



# AVIATION IS IN OUR DNA

With a rich history in aviation  
see how New Zealand companies  
work smarter and faster.



“New thinking combined with deep industry experience and a rich history can make New Zealand the ultimate place to do aviation business.”

Jim McCoy, US entrepreneur and venture capital investor

In the demanding world of aviation New Zealand companies, from design concept to the marketplace, have an enviable reputation for value, practical innovation, international connectedness and for going the extra mile.

## A SIGNIFICANT FORCE

New Zealand's aviation industry has a long-standing reputation for innovation, quality and responsiveness.

More than 80 countries now use aviation products and services from New Zealand.

The industry includes:

- aircraft design and manufacture
- new technologies
- maintenance, repair and overhaul (MRO)
- airport infrastructure
- aviation parts
- aircraft cabin interiors
- pilot and engineer training
- aviation services.

They are part of a thriving NZ\$10 billion industry with more than 1,000 aviation-related businesses and organisations employing around 23,000 staff.

By 2010 New Zealand aviation had manufactured 1,000 aircraft.



## AVIATION IS IN OUR DNA

New Zealand has a rich aviation history. We were among the first to fly and as an island nation, we have to fly – aviation is in our DNA.

1903	1915	1916	1918	1919	1950s	1960s
Richard Pearse, an early pioneer of powered flight	First passenger flights	First pilot school	Purchased first two Boeing aircraft ever exported	First airmail service	New Zealand pioneered crop dusting	New Zealand pioneered live deer recovery using helicopters

New Zealanders love to fly.

Today New Zealand has more helicopters per head of population than any country. There is nearly one aircraft per 1,100 of population, and the highest number of helicopters per capita in the world.

Practical innovation and connectivity makes New Zealand ideal to develop and certify new aircraft and aviation innovations.



## AIRCRAFT DESIGN AND MANUFACTURE

- [Can do attitude](#)
- [Global regulatory connectivity](#)
- [Fast certification pathway](#)
- [Safe neutral environment](#)
- [Largest aircraft manufacturer in Australasia](#)

New Zealand's pioneering work in agricultural aviation gave an early impetus to a growing general aviation sector that has made more than 1000 light aircraft, operating on every continent except Antarctica.

Short take-off and landing (STOL) utility aircraft, micro-light kits, World War I replica aircraft, helicopters, sports and kit aircraft, civilian and military ab-initio trainers and gliders are all manufactured in New Zealand.

With several manufacturers, and an engaged well-connected regulator, aircraft can be prototyped, tested and certified faster than in many other markets.

High quality standards and productivity levels, coupled with intellectual property acquired over many years and moderate OECD-level costs, help ensure New Zealand's general aviation manufacturers are internationally competitive.



## NEW TECHNOLOGIES

- Composite technology transferred from New Zealand's renowned marine sector
- Emerging titanium industry
- Research and product development

Innovative materials such as advanced composites – which New Zealand has successfully used for high-performance yachts – and light metal components, assemblies and structures, are now featuring in aircraft production.

New Zealand Aluminium Smelters supply very high grade aluminium for use in the aerospace industry and Titanox produces titanium powders targeted for specific niche applications including aircraft and space manufacture.

Navigational and communication aids developed in New Zealand include real-time aircraft location and tracking systems delivered over the internet.

New engines, composite propellers and cabin fit outs all feature unique blends of creative design and novel combinations of new materials.

Air New Zealand was one of the first airlines to experiment with a blended biofuel.

Air New Zealand also operated the first flight under 'optimum flight conditions' to demonstrate the significant fuel savings and reduction in carbon emissions that are possible (with FAA, Airways New Zealand and Airservices Australia).



## MAINTENANCE, REPAIR AND OVERHAUL (MRO)

- Smart world-class activities
- Very experienced workforce
- First-class quality service
- Great problem solvers

MRO companies in New Zealand, both fixed wing and rotary, offer full design, engineering and manufacturing services and have extensive experience servicing international customers.

New Zealand's MRO operations are internationally competitive with high productivity and moderate costs by OECD standards.

Scheduled maintenance, inspections, repairs, modifications and overhauls are performed on more than 3,800 New Zealand-registered aircraft manufactured by global companies. These include Airbus, Beech, Bell/Augusta, Boeing, Bombardier, Cessna, Embraer, Eurocopter, Fairchild Metroliner, Hawker Beechcraft, Lockheed Martin, Robinson and Saab.

New Zealand has also earned a reputation for quality engine repair and overhaul work – including on high-performance engines for leading engine brands such as Honeywell, Pratt and Whitney, TCM Continental and Textron Lycoming.

MRO companies have approvals from international bodies including the FAA (United States), EASA (Europe), CAAC (China), JCAB (Japan), CASA (Australia) and NZCAA (New Zealand). Several hold Bureau Veritas quality approvals and AS9100 approvals.

New Zealand also has world-class capabilities in aircraft restoration and replica production, especially of World War I and World War II aircraft, and in developing designs to approval stage with major OEMs, including for instance, repowering helicopters, and developing new aircraft furniture and systems.



## AIRPORT INFRASTRUCTURE

- Great breadth of products and services
- Valued in airports around the world

New Zealand's airport infrastructure service capabilities encompass airport design and development, planning, project management and consulting services.

The build capabilities are extensive. They include runway and apron construction; terminal construction and fit-out; and the provision of airside and landside products and services.

New Zealand has special expertise in the provision of baggage and freight handling products and systems. Companies have supplied to over 80 countries.

Companies are very active in Australia and the Pacific, but an increasing number are providing fit-out products and services to airports in parts of Asia, the Middle East and the European Union.



## AIRCRAFT CABIN INTERIORS

- Focus on customer requirements
- High-tech design and materials
- European and FAA approvals
- Relationships with Boeing and Airbus
- Capabilities cover fixed wing and rotary

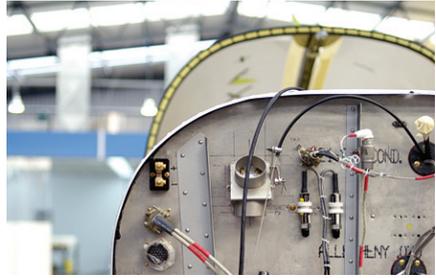
New Zealand's aircraft cabin interior makers are flexible problem solvers, able to create new solutions to meet the unique needs of customers.

Their design, production and servicing skills have evolved from the country's considerable expertise in the marine industry, notably the use of advanced design and composite materials in New Zealand's superyacht industry.

By combining marine and aerospace expertise, New Zealand's aviation interior companies are able to offer a range of innovative products and design solutions. New Zealand companies have a focus on quality and safety, as well as a strong commitment to meeting customer requirements on time.

The flexibility of New Zealand manufacturers, and their ability to carry out short production runs, means they can easily offer part or full solutions for aircraft interior projects.





## AIRCRAFT PARTS

- Delivery on time to specification
- Open communication
- One point of contact
- Strong Asian relationships and Free Trade Agreements

Aircraft parts have been manufactured in New Zealand for 90 years. More recently, parts have been exported to the European Union, North America, the Pacific and Australia.

New Zealand companies have a proven ability to manufacture to the quality and delivery deadlines demanded by international customers.

Many companies hold NZCAA, CASA, FAA and/or EASA certifications, and AS9100.

A growing high-precision engineering supply chain is manufacturing components for Rolls Royce and is gaining the attention of several other aircraft manufacturers.



## AVIATION TRAINING

- Full spectrum environment
- Open unrestricted airspace of 20 million square miles
- Professional and purposeful training
- Leading international standards

New Zealand's aviation training industry is recognized internationally for its innovation, quality standards and calibre of instruction.

The New Zealand pilot training industry has considerable international credibility. It supplies 'fit for purpose' pilots.

Pilots trained in New Zealand fly for many international airlines including British Airways, Air India and Oman Air; and operate helicopters in countries such as China, Indonesia and India.

New Zealand's varied geography, weather and vast and clear airspace provide an unrivalled environment for year-round pilot training. In addition, New Zealand has a strong

focus on aviation safety and has developed a network of pilot training providers with well-rounded capability and expertise.

New Zealand expertise in aviation training includes:

- full professional flight training for pilots, cabin crew and support staff
- aircraft maintenance and engineering staff training
- air navigation and air traffic control training
- medical training for airline medical officers, cabin crew and aviation medical examiners
- english language training for pilots, air traffic controllers and air navigation staff
- partnering to develop customised flight training in other countries
- degree and diploma courses.



## SERVICES

- Wide range of services
- Adherence to international standards
- Skilled workforce

New Zealand's dynamic aviation services sector provides a range of consultancy and project services to airport and airline customers around the world.

These include:

- airport design and build
- employment services covering engineers, technical staff, cabin crew and pilots
- risk and safety management systems
- supply chain development and optimization
- strategic and operational planning for airlines and airports
- fleet optimization
- leasing
- contract negotiation
- feasibility studies
- market research
- installation, commissioning, calibration and checking of airport systems and processes.



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