

So, You Want to be an Air New Zealand Pilot?





So, You Want to be an



Above: An Air New Zealand Boeing 737 taking off from Queenstown. The road to a pilot's seat in a jet like this is a long and rocky one—but well worth the journey for those dedicated enough to follow it to the end. Opposite page: Air New Zealand's Boeing 777 simulator at the Aviation Institute's simulator centre at Auckland International Airport.

Are you (or your son or daughter) considering a career as an airline pilot, but your knowledge of the industry and the career path is very limited? Then this article is for you. It is designed to help you understand more about what is required to become an airline pilot with Air New Zealand, and provide some statistics that help describe the size, shape and nature of the professional fixed-wing (aeroplane) aviation industry in New Zealand.

The journey to an airline job is a taxing one: it requires a huge amount of money, hard work, patience and dedication; it will contain setbacks, disappointments and frustrations. The personal commitment and sacrifices required mean that those people with

that somewhat irrational compulsion to fly are far more likely to be the ones who stick with it long enough to reap the rewards. And for someone who has been bitten by the aviation bug, it is those rewards that make all that hard work worthwhile.

Part One of a five-part series of articles by Christine Ody

Airline Pilot 101

Firstly, some very basic information about the various roles of airline pilots.

On domestic and short-haul international flights, there will be two pilots: a captain (the pilot-in-command, who wears four stripes), and a first officer (FO) or co-pilot, who wears three stripes.

The captain is legally responsible for the conduct of the flight, and for the safety of the aircraft and all its crew and passengers. The first officer is the second in command and must be able to take over the duties of the captain should the captain become incapacitated. First officers contribute actively to the decision-making **process** in flight, but the captain always has the final decision-making **authority**.

Every flight is an exercise in finely honed teamwork. One pilot is designated the pilot flying (PF) and one the pilot monitoring (PM). The PF controls the aircraft's flight path either directly or through the autopilot (so the PF conduct the takeoffs and landings). The PM operates the radios, flaps and landing gear, and attends to other duties such as calling checklists; obtaining weather reports; completing takeoff calculations; communicating with the cabin crew, engineers and company ground crew; and so forth. Usually, PF and PM duties are shared equally between pilots. For example, if a domestic crew has a four-sector duty (i.e. they fly four flights in that work day), the captain and first officer will each act as PF for two sectors.

For long-haul international flights, additional pilots are carried because it is not safe for one pair of pilots to be in charge of the flight for its entire duration without a rest break. The additional pilots carried are called second officers (SOs) (two stripes). SOs can only occupy a pilot seat in the cruise phase of flight when either the captain or first officer is on rest. SOs, therefore, never take off or land the aircraft. SOs are, however, always on the flight deck in the third seat during takeoff and landing (critical phases of flight), where they take the role of an additional PM.

Clearly, airline flying is not a nine-to-five job. Shift work is required, as are nights away from home, but the nature of the shifts and the amount of time away varies depending on airline and fleet.

For domestic pilots (turboprop and jet), there is no "back of the clock" (i.e. midnight to early morning) flying. The earliest sign-on time is around 5:00 a.m.; the latest sign-off time around 10:30 p.m. Maximum shift lengths, and the number of hours of duty and flight time in a given period, are restricted by law and by contract. Pilots can have short days or can be rostered up to 11 hours' duty. In a 28-day roster, turboprop pilots get at least eight days off; domestic jet pilots get at least 10, including at least one weekend off. Generally, pilots get more time off than a Monday to Friday worker—but there

are no regular shift patterns and time off occurs in a random fashion (which, happily, can mean three or four days off in a row). Public holidays are normal work days—but working one earns a day in lieu. Domestic pilots are at home most nights, usually averaging no more than one overnight per week. Overnights provide a great opportunity to get to know other parts of New Zealand if more than the minimum 10 hours of rest is rostered—which is usually the case.

Long-haul international pilots have a significantly different lifestyle, as their tours of duty (TODs) can take them away from home for two weeks at a time (for example, a London return trip). Shorter TODs also occur, as do trans-Tasman days where the crew do not overnight. International pilots do a lot of back-of-the-clock flying, and have to deal with constant time-zone changes—but they get the opportunity to familiarise themselves with a number of overseas destinations. Once home again after a TOD, they have multiple days' rest to reacclimatise before going to work again.

In the jet fleets, annual leave is allocated via a bidding system. Pilots bid once a year for all of the following year's leave, and the amount of prime (school holiday) leave available to each pilot is limited in the first round of bidding. (Access to any "leftover" prime leave is not restricted in the second bidding phase.) Pilots are split into three groups for bidding purposes, depending on their prime leave success in previous years' bids. Pilots in the higher-priority groups have the first bite at the cherry in both bidding phases—but securing prime leave in the first phase moves them down the priority list for the next year's bid. This system ensures that first-priority access to prime leave is shared evenly.







Above three images: Views of the Air New Zealand Training Centre at Rennie Drive, Auckland.







Starting Roles for Pilots in Air New Zealand Group Airlines

The Air New Zealand Group consists of four individual airlines:

- Air New Zealand (with two "narrow-body" aircraft types: Boeing 737 and Airbus A320, and three "wide-body" types: Boeing 767, 777 and 747)
- Mt Cook Airlines (ATR-72)
- Air Nelson (Bombardier Q300)
- Eagle Airways (Beechcraft B1900D)

Together, Mt Cook, Air Nelson and Eagle Airways are referred to as the Link airlines. They service regional New Zealand. The Link airlines operate turboprop aircraft (aircraft with turbine engines driving propellers).

Air New Zealand services New Zealand's main trunk (Auckland, Wellington, Christchurch, Dunedin, Queenstown), and international routes. Air New Zealand flies jet aircraft (turbofan engines with no propellers).

Depending on their experience, pilots can start as SOs on the long-haul jet fleets or with the Link airlines as FOs. Most pilots moving into the Links come from roles in GA (general aviation, the term used to describe a wide range of aviation activities in "small" aircraft). About half of the pilots joining as second officers come from the Link airlines. The other half come from a variety of airline backgrounds, with only a very small number these days coming from the military.



Progression within Air New Zealand

Typical new-pilot experience—hours flown per year and time to first command in each of the Air New Zealand airlines—is collated in the table below. The numbers are indicative only, as especially the time to first command can vary greatly, depending on a number of factors. Pilot seniority determines who gets promoted to any command vacancy. (The section on seniority systems in a subsequent article in this series will explain this further.)

Within the jet airline, the phase-out of the Boeing B737 by about 2016 changes a junior pilot's options somewhat. Up until 2010, pilots could join the jet airline as either a B737 FO or a long-haul SO. From time to time, those pilots had the opportunity to move between the two roles. From 2011, new pilots could only join as long-haul SOs and, once the B737 is gone, no sideways movement

will be possible. Without a change in policy, SOs will remain in that role until they are senior enough to move to an A320 FO position. The length of time that will take is very hard to predict—it may be as much as 10 years—but it may also be much less if the retirement rate increases significantly.

Equally, the time to command within the jet fleet is hard to predict. In the medium-term future, Air New Zealand will become an airline of effectively two fleets: the A320 covering domestic and short-haul international flying, and the B777/B787 covering all long-haul routes. This change, along with an uncertain retirement profile, makes accurate predictions of time-to-command difficult: the figures below may prove to be on the pessimistic side in the mid- to long-term future.

Summary of Current Pilot Experience within the Air New Zealand Group

Airline	Typical Experience of New Pilot (hours)	Hours Flown per Year	Time to First Command
Eagle Airways	1500 (FO)	Range: 550–850 Average: 660	Range: 11 months—31/2 years Average: 2 years
Air Nelson	2000 (FO)	Average: 600	Range: 2–6 years Average: 4 years
Mt Cook	2000 (FO)	Range: 700–750	Range: 3—8 years Average: 5 years
Air New Zealand	3000-5000 (SO)	Average: 600	Narrow-body average: 12+ years Wide-body average: 20+ years



Above: A Bombardier Q300 at New Plymouth.





Discussing specific salaries in the public sphere is always a sensitive issue—hence the lack of detail in the figures below. The general manner in which they are presented is necessary to keep the level of disclosure within the airlines' and unions' comfort levels.

Salaries across all ranks increment with years of service up to a maximum after a set period. For example, in the jet airline, the FO pay scales have eight annual steps, while the captains' scales have 12.

Each Link airline has a separate pay scale for FOs and captains. Taking all three into consideration, the minimum starting salary for an FO is in the low \$40,000s and the maximum captain's salary is in the low \$130,000s.

In the jet airline the pay structure is more complex, as there is a separate pay scale for each rank and each fleet (i.e. the pay scale for an A320 FO will be different from that for a B767 FO; a B737 captain's pay scale will be different from a B777 captain's pay scale, and so on.) The lowest salary on offer is in the low \$80,000s; the highest in the high \$200,000s.

These salaries are base salaries—a pilot receives a number of allowances on top of their base pay, depending on flying duties undertaken. Margins are also payable for check and training pilots.

That's the end goal (to whet your appetite). Now to see how you get there...



Above: The author (left) with Captain Ian Davie-Martin working on Christmas Day 2010.

Christine Ody is currently a first officer in Air New Zealand's Boeing 737 fleet and the airline's Aviation Institute Project Pilot.

Brought up on a farm, Christine caught the aviation bug at age 8 after watching a helicopter pilot spray gorse in the early '80s and, by the age of 14, she had decided to be a topdressing pilot.

After completing a BA (in history and Japanese), Christine spent several years working at TVNZ and took her first flying lesson at Ardmore in December 1996; three years later, she became a part-time instructor. At the beginning of her fourth year of instructing (2003), she became a salaried multi-engine IFR B-cat instructor, got married and gave up her full-time job at TVNZ.

In late 2003, she almost gave flying away after failing an interview with Eagle. However, three months later, and with around 2,400 hours total time, she got a job with Air Nelson and spent the next 18 months flying Saab 340s. In March 2005, she applied successfully for a job with Air New Zealand and started flying B737s in September 2005.

Eighteen months after joining Air New Zealand, she was accepted into the company's Business in the Sky programme aimed at developing pilots' business skills. This ran for a year and a half, and involved a lot of group project work in the participants' own time. One of the projects undertaken by Christine's group was looking at options for future pilot supply—which led to her current involvement in the development of the Aviation Institute's partnership with Air New Zealand's five flight training organisations. Christine says she is loving working with the company's partners and having direct contact again with people who are so passionate about flying.

6

So, You Want to be an



Above: An Air New Zealand Boeing 777-30ER at Wellington.

Qualifications

The Civil Aviation Authority of New Zealand (CAANZ) sets down the rules defining the qualifications that pilots need to fly commercially in the various different types of commercial operation.

All Air New Zealand operations are carried out under instrument flight rules (IFR). This means that the pilots orient and navigate the aircraft by reference to instruments only, and can fly through clouds. (The alternative is visual flight rules (VFR), where the pilots' positional reference is purely visual. VFR pilots cannot legally fly through clouds.)

All Air New Zealand operations are also carried out in multiengine turbine-powered aircraft.

Therefore, the minimum qualifications required for a starting role as a Link airline first officer are:

- private pilot licence (PPL): the PPL is a prerequisite for a CPL;
- commercial pilot licence (CPL);
- multi-engine instrument rating (MEIR);
- basic turbine knowledge exam credit (BTK, usually referred to as "a BGT", which stands for basic gas turbine).

To become an airline captain, a pilot must also have an airline transport pilot licence (ATPL).

To be granted a pilot licence or rating, a pilot must prove his or her competence by passing all of the theory and practical tests required by NZCAA. To get all the way to an ATPL, a pilot has to pass 23 theory exams and four flight tests. The minimum pass mark for theory exams is 70%.

Once in airline employment, pilots must pass operational competency assessments—flight tests including emergency procedures—every six months. Additionally, they must pass operational route checks, and technical and safety procedure refresher training annually.

The requirements for pilot licences and ratings are prescribed by Civil Aviation Rule Part 61 and are contained in detail in the associated advisory circulars. These advisory circulars are available online at http://www.caa.govt.nz/rules/ACs.htm.

The PPL, CPL, MEIR, BGT and ATPL theory subjects are all part of the National Diploma in Aviation (Airline Preparation Stream) or Massey University's Bachelor of Aviation degree. (The ATPL flight test is carried out once in airline employment.) The qualifications can be studied for and obtained at a number of flight training organisations around the country, including the five partners of the Air New Zealand Aviation Institute: Air Hawke's Bay, the International Aviation Academy of New Zealand, Massey University, Nelson Aviation College and Southern Wings.

For information on studying for these qualifications with the Air New Zealand Aviation Institute, visit: http://www.aviationinstitute.co.nz/ai/school-of-flight/nz-diploma-in-aviation-airline-preparation/faq-s/.

At the end of a diploma or degree covering all the elements mentioned above, a pilot will have a little over 200 hours' total flight time, 100 hours of which will be as pilot-in-command (PIC)—or flight time conducted without an instructor on board.

Medical certificates

Holding any professional pilot licence in New Zealand requires a Class 1 medical certificate. Class 1 certificates are valid for a maximum of one year and can only be issued by CAA-designated doctors. *Before* you commit to a course of flight training, make sure you are eligible for a Class 1 medical certificate. For more information on medical certificates, visit the CAA website: http://www.caa.govt.nz/medical/medical_home.htm.

Part Two of a five-part series of articles by Christine Ody

2. Control Display Unit (CDU) of the Flight Management Computer (FMC).
3. First officer's control column.
4. Mode Control Panel (MCP).
5. Flap lever, showing takeoff trim range (green band).
6. VHF comms boxes, and engine and APU fire switches.
7. Thrust levers showing autothrottle disconnect switches.
8. Fire switches
9. EHSI showing a strong northwester in the cruise.

Right: 1. EADI and EHSI.

Below: A Mount Cook Airlines (Air New Zealand Link) ATR72. Image: Rob Neil.

Images: Christine Ody.

















Airline Integration Course

Students who complete the National Diploma in Aviation (Airline Preparation Stream) or the BAv with the Air New Zealand Aviation Institute will have completed the Airline Integration Course (AIC). The course has been designed by Air New Zealand Group training pilots and is currently under development. Its main focus is on equipping new pilots with the "human factors" skills to work effectively as

part of a flight-deck team and to manage complex situations with complex aircraft. For more information on the AIC, see http://www.aviationinstitute.co.nz/ai/school-of-flight/airline-integration-course/.

The AIC is not a regulatory requirement but the Air New Zealand recruitment process will give preference to applicants who have completed it successfully.



Importance of a good training record

Pilots invited to attend an Air New Zealand Group interview are required to bring their official exam and flight-test pass/fail record from Aviation Services Limited (the body contracted to run all of the regulatory exams and flight tests). This record shows every attempt at an exam or flight test that the pilot has ever made—so any failures will be very visible.

While the NZCAA licensing system accepts an infinite number of attempts at any exam or flight test (with only small restrictions placed on the frequency of those attempts), employers tend not to be so forgiving. A record that shows multiple failures tells an employer one of two things about the applicant: that they lacked either the motivation or the ability to pass the first time. Neither scenario is desirable in an environment where every moment a pilot spends in training is a cost to the airline.

If you are serious about a career as an airline pilot, 100% effort from day one of your flight training is an absolute must.



How much does it cost?

The short answer is...a lot. A ballpark figure for the full cost of a PPL, CPL, MEIR, BGT and all the ATPL subjects is \$90,000–\$105,000. The AIC will add about another \$12,000.

The important thing to remember is that the full cost of learning to fly goes way beyond what you will pay for your theory and flight instruction. When you are making an assessment of potential cost, bear in mind that most people need more than the regulatory minimum number of hours to be ready for a flight test. When calculating the cost of flight training, in order to avoid setting yourself up for an unpleasant shock later, use the following figures: 70 hours for a PPL (55 dual and 15 solo); add another 135 for a CPL (55 dual, 85 solo), which brings it up to a total of 210; and add 21 hours for your instrument rating (which will usually be in a multi-engine aircraft).

While the NZCAA does not keep statistics on the average number of hours that candidates have when they sit flight tests, an experienced flight testing officer provided the above as his "best guess" of an average figure.

It is impossible to give a detailed, itemised and costed list for all of the elements that contribute to the cost of learning to fly that will not elicit cries of inaccuracy from a flight training organisation somewhere. This is because there is so much variation in how items are charged for (for example, is the student charged separately for the instructor's time for pre-flight briefings or does the organisation recoup this cost through increasing other charges?), as well as genuine differences in the cost of provision (landing fees, for example). Massey University is different again, structuring its all-inclusive fees under the university system.

So, the following is a list of items **other than flight and theory instruction** that a prospective student will need to pay for during a course of flight training. They add up to a significant amount of money, and need to be budgeted for.

- Class 1 medical initial issue (doctor's issue fee including spirometry and ECG; eye test, hearing test, blood test): around \$650-\$700;
- 2. Annual medical renewal fee (ballpark \$300);
- 3. Textbooks (may be included in theory course fee);
- 4. Student handbooks;
- 5. Pilot's notes for different aircraft types;
- ASL theory-exam fees (PPL, CPL, IR, BGT, ATPL): standard nationwide is \$3,280;
- 7. English proficiency exam fee;
- ASL flight test fees (PPL fees will be individual to the organisation; CPL and IR = \$1,436 total);
- Aircraft hire for flight tests (separate to the flight-test fee: PPL 1.3 hours; CPL 1.5 hours; IR 2.5 hours, approximately);
- 10. NZCAA licence and rating issue fees (PPL \$56.22; CPL \$61.33; IR \$51.11);
- 11. NZCAA Aeronautical Information Publications (Volumes 2, 3 and 4, plus 2 years' annual amendment fees): \$1,855;

- 12. Maps (\$16.35 each, five or six required): about \$82-\$98 in total;
- 13. Pilot headset: anywhere from about \$250 to \$1,250;
- 14. Pilot logbook: \$40-\$45;
- 15. Uniform;

Images: Christine Ody.

- Navigation computer (not an electronic computer, but a clever circular slide rule-type device): about \$110-\$135, depending on manufacturer;
- 17. 360° protractor and scale ruler, and various other stationery items;
- Landing fees (using an aerodrome incurs a fee, which varies greatly depending on location);
- Airways fees (fees incurred when an aircraft files a flight plan and uses air traffic control or similar services). Landing and Airways fees together can add many thousands of dollars to a course of flight training;
- 20. Fees to cover the cost of intra-organisational flight following services;
- 21. "Miscellaneous charges". Ask if you will be charged for anything not already discussed above. PW





So, You Want to be an



Experience Required to Get a Job

Unfortunately, all of the hard work that goes into completing the PPL, CPL, MEIR, BGT and ATPL subjects is not enough to qualify you for an airline job; you will need to follow it up with some experience gained by working in other areas of the aviation industry.

Why can't you go straight into an airline? Primarily for two reasons: regulatory requirements and company requirements—the latter of which are heavily influenced by the ever-changing balance of pilot supply and demand.

Above: Boeing 737 on approach to Auckland.

New Zealand regulatory requirements

Aircraft operators in New Zealand are certified under a number of different Civil Aviation Rules (CAR). The relevant ones here are:

Part 115	Part 115 is a new rule that governs adventure aviation operations (hot-air ballooning, parachute dropping, aerobatics, gliding, paragliding and hang gliding.)
Part 141	Part 141 governs the certification and operation of organisations conducting a limited number of aviation training activities. Strangely, this does not include flight training for PPLs, CPLs or instrument ratings. Training for these activities can be undertaken legally by an uncertificated organisation, meaning there are no quality assurance checks and balances in place until the flight testing stage. All flight tests must be carried out by an examiner working for a Part 141-certificated organisation.
Part 135	Part 135 sets down the rules governing air transport and commercial operations in "small" aircraft (up to nine passenger seats and a maximum takeoff weight of 5,700 kg) and helicopters. Part 135 operators are often referred to as "third level" operators and make up what is referred to as the GA (general aviation) industry.
Part 125	Part 125 sets down the rules governing air operations in "medium" aeroplanes— those with 10 to 30 passenger seats, or a payload capacity of 3,410 kg or less and a maximum takeoff weight greater than 5,700 kg, or an aeroplane conducting single- engine IFR passenger operations. Eagle Airways operates under Part 125.
Part 121	Part 121 sets down the rules governing air transport operations and commercial transport operations in "large" aeroplanes—those with more than 30 passenger seats, or a payload capacity of more than 3,410 kg. Air Nelson, Mt Cook and Air New Zealand operate under Part 121.

Part Three of a five-part series of articles by **Christine Ody**

Within each of these CARs are minimum pilot experience requirements. Some examples are:

Part 115 Subpart J: To operate an aircraft for parachute-drop operations, the pilot-in-command (PIC) must have at least 150 hours as PIC.

Part 115 Subpart L: To operate an aircraft towing a glider, the PIC must have at least 200 hours as PIC in total; and at least 50 hours as PIC in the type (specific make and model) of aircraft used for the glider-tow operation.

Part 135: To operate a single-engine aircraft under VFR, the PIC must have five hours' flight time on type, and five takeoffs and landings on type. But to operate any aircraft under IFR, the PIC must have at least 750 hours of flight time. (Part 135 operations are just about always single-pilot operations, meaning for any Part 135 IFR operations, 750 hours are required.)

Part 125: To operate an aircraft under VFR, the PIC must have at least 500 hours of flight time; for IFR, the figure is 1,200 hours. There is no minimum total time requirement to act as a first officer.

Part 121: To operate an aircraft, the PIC must have at least 1,500 hours of flight time. To act as a first officer, 500 hours' total time is required.

Remember that these are all **minimum** requirements.

Right: The distinctive Air New Zealand koru at Christchurch Airport.



Exception to the rules—JetStar

All operators certificated under NZCAA must abide by NZCAA rules. However, not all airlines operating within New Zealand are certificated by NZCAA. JetStar is certificated under the Australian Part 121 equivalent (so its pilots must fly on Australian licences).

The Australian regulations do not impose a minimum-hour requirement for first officers, and this is why JetStar is able to run a cadetship programme that gives its graduates access to jet roles immediately after graduation with a little over 200 hours.

Company requirements

Airlines in New Zealand set their own minimum experience requirements higher than the regulatory minimums because experienced pilots cost less to train and the supply of pilots is such that there is no need to hire at the regulatory minimum—so far! Hiring takes place from a pool of pilots that have **more than** those minimum requirements. For Air New Zealand Group minimums, refer to: https://careers.airnz.co.nz/operations/becoming_a_pilot.

The number of hours at which pilots are hired into the Air New Zealand Group varies depending on supply and demand. For

example, during the past decade alone, in times of high demand, pilots with as few as 800 hours have been employed into the Link airlines; but in times of low demand, 2,500 hours have not been enough to secure employment. For the jet fleets, it is unusual for pilots to be employed with fewer than 3,000 hours. Often, applicants have more than 5,000 hours.

The other aspect to consider is that not all hours are equal. For example, if you are looking for a job in a Link airline, operational IFR experience is gold. Typically, a candidate with 1,500 hours'

total time that includes 500 hours' commercial IFR experience is a stronger candidate than someone with 2,000 hours whose only IFR experience is as an instructor.

The important point to make here is that **hours are not everything** when it comes to getting a job. Air New Zealand's Chief Pilot, Captain David Morgan, says, "Hire for attitude; train for performance," and this sentiment is echoed by employers at all levels of the industry.

While it is important that every pilot has the required level of technical skill, the hiring decision when choosing between multiple applicants that meet or exceed the minimum criteria will be made on the applicants' personal attributes, and how well they fit into the "big picture".



Changing requirements—supply and demand

Essentially, the number of hours you will need to get a job depends on the balance between the demand for and the supply of pilots. The demand for pilots is notoriously fickle and cyclical: it can be very flat one year and strong the next. Demand for pilots is created in two ways:

- To fill vacancies created by pilot attrition;
- To fill vacancies created by airline expansion.

The rate at which vacancies are created is affected by many variables, but some important ones are discussed below.

Demand 1: economic situation

Within the Air New Zealand Group, the majority of the demand for new pilots occurs within the Link airlines when pilots move on to fill vacancies on jets with other operators. Often, these vacancies are offshore, and they are more plentiful when the global economic situation is strong and airlines are expanding.

Eagle Airways provides a good example of the volatility of the pilot market. Attrition was high in 2000, 2004 and 2007—and is high again in 2012—but was quiet in the intervening years.

Recently, the only Air New Zealand airline that has been expanding notably is Air Nelson. Looking forward, more expansion is imminent as the Air New Zealand Group will take delivery of new ATR72-600 aircraft from the end of 2012.

So far, 2012 is shaping up as a busy hiring year across the Link airlines, with demand predicted to be up to 80 pilots. The average annual hire across the Link airlines over the last decade has been approximately 50 pilots.

Demand 2: retirement rate

Retirement rates at the Link airlines are very low, as most of their pilots leave to continue—rather than conclude—their careers.

Unlike the Link airlines, Air New Zealand jet pilots do not tend to leave their jobs to work for other carriers. Attrition rates are very low and are primarily driven by retirements.

In New Zealand, there is no maximum age limit for flying professionally; as long as a pilot continues to pass the regular medical and flying tests, he or she may continue to fly. But given that the average age of an Air New Zealand jet pilot is somewhere in the early 50s, and only a small proportion of pilots continue to fly past their 65th birthday, it is probable that retirement rates within the jet fleet will accelerate over the next 10 to 15 years.

Demand 3: seniority systems

Air New Zealand jet pilots do not tend to move to roles in other airlines, largely for lifestyle reasons but also as a consequence of the seniority systems commonly used by many major airlines.

A seniority list is a ranked list of all pilots employed by an airline, with the longest-serving pilot at the top and the shortest-serving pilot at the bottom. The seniority list is the mechanism used to fill internal vacancies.

Seniority systems have their origins in post-WWII America, when newly established airlines were expanding rapidly. They were developed to establish a way of promoting pilots that was efficient and fair. This was an important development in an industry where any command vacancy could attract a large number of competent and qualified applicants. Assessing large numbers of eligible applicants was time-consuming and inefficient, and differentiating between them could become little more than a subjective process influenced by the boss's personal preference.

When a newly hired pilot joins an airline, they are added to the bottom of the seniority list. The only way to move up the seniority list is if a more senior pilot leaves their flying role.

Pilot jobs are "ranked" depending on aircraft type and pilot role. Higher ranking roles attract larger salaries. Pilots are able to lodge "standing bids" for any position within the company.

When a vacancy arises, the company appoints the most senior standing bid holder to the role—that is, the pilot with a valid standing bid who is the highest on the seniority list. Once appointed, that pilot is "locked on" in that role for two years (meaning any other standing bids they have lodged are invalid for the next two years).

The two major positives of seniority systems are unrivalled security of employment and the guarantee of an opportunity for promotion. (To be appointed to a more senior role, any pilot must successfully



Left: An Air Nelson Q300 on final approach at Wellington.

Below: An Airbus A320 about to line up at Wellington.



pass the training and checking process associated with that role.)

Seniority systems are a disincentive for the movement of pilots between airlines because a pilot must always start at the bottom and therefore a shift of company means a pay cut (and, for captains and maybe first officers, a demotion in rank). If redundancies are necessary, they are made in the order of reverse seniority—the most junior pilots first.

Most pilots moving from a turboprop role to a jet role—even though they have to start at the bottom of the list again—will still experience a salary increase because the pay scales are significantly

different (and most make the move relatively early in their career) so there is a financial incentive to change jobs. The biggest motivator, however, is usually the opportunity to fly a jet.

Each of the Air New Zealand Link airlines also operates individual seniority systems. There is no facility to bid for a jet role from within a Link airline or to "cross-company" bid between the Link airlines. To be appointed to a role with another Air New Zealand company, a pilot must go through an employment selection process.

It is also pertinent to note that appointment to training roles follows a set selection process and is based on merit, not seniority.

Supply 1: Availability of student loan funding

At the moment, New Zealand citizens and permanent residents who have lived in New Zealand for at least two years are eligible for government-funded, interest-free student loans that will cover the full cost of their flight training—if that flight training is carried out at an approved institution. All of Air New Zealand's five partner flight training organisations are so approved. However, the funding situation may change in 2013.

From 2013, the amount a student pilot is able to borrow **may not** cover the full cost of flight training. The government is concerned at how slowly pilots pay back their large student loans, and the thinking is that by restricting the loan amount, larger portions of it will be recouped more rapidly. Unfortunately, the corollary of such an action is that the majority of student pilots would no longer be able to study full-time and qualifications would thus take longer to complete—which further extends the time to meaningful employment that enables student loan repayment! The Aviation Industry Association (AIA) and Air New Zealand are working to convince the government to retain full student loan funding. (The key message here is that the funding situation for 2013 and beyond remains fluid—final decisions are some months off. Keep an eye on the Air New Zealand Aviation Institute's Facebook page for updates: www.facebook.com/aviationinstitute/.)

Since 2004, the total amount of student loan funding available for flight training nationwide has been capped. In that year, a cap of 775 EFTS (a funding unit: "equivalent full-time students") was imposed; in 2005, it was reduced to 700 EFTS and, in 2006, to 600 EFTS—where it remained until the end of 2011. The 2012 cap is 450 EFTS, which (with the new qualifications) equates to approximately 220 funded student pilots across all levels of training annually. This number includes a small minority of student helicopter pilots.

The availability of student loan funding influences the number of people who learn to fly (refer to the graph of CPL(A) issues later in the article), but, interestingly, the numbers of new CPLs issued annually were strong in the early to mid-1990s—long before student loan availability for flying training—as well.

In addition to the provision of money for student loans, the government also directly funds the approved providers. In 2012, that direct funding will be \$4,406,000 distributed amongst 19 individual flight training organisations. Going by the currently available information, this number will probably halve from 2013.

Supply 2: Interest from people like you!

The number of freshly qualified pilots graduating each year depends largely on the number of suitable people who are interested in the first place!

The comparative attractiveness of a career as an airline pilot is waning, as young people see so many other options available to them—many of which are cheaper and easier to train for, and provide quicker transitions to well-paid employment.

Exacerbating the problem is that finding accurate information about life as an airline pilot—and what's required to get to that end goal—can be more difficult than learning about many other professions that are more accessible to members of the public. Engineers and IT professionals aren't required by law to work behind a locked and bullet-proof door!

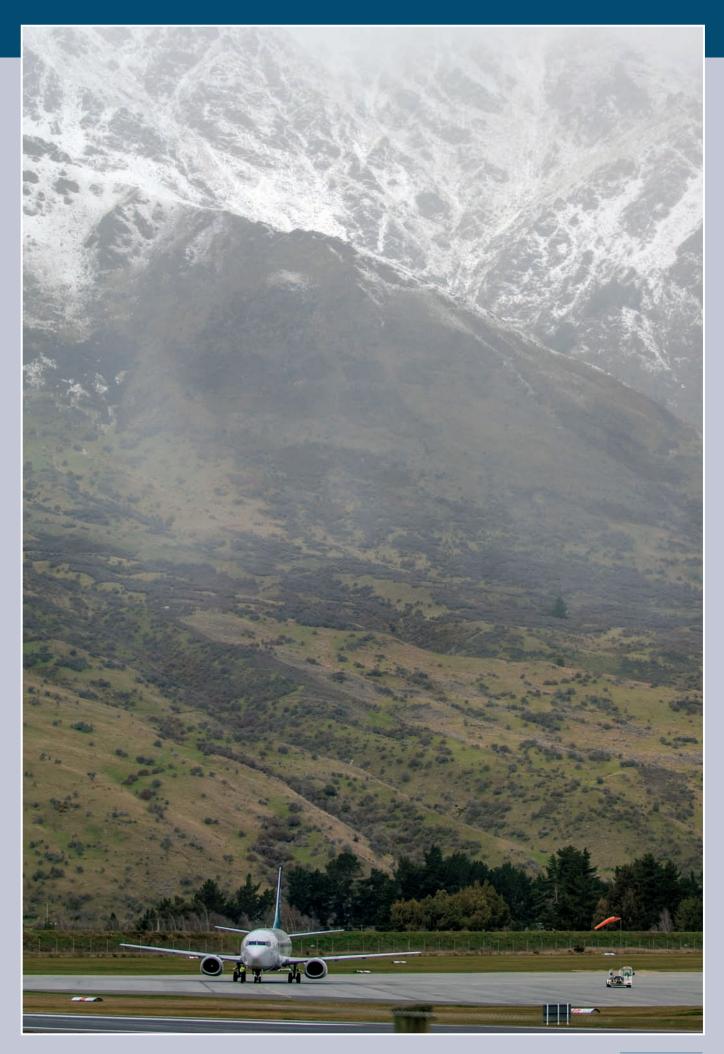
All this being said, historically, the number of pilots graduating annually in New Zealand has routinely exceeded the number of jobs available. We know this because airlines (and other pilot employers) maintain databases of applications from wannabe pilots. When a vacancy arises, a job advertisement is not necessary—the employer merely interviews the most desirable candidates from its database. The size of this database—like the average experience level of the pilots within it—ebbs and flows as the balance between demand and supply fluctuates.

Mere numbers on a database do not tell the whole story, either. As of March 2012, the Air New Zealand Link database has around 190 valid applications (and another 200 in the wings who do not quite meet minimum criteria), but fewer than half of the valid applications are "desirable for interview" from the airline's perspective—that is, they have a sought-after combination of qualifications and experience. The interview and selection process determines whether these candidates' other attributes mean they will make successful Air New Zealanders—in other words, attitude and enthusiasm matter! The success rate at selection boards has been averaging about 60% to 70%.

The demand for pilots this year is the strongest for a long time, and strong growth in the airline sector in the Asia-Pacific region (particularly China) is set to continue. Boeing predicts the need for 180,000 new pilots in the region over the next two decades alone. What that means for young people right now is that it's a great time to train as a pilot.

Below: The busy apron at Wellington Airport.







So, You Want to be an



Above: Vincent Aviation is a Part 121 operation with a fleet ranging from 19-seat Beech 1900s like this one, to a BAe146-200 with around 100 seats.

First Job Profiles

Getting to an airline job requires experience at the lower levels of the aviation industry. So what does the path to the airline actually entail? Talk to ten airline pilots and you'll hear ten different stories of how they got there. However, their experience will probably include at least one of the following: flight instructing, parachute dropping, Part 135 flying and/or other Part 125 or 121 flying.

Flight Instructing

One of the most popular ways to gain experience is to complete a C-category instructor's rating, which enables the holder to teach other people to fly.

To hold a *C*-cat, a pilot must have at least 200 hours' total time, of which 150 must be pilot-in-command (solo). The National Diploma in Aviation may be completed in an instructing "stream", in which graduates finish with this rating (although they will not have completed the Airline Transport Pilot Licence (ATPL) theory subjects or Airline Integration Course (AIC)).

Many flight training organisations prefer to hire graduates of their own programmes as instructors, so when you are choosing a place to train, it is worthwhile asking them about your eventual job prospects. Brand-new C-cats who are still under supervision (which is mandatory for the first 100 instructing hours) may be unpaid—think of it as an apprenticeship. Once employed, inexperienced C-cats often work part-time and are paid per flying hour. The rate will probably be in the ballpark of \$15 to \$25 per flying hour. The number of flying hours in a year will depend entirely on the size and nature of the organisation that employs them, but it may be as few as 100–200. C-cats may also earn extra income from teaching ground theory courses.

What is different from many other jobs is that there may be quite a bit of unpaid "downtime" between flights—which will, initially, be few and far between. Many part-time flight instructors need another part-time job elsewhere to make ends meet financially.

Part Four of a five-part series of articles by **Christine Ody**

With some experience, C-cats may move on to salaried positions, depending on the organisation. Indicative C-cat salaries range from about \$26,000 to \$38,000 (the higher figure for an experienced C-cat). Full-time instructors at busy organisations may fly around 300–400 hours per year.

Experienced C-cats can elect to do more training (and a flight test) and qualify as a B-category instructor. B-cats have more privileges than C-cats—such as being able to authorise a student's first solo flight. B-cats are more likely to be salaried than C-cats, and typical salaries range from \$32,000 to as high as \$65,000—although very few B-cats in New Zealand could expect to earn salaries near that higher range.

An A-category instructor rating is the "Rolls-Royce" of instructing qualification—and it requires a significant investment of time and effort in one's professional development that culminates in a *three-day* flight test! Very few people pursue A-category instructor ratings, and

those who do have usually decided to make instructing their career. Indicative A-cat salaries range from \$51,000 to \$94,000—with the larger salaries reserved for very experienced instructors with other significant responsibilities within the organisation.

On any category of instructor's rating, the pilot can be endorsed with additional privileges—such as night instructing, aerobatics, instrument-rating training and multi-engine training. Each additional privilege requires specific training and sign-off procedures (often another flight test). Again, depending on the organisation that employs the instructor, some financial assistance towards each additional qualification may be available.

Many pilots progress from instructing directly into a Link airline role. This may take a number of years, depending on the demand for pilots in the industry at the time and the number of hours the instructor is able to fly. Other pilots may move from an instructing role into one of the other roles below.

Parachute Dropping

New Zealand has a number of parachuting/skydiving operators. To fly for one of these operators requires a parachute drop rating, which, in turn, requires at least 150 hours as PIC. (To qualify for a CPL requires only 100 hours as PIC). Again, this is a *minimum* regulatory requirement. Meeting minimums does not necessarily make you immediately employable.

Skydiving operators utilise a wide range of aircraft types and hence the pilot requirements differ accordingly. One South Island operator says that while "it is generally believed that drop flying is an easy way to get hours and the work is quite easy, this is certainly not the case... Drop flying is precision flying with the responsibility for the safety of the skydivers on board. It is seat-of-the-pants flying that requires total concentration and it is a skill that requires some time to be good at. Good drop pilots are hard to find." This operator requires 1,000 hours as PIC and 800 hours' tail-wheel time from new pilots, as well as an instrument rating, parachute drop rating



Above: Parachute dropping is demanding flying but can be a good way to build time.

and basic gas turbine (BGT). This employer typically requires one new pilot every other year.

Often, parachuting organisations have only small numbers of pilots, and the turnover is low. For example, SkyDive Wanaka reports that it hasn't hired a new pilot in 10 years. When it does hire new pilots, minimum requirements are 1,000 hours total time and 250 hours of turbine experience—something that is difficult to

come by in New Zealand (as most light aircraft are piston-engined).

One turbine operator reported that the salary for a pilot flying 500–600 hours per year, rostered over six days of the week, was around \$40,000.

For more information on parachute dropping, contact the New Zealand Parachute Industry Association: http://www.nzpia.co.nz/newsite/scope.php.

Part 135 Operator

Part 135 operators are those companies that operate "small" aeroplanes commercially. Part 135 aeroplane flying is usually single-pilot, and a mixture of VFR and IFR, single and multi-engine operations. It can include scenic flights, "scheduled passenger A to B", charter flying or perhaps air ambulance work. Generally, Part 135 companies are small and employ only a few pilots. Examples are Great Barrier Airlines and Fly My Sky in Auckland, Sunair in Tauranga, Wings Over Whales in Kaikoura, Glenorchy Air, Air

Safaris in Tekapo and South East Air (which operates Stewart Island Flights) in Invercargill.

Part 135 companies may occasionally hire immediate graduates for VFR operations but they are more likely to hire pilots with some experience—often instructors. For IFR operations, they are constrained by legislation to use pilots with at least 750 hours' total time and who have 40 hours' experience on the initial type (specific make and model) flown. For this reason, it can be an advantage to do your MEIR training on an aircraft type used by these operators.

Again, to get a Part 135 flying job hours are not the "be all and end all". Each Part 135 operator will have their own minimum requirements and list of attributes that they value in their pilots. Some comments from Part 135 employers:

"GA employers are looking for hard-working, reliable people who will go the extra mile and use initiative. They shouldn't expect much money, as most GA companies don't make any. It is an apprenticeship you need to do. If you think about it, most professional degrees take three to five years. You can get your flying qualifications in a year or so full-time, so a few more years of hard work in GA is like a continuation of your degree... GA flying is hard work and you need to be a jack-of-all-trades to a certain extent. Make the most of it and enjoy it while you're there; lots of good memories and experience!" (Mark Huxford, Air Discovery)

"We do recruit pilots with fresh CPLs, on the understanding they have training in the area (Wanaka/Queenstown) or have completed a mountain flying course with the local training organisations. We like to see pilots with logged mountain flying time. Often I look

for a person who has worked at other jobs, and/or has travelled a bit and has started their flying career later in life. The reason for this is because tourist flying is about customer service and having life skills makes the job easier for those low-time pilots." (Andy Woods, Wanaka Flightseeing)

Tourist-oriented flight operators have high and low seasons, so flying activity is not spread evenly throughout the year. For example, Wanaka Flightseeing pilots do about 80% of their flying

from October to May. During that period, one extra full-time and one part-time pilot are brought in to share the workload with the three permanent full-timers. Wings Over Whales in Kaikoura also augments its three full-time pilots with a part-timer during its busy period.

Ups and downs in the global economic situation directly affect the fortunes of tourist operators, too. From an average of 400+ hours per year before the downturn, Andy Woods' pilots now average between 230 and 260 hours per annum. The average number of flying hours per pilot per year reported (from six operators) was 340, with the highest being 500 for an

operator with a scheduled passenger A to B service.

Part 135 pilots may be paid per hour, per flight or per annum. Several operators pay pilots the minimum wage (\$13 per hour). With time-and-a-half on public holidays, this reportedly averages out at about \$29,000 per annum. Other outfits offer pay scales (for example, a starting salary of \$33,000 or \$85 per flight topping out at \$42,000 per annum or \$120 per flight). Reported salaries were higher in the South Island.

Pay scales that increment with years of service are all but irrelevant in some Part 135 operators, as pilots successfully use this form of employment as a stepping stone. One operator stated that the "average length of stay at our company is approximately 15–16 months before they move on to Air New Zealand [Link]." While this sort of movement is great for a pilot, it imposes an almost constant training burden (and cost) on the Part 135 operator.

Many pilots move from a Part 135 operator into a Link airline role. Others may move into another Part 125 or Part 121 company.



Part 125 and 121 Operators

Part 125 companies operate "medium" aeroplanes (e.g. Jetstream J32s and Fairchild SA227 Metroliners) or those that are smaller than "medium" but are used in single-engine IFR passenger operations (e.g. Cessna C208 Caravan). Part 121 companies operate "large" aeroplanes (like the BAe 146 "Whisper Jet" and the Convair 340/580 or 440/580).

Examples of Part 125 and 121 operators in New Zealand are Sounds Air in Picton, Air2There in Paraparaumu, Airwork (which operates the NZ Post flights) in Auckland, Air Freight NZ in Auckland, Vincent Aviation in Wellington and Air Chathams. These organisations conduct scheduled passenger and freight operations, charter passenger operations and air ambulance services. Most of this flying is in a two-pilot environment, which is great training for airline flying.

Minimum requirements for entry to these organisations are not hard and fast. Some pilots join with vast experience, having flown overseas for large international airlines; occasionally a pilot will have worked for the company in another role (logistics, for example) while they complete flying qualifications, and have then started commercial flying with low time; others work their way up from instructing or Part 135 operations.

Pay and work conditions, again, are highly variable. Pay rates can be considerably higher than that for similar sized aircraft within Air New Zealand, but the hours (e.g. all-night flying) and demands on the pilots (e.g. the flexibility required to meet charter customers' needs) mean that pilots have to make other sacrifices. It is not uncommon for pilots to work as contractors rather than employees. Long-term charter pilots report that the variety and diverse challenges of their jobs make them more rewarding than scheduled airline operations.

Experience with Part 125 or 121 operators prepares pilots well for scheduled airline operations, if that is the path they choose to pursue.

Flying Overseas

Pilots are not constrained to New Zealand when it comes to making their way up the aviation industry ladder. Many find employment in various roles in various places overseas (but no one knows how many, as statistics are not kept). However, every country has its own aviation rules and regulations, and Kiwi pilots will need to convert their licences and ratings appropriately. The process required differs depending on country, and will involve extra training, written exams and/or flight tests and medical assessments; in other words, more money.

Australia is a popular destination for young Kiwi pilots because the Trans-Tasman Mutual Recognition Act (TTMRA) means that

the holder of a New Zealand CPL or ATPL will be issued the Australian equivalent on the basis of the New Zealand licence. They can even exercise the privileges of the Australian licence on their New Zealand Class 1 medical until that medical expires—at which point they must undergo an Australian medical examination.

Pilots who choose to work overseas need to be aware of the student loan payback obligations, as these are significantly different from those for someone working in New Zealand. Additionally, your loan may accrue interest. For more information, refer to:

 $http://www.studylink.govt.nz/finishing-study/paying-back-your-loan/index.html. \\ {\color{red} { } \underline{ PW} }$



So, You Want to be an

Competition for jobs: industry statistics

There is no doubt that you give yourself the best chance of getting a job by being the best all-round candidate. However, regardless of how good you are, your chances will always be affected by the number of jobs available and the number of people going after them. The following information can help give you an overview of the size and nature of the (aeroplane) aviation industry in New Zealand.

Number of operators

As at 30 June 2011, the following number of Part 135, 125 and 121 operators were certified in New Zealand. (In 2011, Part 115 did not exist. Operators who will now be certified under Part 115 would have been certified under Part 135.)

OPERATOR TYPE	NUMBER CERTIFIED
Part 121 (more than 30 passenger seats)	9
Part 125 (10 to 30 passenger seats)	15
Part 135 (up to 9 passenger seats, helicopters)	174

Source: CAA Aviation Industry Safety Update, 1 January to 30 June 2011.

Points to note:

- Of the 174 Part 135 operators, 136 are certificated for aeroplane operations (source: Peter Nalder, CAA).
- A small number of operators hold more than one certificate (for example, Part 135 and Part 125, or Part 125 and Part 121), so the total number of operators represented by the table above will be less than the total of the "number certificated" column.
- JetStar operates within New Zealand but does so under Australian civil aviation rules, so is not included in the above table.

The CAA data does not include the number of pilots employed by these operators. (The New Zealand WINGS Directory, available from http://www.wingsdirectory.com/order-a-copy, records the number of employees—but not pilots—at each company listed.)

Number of licensed pilots

To fully understand the answer to the question, "How many licensed pilots are there?" it is important to understand how pilot licences and medical certificates interact. Pilot licences are lifetime licences—but a pilot cannot exercise the privileges of that licence unless they hold an appropriate valid medical certificate (and meet other flight-currency related requirements). A pilot who has a licence with an appropriate valid medical certificate is said to have a "current" licence.

Professional aeroplane pilot licence statistics, February 2012

LICENCE TYPE	TOTAL	CURRENT	% CURRENT
ATPL	3,352	1,696	51%
CPL	6,019	1,757	29%

Source: Peter Nalder, CAA

There are any number of reasons why pilots might not keep their professional licence current—they may have qualified but not succeeded in gaining employment, they may have retired or have a medical condition that means they cannot continue to fly, or they may have chosen to leave the profession for other reasons. Given the relatively large number of New Zealand CPLs that are issued to foreign nationals, many of them may be flying overseas on a foreign licence.

Part Five of a five-part series of articles by Christine Ody

Gender and age distribution of current professional aeroplane licences

Gender

Aeroplane flying has traditionally been—and still is—a male-dominated industry. However, more and more women are choosing to fly professionally:

- 8.5% of all CPLs are women (149 out of 1,757);
- 3.5% of all ATPLs are women (59 out of 1,696);
- 6.0% of all CPLs and ATPLs are women (208 out of 3,453), but...
- 10.8% of all CPLs under the age of 38 are women (120 out of 1,112);
- 8.1% of all ATPLs under the age of 38 are women (25 out of 309).

The graphs below show the age distribution of current CPLs and ATPLs for both males and females on the same scale, to give accurate proportionality. The distribution for females is then repeated at a more meaningful scale for that data subset.

A detailed gender distribution of pilots within the Air New Zealand Group was not available for publication, but the distribution of professional female aviators in the national airline mirrors that of licences held—approximately 3–4% in the jet airline and around 10% in the Link airlines.

Age

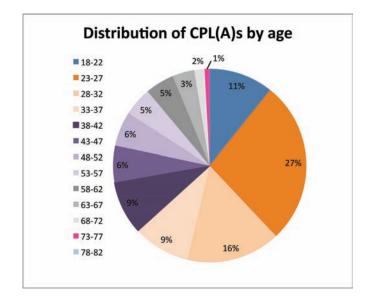
As older pilots continue to experience good health and a desire to remain in the profession, the ATPL pilot demographic has aged. But there are plenty of young pilots amongst CPL holders.

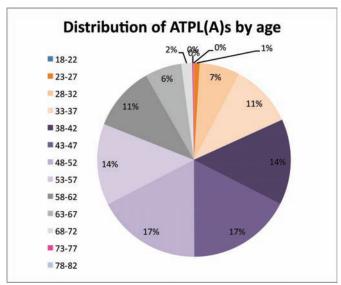
The statistics show that, for aeroplane CPLs:

- 63% of licence holders are under the age of 38 (1,112 out of 1,757);
- 22% of licence holders are aged 48 or over (381 out of 1,757);
- The age bracket with the largest subset of licence holders is the 23–27 age bracket (27%). This is the age group within which many new or recent graduates fall.

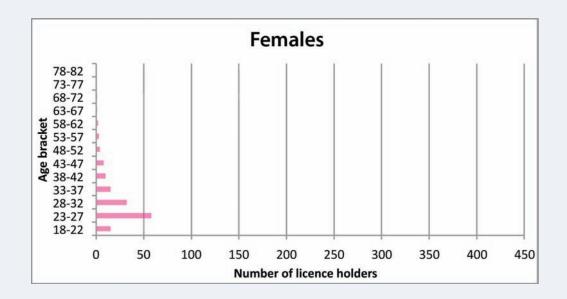
For aeroplane ATPLs:

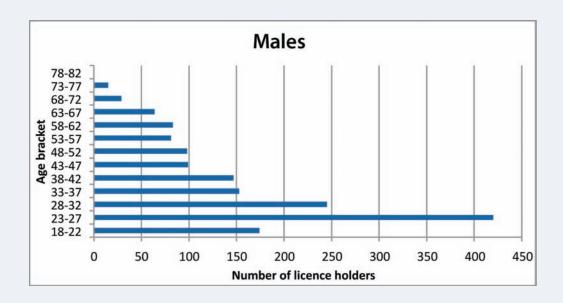
- 18% of licence holders are under the age of 38 (309 out of 1.696):
- 50% of licence holders are aged 48 or over (849 out of 1,696);
- The age brackets with the largest subset of licence holders are the 43–47 and 48–52 age brackets (17% each).

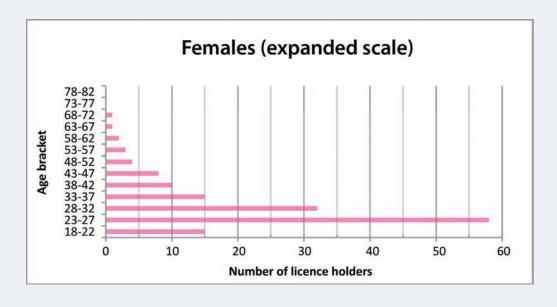




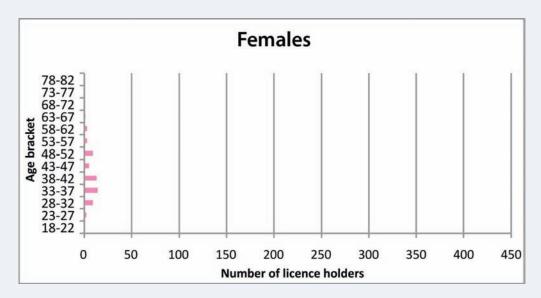
Age and gender distribution of current NZ CPL (A)s, February 2012

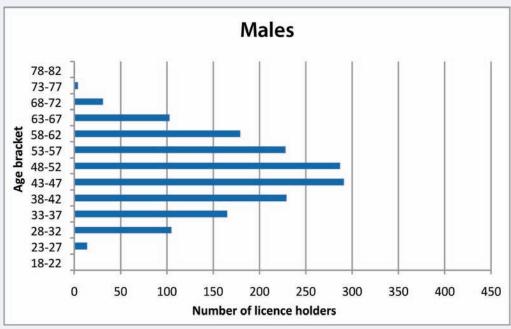


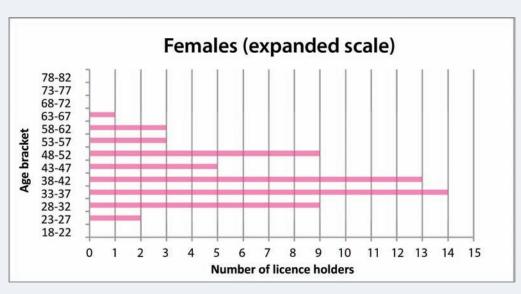




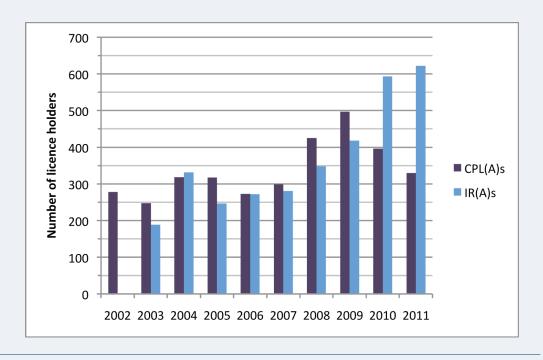
Age and gender distribution of current NZ ATPL (A)s, February 2012







Total number of CPL(A)s and IR(A)s issued 2002/3–2011



Number of newly qualified pilots annually

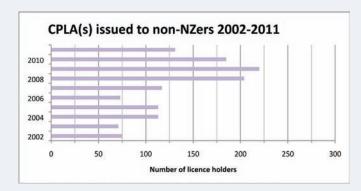
New Zealand continues to be a popular place to learn to fly. While the majority of student pilots are Kiwis, a significant number belong to other nationalities. From the data below, it is not possible to tell how many of these non-Kiwis live (and intend to fly) here, and how many are non-residents and intend to find employment as pilots offshore.

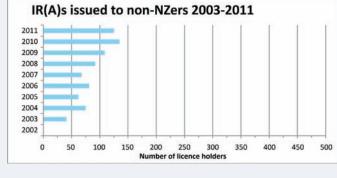
For aeroplane CPLs, from 2002-2011:

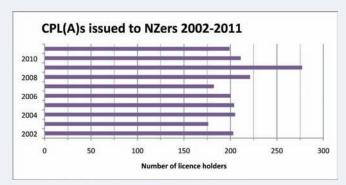
- An average of 208 have been issued to New Zealanders annually;
- An average of 130 (39%) have been issued to non-New Zealanders annually;
- The portion issued to non-New Zealanders peaked in 2009 at 48%.

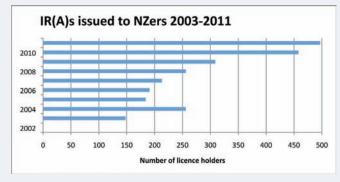
For aeroplane IRs, from 2003-2011:

- An average of 279 have been issued to New Zealanders annually;
- An average of 88 (24%) have been issued to non-New Zealanders annually;
- The portion issued to non-New Zealanders peaked in 2006 at 30%.









Number of employed pilots

What the data above tell us is that there were *potentially* 3,453 people—the total number of current ATPL(A)s and CPL(A)s—earning money from flying aeroplanes in New Zealand in February 2012. Of those 3,453 people, the Air New Zealand Group employed just under 1,300, about 37%.

Unfortunately, no body or organisation keeps up-to-date, detailed data on the number of pilots employed in New Zealand. The only such data available is from the last Census, held in 2006 before the global financial crisis set in. (*see right*)

As at 31 December 2006, there were 2,849 people who held current aeroplane or helicopter CPLs or ATPLs—which gives a fairly healthy employment rate of 88.7% of current licence holders. What the numbers can't tell us is the status of those who were employed—how many worked part-time and how many worked full-time? We do know that 1,248 of them—66% of the 1,896 employed aeroplane pilots—worked for the Air New Zealand Group.

In the 2006 Census, 2,526 people identified themselves as professional pilots:

- 1,896 people identified their occupation as "aeroplane pilot";
- 336 people identified their occupation as "flying instructor" (some of these will be helicopter instructors);
- 294 people identified their occupation as "helicopter pilot".

(Source: http://www.stats.govt.nz/Census/2006CensusHomePage/classification-counts-tables/about-people/~/media/Statistics/Census/2006-reports/Classification-Count-Tables/People/occupation.ashx)

Conclusion

The aviation industry is an ever-changing, challenging environment in which to work. The safety-critical nature of a pilot's role and the huge responsibilities that all pilots shoulder every day mean that the demands upon those who wish to fly professionally are considerable. All professional pilots have to master complex physical tasks; understand and apply a diverse range of technical knowledge; react correctly in time-critical situations that, if mishandled, become lifethreatening; and deal with their clients in a warm yet professional

manner that inspires confidence and provides a customer experience that encourages repeat business! Despite—or perhaps because of—all these challenges, the satisfaction of succeeding in this environment makes it all worthwhile.

Hopefully, this series of articles has helped you understand more about the industry that you think you might like to become part of. However, if you have specific questions not answered above, I can be contacted at: christine.ody@airnz.co.nz





The Air New Zealand Aviation
Institute Flight Training Partners are:

Massey University School of Aviation

BAv (Air Transport Pilot)
Palmerston North
www.massey.ac.nz/massey/learning/
departments/school-aviation/

Air Hawke's Bay

DipAv (Airline Preparation)
Hastings
www.airhb.co.nz/

International Aviation Academy of New Zealand

DipAv (Airline Preparation)
Christchurch
www.flighttraining.co.nz/

Nelson Aviation College

DipAv (Airline Preparation)
Motueka
www.nelson-aviation.co.nz/

Southern Wings

DipAv (Airline Preparation)
Invercargill
www.southernwings.co.nz/

For details of Air New Zealand pilot entry criteria, visit:

careers.airnz.co.nz/operations/
becoming_a_pilot