

# How to be a pilot



### **Contents**

Introduction	
Fit and proper person	4
English language proficiency	4
Sport and recreational flying	
Recreational pilot licence	(
Obtaining your private pilot licence	
Medical	
Flying lessons	
RPL and PPL examinations	
Licence issue	
Keeping your pilot licence	

Aircraft type ratings	10
Ratings	10
Becoming a commercial pilot	11
Medical	12
Flying	12
Examinations	
CPL issue	13
Ratings	
Becoming an airline transport pilot	12
To learn more	15

Cover photo: iStock.com/zkortini

**Opposite page:** Flying organisations regularly hold fly-ins and competitions. This Piper Cherokee is attending a Flying New Zealand event.

Every effort is made to ensure that the information in this booklet is accurate and up to date at the time of publishing, but numerous changes can occur with time, especially in regard to airspace and legislation. Readers are reminded to obtain appropriate up-to-date information.



See the CAA website for Civil Aviation Rules, advisory circulars, airworthiness directives, forms, and more safety publications. Visit www.caa.govt.nz.

#### **Abbreviations**

ATPL	Airline transport pilot licence
BFR	Biennial flight review
CPL	Commercial pilot licence
ELP	English language proficiency

PPL	Private pilot licence
RPL	Recreational pilot licence
VFR	Visual flight rules



### Introduction

Flying is fun. Flying is a challenge.

Did you know that you can fly right now? Most people have their first taste of flying in a trial flight at their local aero club or flying school.

A trial flight usually lasts about 20 minutes. You will sit in the pilot's seat and be given your first lesson by a flight instructor. You don't need to know anything about flying to take a trial flight, and there is no obligation to continue with lessons.

There are about 100 aero clubs and flying schools around New Zealand that operate aircraft and employ flight instructors, so owning an aircraft isn't a requirement.

It's best to contact a range of flight training organisations to compare their prices, services, and facilities – but don't choose solely on cost. Base your decision on the ability of each organisation to help you achieve your ultimate goals.

Somebody intending to fly only for recreation can opt for a microlight certificate, recreational pilot licence (RPL), or private pilot licence (PPL). If you're looking for a career in aviation, you can also train towards a commercial pilot licence (CPL) or an airline transport pilot licence (ATPL).

Whether you want to fly a small aircraft on sunny weekends, or fly passengers across the globe for an airline, you will follow a similar process. You will learn about yourself, the aircraft, the weather, the flying environment, and the rules pilots follow to fly safely.

As well as the cost of flight training, there are costs for medical examinations, theory examinations, and flight tests. Your flight training organisation should help you plan for this.

There are other organisations you will encounter as you learn to fly. Air traffic control and flight planning is run by Airways. Weather information is supplied by MetService. Aviation examinations are conducted by Aspeq. The Aviation Security Service (Avsec) carries out aviation security requirements, and issues airport identity cards. There are links to these organisations on the CAA website.

Every participant in New Zealand's aviation community shares a responsibility for safety and security. The role of the CAA is to see that aviation participants meet the standards set by the Minister of Transport in the public interest.

## Fit and proper person

The Civil Aviation Act 1990 requires applicants for an aviation document, including pilot licences, to be assessed as a "fit and proper person".

To be considered a fit and proper person you must, among other things, have demonstrated a respect for the law, such that the Director may have confidence in your ability to fly within the Civil Aviation Rules.

When you apply for your licence, you must provide the Director of Civil Aviation with information to make this assessment. There is information on the applicable CAA forms to guide you through the process.

It can take some time to get the information required to accompany your application, and your flight training organisation should advise you when to start this process.

As with the medical certificate, it is a good idea to make sure you qualify as a fit and proper person before beginning flight training, to avoid possible disappointment.

You are required to remain a fit and proper person throughout the operating life of your licence.

For more information on the process, see www.caa.govt.nz, "Aviation Info > Pilots > Fit and Proper Person Process".

# **English language proficiency**

Applications for a PPL, CPL, or ATPL must include evidence that the applicant has demonstrated English language proficiency (ELP) to at least the Level 4 standard prescribed by the International Civil Aviation Organization (ICAO).

The test itself is not a technical examination, and aims only to test English language proficiency to the ICAO standard, and in an aviation context.

For more information, see www.caa.govt.nz, "Aviation Info > Pilots > English Language Proficiency".

# **Sport and recreational flying**

There are numerous options for recreational flying, such as flying a microlight, gliding, ballooning, parachuting, hang gliding, paragliding, and even drones and model aircraft (RPAS).

These activities are governed by the Civil Aviation Act and Civil Aviation Rules, but the day-to-day administration for most are carried out by 'Part 149' recreation organisations certificated for that purpose by the CAA.

To fly a microlight, glider, parachute, hang glider, or paraglider, you will need to gain a certificate issued by the appropriate organisation.

To be issued with a pilot certificate, you must:

- Be at least 16 years of age to hold a full certificate
- Hold a medical declaration issued by your general practitioner
- Pass written examinations, and
- · Pass a practical flight test.

It can take around 40 hours of flying to become competent and gain your pilot certificate.

If you're intending to move into an aviation career, you may be better off applying for a class 2 medical and working towards a PPL with an aero club or flight school, rather than starting as a microlight pilot.

For balloons, no certification or a medical declaration is required, unless you are carrying commercial passengers for hire or reward. In that case, you would need a commercial pilot licence.

Drones and other RPAS can be flown without a licence, but there are rules governing where and how they can be flown. We recommend you undertake training before flying one – there are even courses available online. It pays to remember that if you're operating a drone, you are a pilot!

To find aviation recreation organisations, see "To learn more" on page 15.



# **Recreational pilot licence**

An alternative to the PPL in New Zealand is the recreational pilot licence. Gaining an RPL allows you to fly single-engine non-pressurised light aeroplanes or single-engine helicopters.

The knowledge, flight experience and competency standards for the RPL are the same as those for the issue of a PPL. For more information on these standards, see the next section in this booklet, 'Obtaining your private pilot licence'.

The medical requirements are different. While a PPL requires a full CAA class 2 medical examination, an RPL requires a medical examination by a general practitioner, preferably your regular doctor. They must be approved to conduct a NZ Transport Agency medical for a class 2, 3, 4, or 5 drivers licence endorsed to carry passengers.

The New Zealand RPL is only a national licence. It is not recognised overseas, and cannot form the basis for the issue of a foreign licence.



# Obtaining your private pilot licence

Most pilots in New Zealand hold a PPL. More than 10,000 have been issued across the country.

A recreational or private pilot can't be paid or rewarded to fly, and may not fly an aircraft that is being operated for hire or reward.

You can start learning to fly an aircraft at any age, but you may not fly solo until you are 16 years old. You can hold a recreational or private pilot licence when you are 17 years old.

To gain an RPL or PPL, you must complete several steps, including practical flying and written examinations. The first step is a medical examination.

#### Medical

Private pilots must pass a class 2 medical examination, that can only be carried out by designated medical examiners. Your aero club or flying school will provide you with a list of these doctors in your area, and they are listed on the CAA website. During the class 2 medical examination, your past medical history and current medical status will be assessed. Additional investigations may be requested. It's worth talking to a designated medical examiner before your appointment, as they will be able to explain this in greater detail.

If you are unable to pass your medical examination, you can continue to fly with an instructor, but you cannot hold a PPL. So to avoid possible disappointment, it's worthwhile making sure you can obtain your medical certificate before commencing flight training.

If you are aged under 40, you must renew your medical every five years. If you are over 40, your medical lasts for two years.





#### Flying lessons

You will learn to fly progressively. Early lessons cover the basics, like controlling the aircraft in straight and level flight. The structure and sequence of lessons creates a building block process, where previous learning is reinforced and developed in succeeding lessons. Eventually you will cover everything you need to be a capable and safe pilot.

Most students will fly solo for the first time after about 10 to 15 hours, with a minimum of 50 hours before obtaining their licence. Many fly for 60 to 70 hours before they are ready to sit the flight test.

It is possible to exclude the cross-country training and obtain your RPL or PPL with a restriction that limits you to flying near the aerodrome at which you trained. This restriction can be removed later by completing the cross-country training.

Your aero club or flying school will discuss these options with you.

Each flying lesson typically lasts about 40 minutes. Your instructor will usually give you a briefing before the flight so you will know what to expect and what is required of you. A debriefing after the flight helps to consolidate what you have learned.

Make sure you record every flight. Your aero club or flying school will sell you a pilot logbook to record the date of each flight, the aircraft type and registration, the name of your instructor, the length of your flight, where you went and what you did.

You can take your flying lessons as frequently as time and finances allow, but it's recommended you plan for regular sessions. One lesson every week or 10 days will ensure cost effective training.

#### **RPL and PPL examinations**

The six RPL/PPL examinations are set at about the same level as secondary school examinations. Learning about the flying environment, and your aircraft, is part of being a safe and competent pilot. Your aero club or flying school will help you prepare for these examinations.

You don't have to pass the exams before you begin your flying lessons, but they are required in order to complete certain parts of your training. It is recommended that you plan for this with your instructor, as exam credits are only valid for a fixed period. You must pass all exams before you can fly a solo cross-country flight.

#### Air navigation and flight planning

You will learn to calculate the distance of your planned flight, the compass headings to fly, how long it will take you, and how much fuel you need. You will also learn to use maps that are specifically designed for aviation.

#### Aircraft technical knowledge

Understanding how your aircraft flies, and its systems, enables you to make safe flying decisions. As a trainee pilot, you will learn about aerodynamics, engines, electrical systems, flight instruments, and loading your aircraft. Helicopter pilots and aeroplane pilots sit different aircraft technical knowledge exams.

#### Meteorology

The weather has a major bearing on your flying. Often, your flights will be cancelled or delayed because of the weather. You will learn about New Zealand's weather patterns, about cloud formations, and about how different weather conditions affect aircraft performance. This knowledge will help you develop decisionmaking skills essential to safe flying.

#### **Human factors**

Human error is one of the most common causes of air accidents worldwide. It is important, therefore, to understand the human element in aviation. Areas of study include: aviation medicine and health. stress management, and decision-making.

#### Flight radiotelephony

Pilots keep in contact with air traffic controllers, and with each other, by radio. As a trainee pilot, you will learn the terms and phrases pilots use to navigate safely through both controlled and uncontrolled airspace. You will also learn how to operate your aircraft's transponder and emergency locator beacon.

#### Air law

Everyone in aviation follows the same set of standards when they are flying. These standards are set out in the Civil Aviation Rules. As a trainee pilot, you will develop a working knowledge of these rules.

#### Licence issue

When you have gained your medical certificate, passed all the exams, have the required flying experience and can demonstrate the competency standards, you will be ready to sit a flight test. Once you have passed the flight test, you can apply to the CAA for the issue of a PPL.

#### **Keeping your pilot licence**

Getting your pilot licence is only the first step.

To keep it current you must have carried out at least three takeoffs and landings in the preceding 90 days in the aircraft types that you wish to fly.

Every two years, you will need to carry out a biennial flight review (BFR). This involves demonstrating to a flight instructor that your knowledge and flying skills are still maintained at the required standard for the type of licence you hold.

A BFR will also ensure that you remain up to date with the current operating environment. As well as the BFR, many pilots continue to take occasional refresher flights with an instructor.

Before gaining your PPL, it's advisable you plan your flying beyond the initial issue of your licence. Budgeting for sufficient funds to allow you to fly often enough to remain both current and competent will help you retain your licence.

#### Aircraft type ratings

Pilots are only permitted to fly the aircraft for which they hold type ratings. When first learning to fly, you will take lessons in the same type of aircraft.

Once you have your pilot licence, you may choose to learn to fly other types. New Zealand pilots are lucky to have access to a wide range of aircraft types that are available for training. These include graceful old biplanes and some 'warbirds'. Gaining a rating in a new aircraft involves practical conversion flying lessons, along with study of your new aircraft's systems and performance. This is usually followed by a final handling competency demonstration to an instructor.

#### **Ratings**

Once you have your pilot licence you can develop many more skills.

You can train for, and gain, additional qualifications called ratings. Examples are: aerobatic rating, glider tow rating, and an instrument rating. Remember that you cannot be paid or rewarded to fly with an RPL or PPL, therefore many ratings are more applicable to CPL holders.

You can also take specialist training in mountain flying, formation flying, competition flying, or night flying. While not formalised with a rating, this training is usually recorded in your log book.



# Becoming a commercial pilot

Many very experienced pilots in New Zealand are content to fly simply for fun. To work as a pilot, you must hold a CPL. There are about 4000 pilots with an active CPL in New Zealand.

Pilots with a CPL may fly as pilot-in-command on a single pilot aircraft, or as a co-pilot on a multi-crew aircraft. You can hold a CPL once you are 18 years old.

The CPL includes both theoretical and practical training, the first step being your medical certificate.



#### Medical

Commercial pilots must pass a class 1 medical examination with more requirements than the class 2 examination for a PPL. During the class 1 medical, your past medical history and current medical status will be assessed. Additional investigations may be requested. It is a good idea to talk to a designated medical examiner prior to your appointment. Your aero club or flying school can provide you with a list of designated medical examiners in your area, and they are listed on the CAA website.

It's a good idea to obtain your medical certificate before beginning flight training for a CPL in order to avoid possible disappointment.

A class 1 medical certificate must be renewed annually if you are aged less than 40. For single pilot air operations carrying passengers, renewal is every six months if you are 40 and over.

#### **Flying**

To be a commercial aeroplane pilot you must have completed a minimum of 200 hours of flying training before you are eligible to sit your flight test. Many people, however, do not sit this test until they have about 215 to 230 hours.

To be a commercial helicopter pilot you must have a minimum of 150 hours of flying training, before you are eligible to sit your flight test.

New Zealand has many aero clubs and flying schools that offer different aircraft types and training environments.

Some schools teach commercial pilots in fulltime courses that involve integrated flight and theory training. Others provide an 'on demand' training process where you can train for your CPL in your own time, advancing as you can afford the lessons.

It is advisable, however, to maintain a regular training programme to progress efficiently. This needs to coordinate theory examination passes and their validity periods with relevant flight training requirements. A personalised training programme can be planned with your instructor.

You should talk to several training organisations and choose the package that best suits your needs and goals in aviation. Your commercial flight training will follow a set syllabus and will include cross-country flying and instrument flying. You will be expected to meet a higher standard than for your PPL.



#### **Examinations**

Commercial pilots must pass examinations in air law, flight navigation general, meteorology, principles of flight and aircraft performance, general aircraft technical knowledge (aeroplane or helicopter), and human factors. These are similar to tertiary level examinations.

In addition, a demonstration of English language proficiency will be required if not passed beforehand.

#### **CPL** issue

When you hold a current class 1 medical certificate, have passed the CPL examinations, have the required flying experience, and have passed the practical flight test, you can apply to the CAA for the issue of a CPL.

You can now seek employment as a pilot, but unless you have an instrument rating, you may only fly under visual flight rules (VFR). This means that you must be able to see the surface to navigate - you cannot fly in cloud. Possible careers include VFR charter, scenic flying, and agricultural flying.

When employed as a CPL you will have ongoing competency checks at least annually to ensure that you are flying to the required standard.

The next step for many CPL pilots is to gain a number of ratings that will give them more qualifications and opportunities to work as a pilot.

#### **Ratings**

As well as ratings such as the flight instructor rating, many CPL holders will want to obtain an instrument rating.

#### Becoming a flight instructor

Once you are a commercial pilot, you can do further flight training and study to become a flight instructor. Newly qualified flight instructors are called C-category instructors. As a C-category instructor you may teach trainee pilots, although you will work under the supervision of an experienced instructor. There are several aero clubs and flying schools that offer C-category instructor training.

#### Agricultural rating

To gain an agricultural rating you must complete a course of ground and flight training, and pass a flight test.

#### Instrument rating

If you want to expand your employment options with a view to becoming an airline pilot, you will need an instrument rating. This allows you to fly in cloud, navigating with reference to the aircraft instruments. Possible careers include freight and charter operations, or you can fly for an airline.

#### Type rating on gas turbine powered aircraft

Airlines, some freight or charter companies, helicopter, parachute, and agricultural companies, operate aircraft that are powered by gas turbine engines. These are different from the piston engine aircraft you will train in. In order to fly a turbine-powered aircraft you will need to pass a basic turbine knowledge examination. This is a prerequisite of a type rating in your first turbine-powered aircraft.

# Becoming an airline transport pilot

For aircraft that require a co-pilot and are engaged in an air transport operation, or an operation for hire or reward, the pilot-in-command must hold an ATPL.

To apply for an ATPL, you must be 21 years old, hold a current instrument rating, and have 1500 hours total flight time in an aeroplane, or 1000 hours in a helicopter. You must also demonstrate English proficiency, pass seven written examinations, and complete a flight test with a flight examiner.

When employed as an airline pilot, you will have ongoing competency checks to ensure that you are continuing to fly to the required standard.



### To learn more

To find out more, search for your local flight training organisation through the internet, the Yellow Pages, or aviation magazines. It is also a good idea to talk to pilots and ask about their experiences.

You can find lists of Part 141 certificated training organisations, and Part 149 aviation recreation organisations, at www.caa.govt.nz, "Quick Links > Certificated Organisations".

The requirements for becoming a pilot are contained in the Civil Aviation Rules, and the examination syllabuses are in the advisory circulars (ACs). Rules are divided into "Parts" and Part 61 is titled "Pilot Licences and Ratings".

The Part 61 rules and ACs detail what you will be examined on, as well as the flight experience that you will need to accumulate for each pilot licence. All rules and ACs are available free on the CAA website.

The CAA website is also a great place to find other helpful resources, like the Flight Instructor Guide (FIG) and Flight Test Standards Guides (FTSGs).

The FIG is a highly recommended resource for trainee pilots, as it gives detailed examples of what an instructor will teach, while the FTSGs detail the assessment factors used by instructors and examiners. They can be freely viewed online, and the FIG can also be purchased as a hard copy.

The How to navigate the rules booklet will give you an overview of the aviation system in New Zealand, while the Aircraft operator requirements poster shows exactly what is required for flying different types of aircraft.

Your flight training organisation may have copies of these publications, or you can find them on the CAA website. If you'd like to request your own copies, just send an email to info@caa.govt.nz.





PO Box 3555 Wellington 6140

Tel: +64 4 560 9400 Fax: +64 4 569 2024

Email: info@caa.govt.nz

New Zealand Government

See the CAA website for Civil Aviation Rules, advisory circulars, airworthiness directives, forms, and more safety publications.

www.caa.govt.nz

How to be a pilot was revised January 2019.