
How to report occurrences



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Every effort is made to ensure 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 aviation.govt.nz.

For a list of CAA contacts visit: aviation.govt.nz, "Contact us".

Introduction

For as long as people have been taking to the skies, aviators have been studying aircraft accidents to find out what went wrong and prevent it happening again.

With a large and diverse range of aviation activities in New Zealand, it helps to have a central point for collection and analysis of occurrences. As a member state of the International Civil Aviation Organization, we also have responsibilities to the global aviation community.

Reporting occurrences starts the process of preventing accidents and incidents, benefiting not only people in aviation, but also the general public.

In the interest of public safety, some reporting is mandatory. But we can learn so much more from voluntary reports of occurrences, and the CAA encourages this.

The aim of this booklet is only to guide you to the information you need to know as an aviation participant. You are required to be familiar with the rules and this booklet is not a substitute for that.

We recommend you study Part 12, related advisory circulars, and any certification rules relevant to your operation. Participants with a pilot or parachutist certificate issued by a Part 149 organisation should be familiar with that organisation's operations manual.

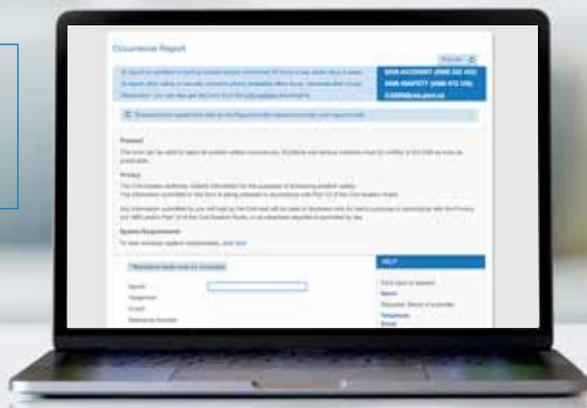
Report online

Remember that you must still notify an accident or serious incident as soon as practicable using:

**0508 ACCIDENT
(0508 222 433)**

It's easy to report occurrences – just go to **aviation.govt.nz/report**

You will receive an email repeating your entries so you can check they are correct. No additional paper copy is required.



What needs to be reported?

‘Occurrence’ is the umbrella term for accidents, incidents, and immediate hazards to the safety of an aircraft operation.

As a rule of thumb, if the occurrence is something that you don’t want to happen again, it should be reported.

Accident

Briefly, an accident is an occurrence that causes significant damage, or injuries, while the aircraft is in operation.

The definition of an accident, according to Part 1 of the Civil Aviation Rules is: “an occurrence that is associated with the operation of an aircraft and takes place between the time any person boards the aircraft with the intention of flight and such time as all such persons have disembarked

and the engine or any propellers or rotors come to rest, being an occurrence in which – a person is fatally or seriously injured as a result of:

- i. Being in the aircraft; or
- ii. Direct contact with any part of the aircraft, including any part that has become detached from the aircraft; or
- iii. Direct exposure to jet blast except when the injuries are self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to passengers and crew; or



- a. The aircraft sustains damage or structural failure that:
 - i. Adversely affects the structural strength, performance, or flight characteristics of the aircraft; and
 - ii. Would normally require major repair or replacement of the affected component except engine failure or damage that is limited to the engine, its cowlings, or accessories, or damage limited to propellers, wing tips, rotors, antennas, tyres, brakes, fairings, small dents, or puncture holes in the aircraft skin; or
- b. The aircraft is missing or is completely inaccessible.”

Serious incident

A serious incident is one in which an accident nearly happened. Some say it is an accident where you got lucky.

Some examples:

- runway excursion that narrowly missed a person or property
- near collisions
- controlled flight into terrain only marginally avoided.

Immediate hazard to aircraft operations

A hazard to the safety of an aircraft could be something like a hole in the runway, a failure in taxiway lighting, or a breakdown in communication between air traffic control (ATC) and aircraft in the circuit.

Those types of hazards should be reported promptly, even if there was no incident.

Incident

According to the Civil Aviation Rules, Part 1, an incident is any occurrence, other than an accident, associated with the operation of an aircraft, that affects, or could affect, the safety of that operation.

Examples include:

- wind shear that results in a go-around
- a system or component not working as intended a laser strike
- a collision between an aircraft and one or more birds
- the misidentification of aircraft by a radar operator.



All other incidents

Other incidents involve aerodromes, aircraft defects, security, dangerous goods, and facility malfunctions. These all represent threats to the integrity of a safe aviation system.

They could include:

- significant defects or damage found as a result of a heavy landing or turbulence
- significant spillage of fuel on aerodrome aprons
- reporting of suspect unapproved parts.

Air cargo agents operating under Part 109 must report any cargo security incidents.

For further guidance on accidents, incidents and hazards, go to aviation.govt.nz, "Rules > Advisory Circulars > AC12-1 *Mandatory occurrence notification and information*".

What about UA (drones)?

Unmanned Aircraft (UA) are also referred to as remotely piloted aircraft systems (RPAS) or drones.

Essentially you report an occurrence involving a UA in the SAME way you would report an incident with any other aircraft type.

- So if you are an operator of a registered aircraft and you experience an occurrence involving a UA, you should report that in the normal way. The easiest method is the online reporting form – aviation.govt.nz/report. The only thing that changes is the 'other aircraft' is identified as a UA.
- Similarly for other certificate holders like aerodrome operators, report an occurrence involving a UA as you would for any other occurrence involving an aircraft.



- If you operate a UA under Part 102 and you experience an occurrence, you should report that to the CAA as defined in your exposition. Typically this would include occurrences such as destruction or damage to the UA, injuries to people, or significant operational problems.
- Recreational UA operators who come under Part 101, do NOT need to report occurrences, when ONLY their aircraft is involved. However, if you consider the occurrence significant to other aviation users (eg. a control system failure or battery fire), you can always report an aviation-related-concern – refer to Page 14 under the heading *Anyone can report an occurrence or safety concern*.

Part 149 activities

Anything that meets the definition of an accident must be reported to the CAA.

Whether sport and recreation participants have to report occurrences themselves will depend on the exposition requirements of the organisation they are operating under.

If you have a pilot or parachutist certificate issued by a Part 149 organisation, you need to be familiar with that organisation's operations manual.

Immediate hazards should be reported promptly, regardless of what Part you are operating under.

Other occurrences may also need to be reported to the organisation under whose authority you are operating.

The CAA strongly encourages participants to report all occurrences, and will never turn away a report.



Certificated organisations

A certificated organisation associated with an accident or serious incident has to complete its own investigation and submit its report to the CAA within 90 days of the occurrence.

The emphasis is for industry to be responsible for conducting their own safety investigations. Doing so contributes to their safety management systems (SMS), and feeds into their risk management strategies.

The CAA may want to take part in the organisation's internal investigation or conduct its own. However, where that is not the case, Advisory Circular AC12-2 *Incident investigation* has guidelines that should help you file a report.

The most important part of the investigation report is to show the actions you are taking to reduce the probability of recurrence. After all, that is the point of incident investigation.

Safety investigation forms an important part of an organisation's SMS framework, as explained in AC100-1 *Safety management*.

As well as establishing the causes of accidents or incidents, most investigation exercises also uncover hazards and threats.

Not all companies have trained investigators, so CAA specialists may be consulted for advice or assistance. They may also review the findings of the internal investigation and work with the operator to ensure that any fixes will be effective.



Near misses, close calls and 'free lessons' provide qualitative insights into how small defensive failures could combine to cause major accidents.

Professor James Reason, 2008





Benefits of reporting

The CAA gets good information about accidents. It should be obvious to everyone that an accident in which someone sustains major or fatal injuries has to be reported to the regulator.

However, some people do not see that reporting the smaller occurrences are worth the trouble. But it is the reporting of everyday difficulties, the type that can happen to anyone, which may well prevent the bigger tragedies.

A study of industrial accident data indicated there are as many as 360 small incidents and 10 serious incidents before a fatal accident occurs.

So it's precisely those seemingly less noteworthy occurrences that sometimes end up playing an enormous role in improving overall safety.

For example, birds flocking around the runway might force you to orbit before landing.

To you, that may not seem important enough to report to the CAA. But it's *exactly* the sort of information the CAA needs, so it can build a picture of flying conditions around that area.

With that sort of intelligence, the CAA can identify the areas or issues giving pilots a headache, and decide on an appropriate intervention. This could be recommending a rule change or issuing an airworthiness directive. The CAA could inform the aviation community of the issue through its communication channels like *Vector* magazine, the website, and other publications.

The CAA doesn't know what is going to be significant 5, 10, 20 years down the track, and something you report today could be helpful even then.

Accident/incident pyramid

It is accepted in most major industries eg, nuclear, mining, manufacturing, that for each major accident (involving fatalities) there are as many as 360 incidents that, properly investigated, might have identified an underlying problem in time to prevent the accident.

The trick is to identify where we are in the triangle, and implement corrective or preventive actions before we have the accident.



New Zealand skies will be safer if everyone reports even small occurrences. That, alone, makes your life easier, but it will also further enhance the country's safe flying reputation, encourage tourism, and do its bit to make businesses relying on domestic and overseas visitors more profitable.

It also allows an aviation business to save on all the hidden and social costs associated with preventable incidents and accidents. These include loss of reputation, insurance excess, lost time and overtime, loss of morale among staff, loss of use of equipment, and cost of rental or lease of replacement equipment.

To paraphrase a saying in aviation – if you think reporting and investigating an occurrence is expensive, try having an accident.

A safety investigation can have ongoing benefits for an organisation that is willing to learn and improve. The result may not only reduce future risk, but also offer gains to efficiency and operational performance.

The CAA, like regulators the world over, does not have safety officers on each flight or inside each maintenance hangar.

Every pilot, aircraft owner, operator, engineer, ground handling officer, flight attendant, air traffic controller, and aviation service supplier – in short everyone involved in the aviation community – needs to do their bit to contribute to the big picture.

When people don't report, they are letting down everyone else working in aviation, and of course, the passengers.

The risk you don't report is the risk you accept.



What is being reported

If the accident/incident pyramid on page 10 is correct, and we assume all accidents are reported, only two thirds of all serious incidents are being reported. Even worse, only one quarter of all minor incidents are being reported. Without these vital reports, it is harder to stop the accidents at the top of the pyramid.

Statistics averaged over a five year period. Source: CAA

How to report

Notifying the CAA about an accident or serious incident

The pilot-in-command must notify the CAA about an accident, serious incident, or immediate hazard to the safety of an aircraft operation, as soon as is practicable. That does not mean when it is convenient. It means using a cellphone immediately, or the first landline telephone you can get to. Call 0508 ACCIDENT (0508 222 433).

The freephone number connects you with the Rescue Coordination Centre 24 hours a day, seven days a week.

If the pilot has been killed or incapacitated, the aircraft operator must notify the CAA instead.

When reporting an immediate hazard to the safety of an aircraft operation, ATC will notify pilots immediately, but you should also report it to the CAA as soon as practicable.



Supplying the details

The pilot (or aircraft operator) must then send the details of the accident or serious incident to the CAA within the next 10 days.

The easiest, quickest way to do that is to report online, aviation.govt.nz/report. An email will be sent to the email address you have provided that will repeat all your entries so you can check they are correct.

You could also email the CA005 form, found on the CAA website, to isi@caa.govt.nz.

You should include a statement from each flight crew member outlining what happened. You need fill in only the sections relevant to your occurrence.

There's a shorter version available for reporting defect incidents, CA005D, and for reporting bird incidents, CA005B.

Retain a copy for your own record.

There are also forms on the website tailored to RPAS operations – CA005RPAS, skydiving – CA005SKYDIVE, and helicopter and ag – CA005AG.

The ONLINE form caters to ALL of the different types of operation.

The different 005 forms can be found at aviation.govt.nz, "Safety > Safety reporting", under the heading *Reporting*.



Obligations under health and safety law

The CAA administers the Health and Safety at Work Act 2015 in respect of the aviation sector, for aircraft while in operation.

This includes work to prepare an aircraft for imminent flight; work on board an aircraft for the purpose of imminent flight or while in operation; and aircraft as workplaces while in operation, ie, while the aircraft is taxiing, taking off, flying or landing.

WorkSafe administers the Act in respect of the aviation sector in all other circumstances.

In most cases, an event that is notifiable under the Health and Safety at Work Act involving a commercial operator will also be a reportable occurrence under Part 12. For this reason, the CA005 form includes a HSWA section.

The person conducting a business or undertaking (PCBU) must notify the CAA of notifiable events as soon as possible by phoning 0508 4 SAFETY (0508 472 338), or by completing the Health and Safety section of CA005 *Occurrence Report* form and emailing it to isi@caa.govt.nz.

Need help?

The Advisory Circulars AC12-1 *Mandatory occurrence notification and information* and AC12-2 *Incident investigation* are available free from aviation.govt.nz, “Rules > Advisory Circulars”, or at low cost from 0800 GET RULES (0800 438 785).

Anyone can report an occurrence or safety concern

Part 12 *Accidents, Incidents, and Statistics* details who is required to report occurrences under the Civil Aviation Rules, but the CAA welcomes reports from anyone who is aware of any accident, incident, or possible incident. To do that, use the contacts inside the back cover of this booklet.

Anyone can also report an aviation-related-concern using 0508 4 SAFETY (0508 472 338), or email isi@caa.govt.nz. A concern might be a low-flying aircraft or someone talking on a cell phone during flight, or it could be substandard maintenance on an aircraft or spray drift from helicopters.

Reading more

Some occurrences are investigated by the Transport Accident Investigation Commission (TAIC). To learn more about their role, see www.taic.org.nz.

To read more about your obligations to report an accident or serious incident, under Part 12, go to the CAA website, aviation.govt.nz, “Rules > Part 12”.

Confidentiality

If you are embarrassed or worried about the consequences of reporting, you *can* report confidentially to the CAA. Simply write in the event 'Description' field that you request confidentiality.

When thinking about requesting confidentiality, remember that the CAA is already bound by the Privacy Act 1993 and the Official Information Act 1982. These Acts protect the disclosure of your personal information.

One of the first things the CAA does with an occurrence report is remove personal information like names and telephone numbers. Have a look at the *Accident Briefs* section of the CAA's *Vector* magazine for examples of de-identified descriptions.

You can submit a report anonymously, without any contact details, but this severely limits the scope of an investigation. The CAA would be unable to contact you for more information, reducing the chances of finding out what caused the occurrence. They also wouldn't be able to let you know what was done with your information.

It is important to understand that while a report may be confidential or anonymous, the CAA may still learn of the occurrence via other people or means. Confidentiality attaches only to the information you submit under Part 12 – not the event itself.

For more information, see *The collection and use of safety information* at aviation.govt.nz, "Safety > Safety reporting".



... incidents act towards accident prevention as inoculation works in preventing illness: a little bit of what could do you harm acts to strengthen the system's defences.

Professor James Reason, 2008



What the CAA does with the information

The details from your report will be carefully read, categorised, and stored in the CAA's database.

With thousands of occurrences every year, most events reported to the CAA are not investigated as individual events, but are used as a valuable resource for analysis of safety trends. They also help decide which aspects of the civil aviation system might need to be changed or strengthened.

If the CAA decides that further examination of your occurrence is needed, a safety investigator will be assigned to it. They may then contact you to clarify something or get more information. The investigator will work with you to find out what happened and why, and will try to help you to determine what can be done to stop the same thing happening again. You will be notified when the investigation is complete.

If you believe your occurrence needs additional CAA attention, don't be afraid to tell us.

The CAA receives safety information from many different sources, including:

- accident and incident reports under Part 12
- public complaints and concerns
- information obtained by the CAA during audits/inspections and safety investigations.

Safety investigations are conducted to find out how an occurrence came to happen. Sometimes they look at the direct cause, and sometimes also at how the 'system' failed. The purpose of an investigation is not to apportion blame or responsibility.

There is a common misconception that reporting occurrences means you are more likely to be prosecuted. The opposite is true. While it may be a little uncomfortable telling the CAA what happened, or that you made a mistake, you are far less likely to be the subject of action or prosecution, if you are honest and open with the CAA.

The small number of prosecutions that the CAA does take each year typically involve cases where people don't report, or where we learn of the occurrence from the public or other participants.

Some people are also concerned they might get into trouble with their employers if they report an occurrence. Most aviation employers understand the legal obligation to report accidents and incidents to the CAA, and the benefits that brings.

The CAA expects that an organisation will operate a 'just culture' where employees feel comfortable in reporting errors in the knowledge that, within reason, they will not be blamed, ridiculed, or punished.

If you want to see how your report can contribute to the big picture, go to aviation.govt.nz, "Safety > Safety advice > Safety reports".



Reporting guide

| Type of occurrence | I. Notification | II. Details | III. Investigation report |
|--|---|---|--|
| | As soon as practicable | Accidents within 10 days Incidents within 14 days | Within 90 days |
| Accident | Pilot-in-command, or certificate holder 0508 ACCIDENT (0508 222 433) | Pilot-in-command or certificate holder aviation.govt.nz/report – or CA005 form | Certificate holder or responsible person Page 3 of CA005 form – or a report acceptable to the Authority |
| Serious incident Immediate hazard to aircraft operations | Certificate holder, or person involved 0508 ACCIDENT (0508 222 433) | Certificate holder or person involved aviation.govt.nz/report – or CA005, CA005B, or CA005D forms | Certificate holder or responsible person Page 3 of CA005 form – or a report acceptable to the Authority Filling out the ‘Cause’ box on CA005D completes the investigation for defects |
| All other incidents | | Certificate holder or person involved aviation.govt.nz/report – or CA005, CA005B, or CA005D forms | Certificate holder or person involved Page 3 of CA005 – or Page 2 of CA005D – or a report acceptable to the Authority |
| Health and safety notifiable event | The Person Conducting a Business or Undertaking (PCBU) CA005 form – or 0508 4 SAFETY (0508 472 338) | The PCBU As soon as possible after becoming aware that a notifiable event has occurred, and by the fastest possible means in the circumstances. | The PCBU If by telephone, the PCBU gives the details requested and, if required, provides a written report within 48 hours. |

There are also forms on the website tailored to RPAS operations – CA005RPAS, skydiving – CA005SKYDIVE, and helicopter and ag – CA005AG.

The ONLINE form caters to ALL the different types of operation.

Need more help?

General enquiries can be made to **isi@caa.govt.nz** or **+64 4 560 9400**.

Reports, including CA005 forms, can be sent to **isi@caa.govt.nz** or call **0508 4 SAFETY (0508 472 338)** – voicemail operates outside office hours.

An investigation report acceptable to the Authority might be your own company incident form, or a letter containing the relevant details. Use the CA005 form for guidance on what details are relevant.

To report a Health and Safety at Work Act notifiable event:

0508 4 SAFETY (0508 472 338) – voicemail operates outside office hours. For more information, see the CAA website at **aviation.govt.nz/safety/health-and-safety**.

To notify the CAA about an accident or serious incident call the freephone number:

0508 ACCIDENT (0508 222 433) – staffed 24/7 by the Rescue Coordination Centre.

The easiest way to do your follow up report is online at:

aviation.govt.nz/report

You can also email the CA005 form to:

isi@caa.govt.nz; or post it to
FreePost 146123,
Civil Aviation Authority of New Zealand,
PO Box 3555, Wellington 6140;
or fax it to **04 560 9469**.



Good Aviation Practice



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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.

To request publications such as GAPs and posters email: publications@caa.govt.nz.

aviation.govt.nz

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