

Civil Aviation in New Zealand

The aim of this paper is to explore the development and some of the current issues in civil aviation in New Zealand. Civil aviation plays a very important economic and social role. New Zealand is geographically isolated and highly dependent on both international and domestic aviation services. Its airports were amongst the first to be commercialized. Air New Zealand remains a dominant player both in the domestic market and international routes into New Zealand - markets which have witnessed the failure of other airlines. Low cost carriers have operated in New Zealand markets since 1995.



Firstly, this article considers the development and significance of civil aviation in New Zealand. The article then looks at some of the current issues in terms of airlines and then airports. Finally, the article turns to the economic importance of civil aviation to New Zealand.

By David Lyon and Graham Francis

History of Civil Aviation in New Zealand

New Zealand has a long history as a pioneer in aviation. Many New Zealanders have never really accepted that the Wright brothers flew before Richard Pearse. The first two aircraft built by Boeing were exported to New Zealand during the First World War and were used to train military pilots. Although it had no national airline, New Zealand had landing rights on continental USA before the Second World War, and ahead of its bigger neighbor Australia. New Zealand was amongst the first to deregulate and one of the first countries to commercialize, and then privatize parts of its air transport infrastructure.

Significance of Aviation to New Zealand

New Zealand is a country that has embraced aviation from its earliest days, and aviation remains vital to a country 1,800 kilometers from its nearest neighbor. Ninety-nine per cent of people arriving and leaving New Zealand do so by air. Twenty-five per cent of imports, by value, arrive by air and 15 per cent of exports leave New Zealand in the same manner. The country's population is small: approximately four million widely dispersed across varying terrain, so the most common form of public transport between major cities is by air. The dominant internal airline is Air New Zealand, which is also

the face of New Zealand to the outside world, with the airline servicing destinations in Asia, the United States and Europe.

Airline

New Zealand was early to implement deregulation and an open skies policy. The domestic aviation market in New Zealand was deregulated in 1984 (Collier, 1999; Kissling, 1998). Although only a relatively small number of airlines have operated, the market has been characterized by volatility and competitiveness. The high dependence on air travel has not always guaranteed success for airlines. There have been several notable airline failures such as Origin Pacific, Kiwi, Ansett and Qantas New Zealand. Other international airlines such as United Airlines and Continental have withdrawn from the market.

Legacy Carriers

The dominant force in the New Zealand's aviation markets remains the 'flag carrier', Air New Zealand. Formed from Trans Empire Airline Limited (TEAL) the airline became Air New Zealand on 1 April 1965, and absorbed the internal National Airways Corporation (NAC) in 1978 (Sheehan, 2003). Air New Zealand was privatized in 1989, but 84 per cent was repurchased by the Government in January 2002 after the failure of Ansett Australia the previous year. Ansett Australia was 100 per cent owned by Air New Zealand. For the year ending 30 June 2006, Air New Zealand reported an after tax profit of \$96 million, and for the six months to 31 December 2006 an interim profit of \$74 million after taxation. This continues a financial turnaround over recent years since making large losses in 2002.

Aircraft	Owned	Leased	On Order	Average Age (years)	Average Utilization (hrs/day)
B747 - 400	4	4	0	12.9	14.75
B777-200ER	4	4	0	0.9	14.44
B787	0	0	8	0	0
B767-300ER	5	1	0	10.7	13.73
A320	2	10	0	2.6	12.02
B737 -300	5	9	0	9.3	7.95
ATR72-500	3	8	0	6.3	7.18
Q300	15	0	5	0.8	7.47
Saab 340A	6	0	0	18.8	5.65
Beech 1900D	17	0	0	5.1	7.05
Totals	61	36	13	6.5	9.06

Table 1: Air New Zealand's Fleet (as at April 2007)

Source: Air New Zealand. <http://www.airnewzealand.co.nz/aboutus/fleet/default.htm>

Airport	International movements		Growth in	Total		Growth in total
	2000	2005	international	movements		movements
			movements			%
Auckland	28,537	36,414	+28%	153,257	159,191	+4%
Christchurch	7,124	12,149	+71%	159,360	148,506	-7%
Dunedin	451	1,036	+130%	23,893	24,143	+1%
Hamilton	1,117	1,233	+10%	54,047	86,511	+60%
Palmerston	906	948	+5%	55,959	52,143	-7%
North						
Queenstown	196	412	+110%	53,102	53,469	+1%
Wellington	5869	6,381	+9%	135,237	119,275	-12%
Total	44,200	58,573		634,855	643,238	
Mean increase			+33%			+1%

Table 2: The growth in international movements for the five year period 2000-2005

Source: Airways New Zealand, 2006/Calendar year aircraft movements/

During the past few years, Air New Zealand has demonstrated a strong emphasis on cost control to remain profitable. This has included the recent contentious proposal to contract heavy maintenance offshore, and, more recently, to contract out customer service and baggage handling functions. These functions have, however, remained within Air New Zealand after substantial negotiations with unions and employees to drive down overall costs to the airline. Fleet choice upgrades have remained a constant focus for Air New Zealand as it strives to remain competitive. It has received new Boeing 777 aircraft and is an early customer for the Boeing 787 (see Table 1). A wholly-owned subsidiary is completing the replacement of SAAB 340 aircraft with a fleet of what will be 20 Bombardier Q300 aircraft. Air New Zealand operates a broad range of aircraft from Boeing 747 400s to Beech 1900s.

Other than Air New Zealand, a number of legacy carriers offer services to four New Zealand destinations. Among these are Qantas, Singapore Airlines, and Emirates, which fly principally to Auckland, but direct routes to Christchurch are becoming more frequent. Emirates have had an impact on the competitive nature of both trans-Tasman and long-haul markets, routing into their growing network via Australia.

The Potential Air New Zealand - Qantas Alliance

The 'on-again off-again' linkup between Qantas and Air New Zealand

has so far been prevented by Australian and New Zealand authorities as being anti-competitive. Following these rulings, there was a rationalization of the number of seats flown Trans-Tasman, and Air New Zealand is reporting high load factors on these routes in recent media releases.

Low-cost Airlines

The first low-cost carrier was Kiwi Airlines, which commenced a low cost trans-Tasman service in 1995. Kiwi Airlines initially operated as a charter airline, but then subsequently became a scheduled carrier providing services to a number of cities in both New Zealand and Australia. Air New Zealand responded by launching its own low-cost subsidiary Freedom Air, which, combined with competition from Qantas, forced Kiwi Airlines out of business (Airliner World, 2003; Forsyth, 2003 and Wilson, 1996).

Other low-cost operators to and from New Zealand currently are Jetstar, a subsidiary of Qantas and Pacific Blue, a subsidiary of Virgin Blue in Australia. Jet Connect is a Qantas subsidiary flying Boeing 737 aircraft domestically inside New Zealand between main centers.

Deregulation within New Zealand has meant that new entrants and particularly large airlines with substantial capital are seeing New Zealand as an attractive market to enter, and are viewing the domestic and trans-Tasman routes as possible revenue

earners. Air New Zealand has remodeled itself with its 'express class', adopting many of the low-cost airline practices on all flights of six hours or less (in addition to running its low-cost subsidiary Freedom Air).

International Air Links

The largest international destination from New Zealand remains its neighbor Australia, and the largest numbers of inbound tourists to New Zealand come from Australia. Daily flights link New Zealand directly to Asia and North America with onward connections to Europe. Trans-Tasman routes are a hotly contested market, with Air New Zealand remaining a dominant player, and flights are both frequent and to multiple destinations in each country. For example, Air New Zealand and its 100 per cent owned low-cost carrier Freedom Air operate to Australia from seven international airports within New Zealand. Tourists from New Zealand frequently holiday in neighboring Pacific Island countries such as Fiji, Samoa and Tonga, and extensive air routes link New Zealand to a number of small Pacific states. Many of these air links were established immediately after the Second World War as routes to Hawaii and ultimately the USA. New Zealand also has direct air links to a number of Asian countries, the United States and South America in addition to short-haul destinations. Air New Zealand has a policy of adding one new international route per year and it will initiate direct flights from Auckland to Vancouver from late 2007. Table 2 shows the growth in the number of international movements.

The New Zealand Domestic Airline Market

Within New Zealand, there is a high dependence on domestic air travel. This has resulted in a highly developed regional airport network for a country of such a small population. The dependence on domestic air transport is influenced by geography and the limitations of alternative forms of transport. Rail within New Zealand is used primarily for freight and not as a means of passenger travel between major centers of population. Air travel, by contrast, is reasonably priced, fast and frequent.

In terms of market share, Air New Zealand remains domestically by far the most significant player. This has been increasingly evident since the demise of Origin Pacific in 2006 and the announcement by Qantas that it will withdraw services between two major cities at the end of 2007. Within New Zealand, Air New Zealand has a number of domestic hubs and operates an increasingly no frills service. Its low-cost subsidiary Freedom Air does only operate international flights.

New Zealand's Airports

There are seven airports with international services and 17 others with services by a major airline. All significant centers of population are served by a regional airport with scheduled services. These are shown on the map in Figure 1. Auckland has traditionally been the major international hub for New Zealand and around 50 per cent of the population live within 250 kilometers of Auckland Airport. The second most significant international hub is Christchurch, situated on the south Island, which is increasingly attracting both long-haul and Trans-Tasman traffic that is principally tourism-related. In addition to domestic services, many airports have actively sought the establishment of international air links. As well as the current seven international airports, others that seek to provide international services are Invercargill, Rotorua and Napier. Many of these initiatives are supported by local governments who are interested in the economic potential of such developments within their respective regions.

A History of Changing Ownership Structures: Commercialization to Privatization

The Tymms report (1948) first proposed commercial /user pays principles and guided New Zealand aviation-related policy in the post World War Two era. From 1964, the New Zealand Government began entering into joint ventures with local government to jointly own and manage airports in their regions. In 1985, the government announced a new policy

to corporatize the existing joint venture airports. Shortly thereafter, the Government began to privatize some of the joint venture airports. Auckland Airport was the first airport company in the Asia Pacific region to be listed on a stock exchange in 1989, and the government share of Wellington Airport was sold via a trade sale to a major infrastructure company. Other smaller airports were either sold in their entirety or the government sold its share.



Figure 1: New Zealand's Airports

The three major airports within New Zealand are Auckland, Christchurch and Wellington. Auckland Airport is in private ownership with some local government shareholding. Christchurch Airport is in local government ownership with 25 per cent central government ownership. Wellington Airport is principally owned by Infratil, which also owns a portfolio of infrastructure investments, including maritime ports and buses in NZ and other airports in Scotland, England and Germany. Airports have been reasonably successful operating as commercial

enterprises, relying on an increasing proportion of non-aeronautical sources of revenue. All airport companies with international connections have continued to be profitable (Lyon & Francis 2006).

Regulation of Airports

New Zealand's airports are subject to reserve regulation (Graham, 2003). The system basically operates under the premise or tacit threat that regulation (such as price cap regulation) would be introduced if airports are found to be making unreasonably large profits. The commerce commission's 2002 study of Auckland, Wellington and Christchurch airports concluded that price regulation was warranted at Auckland Airport, but that it was not warranted at Wellington or Christchurch airports. The New Zealand Government has, so far, decided not to regulate prices at Auckland Airport since the report was published. Auckland International Airport has continued to be a highly profitable venture, and, perhaps not surprisingly, the airlines have continued to call for price-cap regulation to be introduced.

Economic Importance of Aviation to New Zealand

Both airlines and airport companies are significant businesses in their own right and contribute significantly to the New Zealand economy. Of greater benefit and importance, however, are their key contributions as the vehicle for almost all travel to and from New Zealand, the high percentage of imported and exported goods that travel by air and their direct role in economic activity such as tourism. This high national dependence on air travel and air freight also represents significant economic risk, which may be one of the reasons that the New Zealand government decided to repurchase the majority of the shareholding of Air New Zealand about five years ago, when it got into financial difficulties. Because of the importance of air links to and from New Zealand, and internally, New Zealand operates a very liberal aviation market and welcomes competition both domestically and internationally.



Tourism

Tourism is a key contributor to the New Zealand economy and it has recently replaced food production as the largest single contributor. Aside from cruise ships servicing New Zealand, almost all other visitors arrive by air from a range of destinations. The biggest single inbound tourist flow is from Australia and there are currently seven New Zealand airports with direct flights from Australia. In terms of a medium haul destination, New Zealand is popular with visitors from Asian countries such as Japan, Korea, and, more recently, China. It is also an important inbound market for tourists from the United States of America and, to a lesser extent, South American countries. The main inbound destination is Auckland with 68 per cent of international flights, followed by Christchurch with 16 per cent of international flights. Small niche international airports such as Queenstown in the Southern Alps provide immediate access to recreational snow fields. A potential new international airport at Rotorua will provide immediate access to the most iconic tourism destination in the North Island, known for its Maori tourism culture and geothermal activity and spas.

Engineering and Manufacturing

The major engineering capability within New Zealand is owned and operated by Air New Zealand. It owns its own aircraft maintenance company, Air New Zealand Engineering Ltd, and is also a joint partner with Pratt and Whitney in the Christchurch Engine Centre. Several Air New Zealand-owned facilities operate in Australia. Air New Zealand also owns Safe Air Limited, which under-

takes significant engineering contracts for both civil and military clients.

Aircraft manufacturing in Hamilton, New Zealand has been continuous since the early seventies. Pacific Aerospace manufacture light piston engine military trainers, agricultural aircraft and a turbine powered utility aircraft called the XP750. This aircraft is a direct competitor to the Cessna Caravan and Pilatus Porter and is sold worldwide. Pacific Aerospace also manufactures components for the major aircraft manufacturers. A more recent manufacturer, Alpha Aviation, has gained the international rights to the Robin range of aircraft and is manufacturing them to replace training aircraft such as the Cessna 152 and similar two place training aircraft that are no longer in production. A major customer for this aircraft has been CTC Aviation, which has recently placed orders and options for 26 aircraft. CTC Aviation is a British company training pilots for airlines that has established a major base in New Zealand.

Conclusions

Although it is a small country, New Zealand has frequently been at the forefront of aviation/air transport developments, such as privatization, commercialization and deregulation. Given its small population, it has a well-developed international and domestic airport system, and, as a geographically isolated country, its dependence on air transport is unlikely to diminish. Air New Zealand remains the dominant player in domestic air travel within New Zealand and on many short haul international routes.

References

- Air Department, 1948. "Tymm's Report"-Great Britain Civil Aviation Mission to New Zealand. New Zealand Government, Wellington.
- Airways New Zealand, 2006. 'Domestic and International Movements by Calendar year' http://www.airways.co.nz/documents/avimove_stats.pdf
- Commerce Commission, 2002. Final Report Part IV Inquiry into Airfield Activities at Auckland, Wellington and Christchurch International Airports, 6 August 2002 http://www.med.govt.nz/templates/ContentTopicSummary___3315.aspx
- Graham, A., 2003. Managing Airports: an international perspective, Elsevier: London.
- Kissling, C., 1998. Liberal aviation agreements - New Zealand, *Journal of Air Transport Management*, 4 (3), 177-180.
- Lyon, D., & Francis, G., 2006. Managing New Zealand's Airports in the Face of Commercial Challenges, *Journal of Air Transport Management*, 12(5), 220-226
- McCreal, M.E., 2003. A History of Civil Aviation in New Zealand, Bateman, Auckland.
- Sheehan, P., 2003. The aircraft of Air New Zealand and its affiliates since 1940, Transpress, Wellington.
- Wilson, E., 1996. Dogfight: The Story of Kiwi Airlines Collapse, Howling at the Moon Productions, Auckland.

About the Authors

Corresponding author is David Lyon:
 Head of School of Business
 Bay of Plenty Polytechnic
 Tauranga
 New Zealand.
David.Lyon@boppoly.ac.nz
 Tel +64 7 576 4271

Graham Francis is a Senior Fellow at Waikato University, Hamilton, New Zealand