incorporating secure voice, position and data transmission, Flightcell has won multiple contracts with the United States' Army, State Department, Air Force, and Air National Guard units, and recently the Colombian government. Their technology innovations have been readily picked up in the commercial and private aviation sectors.

Safe Air

Safe Air operates a maintenance, repair and overhaul facility for military air frames and components, including Lockheed C-130 and P-3, Boeing 737, UH1 and Kaman SH-2 Seasprite air frames, as well as Rolls Royce T56 and Pratt & Whitney J52 engines. Safe Air operates one of the world's largest propeller overhaul facilities and is an authorised repair centre for Hamilton Sundstrand and Dowty propellers. Safe Air is the main sub contractor to L3 Communications for the RNZAF C-130 fleet centre wing replacement programme.

Noske-Kaeser

Noske-Kaeser is a New Zealand-owned global company, which designs and manufactures specialised turnkey heating ventilation and air conditioning (HVAC) and fire fighting systems for defence, rail, marine, offshore, coastal and land based applications. Noske-Kaeser equipment and components are in service worldwide in naval vessels of several nations, on board destroyers, frigates and corvettes as well as on military transport vessels, fast patrol boats, mine hunters and submarines.

Hamilton Jet

The waterjet propulsion system was pioneered by Hamilton Jet 50 years ago and the company continues to be a leader of waterjet technology via ongoing research and development. Hamilton Jet's product range includes models for power inputs from 80kW up to 5000kW and control systems to match. These are put to work in high speed military craft ranging from small interceptor boats right up to large patrol vessels. The company is currently working on many naval and coast guard projects worldwide.



NEW ZEALAND

Niche technology solutions

While the New Zealand defence sector is host to a handful of reasonably large defence and general engineering contractors, the sector includes many smaller niche technology providers that sell into defence and homeland security markets.

Many of these companies are expanding as a result of international success, particularly in North America.

Surveylab

Surveylab's ikeGPS enables verifiable field GIS data capture to be quicker and safer. ikeGPS's "point and shoot" laser GPS technology allows field users to remotely capture positional data and photos up to 1,000 meters away. The image verifies exactly what was measured, so data integrity is preserved. Surveylab's technology is used by defence forces, city councils, federal authorities, and utility companies around the world.

Zephyr™ Technology

Zephyr™ Technology is a global market leader in physiological and biomechanical monitoring technology. Its BioHarness™ Defense Physiological System (DPS) uses patented smart fabric sensors to wirelessly monitor the physiological condition of up to 64 military personnel in both training and combat environments. By communicating over existing voice radios the data is used to make informed decisions in emergency situations. The technology has been used by United States special operations personnel.

International collaborations

VT Fitzroy

VT Fitzroy is a joint venture between the VT Group plc (United Kingdom) and Fitzroy Engineering of New Plymouth, New Zealand. The company has a long-term contract to manage the Royal New Zealand Navy's naval base in Devonport, Auckland, and is an integrated mechanical, electrical and electronic engineering facility. International partners include MAN Diesel (Australia), MTU Detroit Diesel (Australia), Wartsila (Finland), BAES (Australia), CEA Technology (Australia) and BVT Surface Fleet Ltd (United Kingdom).

spidertracks

spidertracks developed the world's first truly portable satellite-based tracking solution, allowing users to track any mobile asset anywhere in the world. Partnering with the global satellite network, Iridium, spidertracks has attracted clients in 30 countries. Its accurate flight, marine and vehicle following is ensuring the safety of their crews, improving planning and helping to increase the productivity of their businesses.



NEW ZEALAND

Industry contacts

[New Zealand Defence Industry Association](#)

The New Zealand Defence Industry Association (NZDIA) has a broad mandate to support New Zealand companies operating in the defence and homeland security sector. It also works with New Zealand Trade and Enterprise (NZTE) to support companies in the identification and targeting of export opportunities.

[Defence Industry Committee of New Zealand](#)

The Defence Industry Committee of New Zealand (DICNZ) is a government policy advisory body formed from the industry together with New Zealand's defence forces. These industry groups have worked to expand the technology base, maximise export earnings and promote regional links and industrial cooperation with other countries.

[New Zealand Trade and Enterprise](#)

NZTE is the New Zealand government's economic development agency and works with the defence industry to build up its capability and increase its international connections.