



Advisory Circular

AC12-1

Revision 4

09 May 2012

Mandatory Occurrence Notification and Information

General

Civil Aviation Authority Advisory Circulars contain information about standards, practices, and procedures that the Director has found to be an **Acceptable Means of Compliance (AMC)** with the associated rule.

An AMC is not intended to be the only means of compliance with a rule, and consideration will be given to other methods of compliance that may be presented to the Director. When new standards, practices, or procedures are found to be acceptable they will be added to the appropriate Advisory Circular.

An Advisory Circular may also include **Guidance Material (GM)** to facilitate compliance with the rule requirements. Guidance material must not be regarded as an acceptable means of compliance.

Purpose

This Advisory Circular (AC) provides information and methods acceptable to the Authority for showing compliance with the submission of occurrence notification and information required under Civil Aviation Rule Part 12 – *Accidents, Incidents, and Statistics*. This AC should be read in conjunction with AC12-2 – *Incident Investigation* where an investigation report is required.

Related Rules

This Advisory Circular relates specifically to Part 12 Subpart B.

Change Notice

Revision 4:

- adds an additional requirement to Appendix A under Other incidents to report suspected unapproved parts
- updates contact details for reporting

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- adds emergency equipment to the examples of defect incidents
- updates runway incursions under Aerodrome Incidents in accordance with ICAO guidelines
- removes reporting incidents via ATS from the Quick Grid.

The revision also adds a requirement to notify an aircraft incident or defect incident if the incident is associated with an aircraft performing an extended diversion time operation (EDTO). This requirement became effective 1 November 2010 when the Part 121 EDTO rule amendments came into force.

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Section 1 — Rule compliance

Note: Only rules requiring compliance guidance are included in this section.

Subpart B – Notification, Investigation, and Reporting of Occurrences

12.51 Notification of accident

This rule requires accidents to be notified to the Authority as soon as practicable. See Section 2 for methods of contact that are acceptable to the Authority.

Accident definition

The definition of an accident is contained in Part 1 of the Civil Aviation Rules and is reproduced below. Persons submitting reports should refer to this definition when deciding whether an occurrence is an accident. If in doubt report it anyway.

“**Accident**” means 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) 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
- (b) 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, antennas, tyres, brakes, fairings, small dents, or puncture holes in the aircraft skin; or
- (c) the aircraft is missing or is completely inaccessible.

12.53 Details of accident

This rule requires occurrence details of accidents to be provided to the Authority on form CA005, through the on-line reporting function on the CAA’s website, or by a means acceptable to the Authority. See Section 2 for contact methods that are acceptable to the Authority.

The Authority has determined that some 3rd party software systems can be an acceptable means of compliance for providing details of Accidents and Incidents. Contact Manager, Intelligence, Safety and Risk Analysis if considering using or developing such software (refer to Section 2 for address).

12.55 Notification of incident

This rule requires the holder of a certificate, any person involved in the incident, or a pilot-in-command to notify the Authority as soon as practicable of incidents, airspace and bird incidents that are serious or an immediate hazard, as required in paragraphs (a), (b), and (c) of rule 12.55. In addition, from 1 November 2010 an aircraft incident or defect incident associated with an aircraft used to perform an extended diversion time operation (EDTO) is to be notified to the Authority within 72 hours of the incident occurring.

See section 2 for methods of notification that are acceptable to the Authority.

Note: See Appendix A for examples of 'incidents' and 'serious incidents'.

In addition, rule 91.431 requires the pilot-in-command of an aircraft operating under IFR to notify ATS as soon as practicable after experiencing a malfunction of any aeronautical telecommunication facility during flight.

12.57 Details of incident

This rule requires details of an incident to be submitted to the Authority within 14 days of the incident on form CA005, through the on-line reporting function on the CAA's website, or a means acceptable to the Authority.

Defect incidents may be reported on Defect Report form CA005D.

Bird incidents may be reported on Bird Report form CA005B.

The Authority has determined that some 3rd party software systems can be an acceptable means of compliance for providing details of Accidents and Incidents. Contact Manager, Intelligence, Safety and Risk Analysis if considering using or developing such software (refer to Section 2 for address).

Forms are available on the CAA web site (Forms) or on request from the CAA.

12.61 Confidentiality of persons submitting information

If a person requests confidentiality when notifying and providing details of an incident, the Authority will remove any information that might reveal the identity of that person before processing the information in the data system. Persons requesting confidentiality must accept that confidentiality might inhibit effective investigation. See Section 2 for confidential address details.

Section 2 — Channels of communication

Accident and Serious Incident or immediate hazard notification.

The acceptable means of Accident and Serious Incident notification to the Authority is by—

- Freephone: 0508 ACCIDENT (222 433) at any time

Note:

The Authority has established 0508 ACCIDENT (222 433) as a toll free phone for receiving accident notifications. This number is monitored 24 hours every day of the week. If a report is made via this telephone, the Authority representative will request details of the accident as listed in the rule.

Incident notification

The means of notification direct to the Authority is as follows—

- FAX: +64-4-569 9469
- Free-phone: 0508 4 SAFETY (472 338). (Messages are stored when calls are made out of normal working hours).
- Email: CA005@caa.govt.nz
- Form CA005, or CA005B, or Form CA005D (self addressed and free post)

Electronic versions of Forms CA005, CA005B and CA005D are available online at <http://www.caa.govt.nz/Forms/Forms.htm>. MS Word versions can be completed electronically. PDF version must be printed and filled by hand. These can be submitted by email, fax or mail as appropriate.

Accident and Incident details

The occurrence report form CA005, CA005B, and CA005D are Freepost and are self addressed.

Details of any accident or incident may be sent through the on-line reporting function on the CAA's website.

If you are reporting by some other means, address the report to—

Intelligence, Safety and Risk Analysis Unit
Civil Aviation Authority of New Zealand
PO Box 3555
Wellington 6140

Confidential address

If a reporter wishes to submit a confidential notification or incident details, the submission should be clearly annotated **CONFIDENTIAL** and addressed to—

Manager, Intelligence, Safety and Risk Analysis Unit
Civil Aviation Authority of New Zealand
PO Box 3555
Wellington 6140

or

Phone: 0508 4 SAFETY (472338). (Messages are stored when calls are made out of normal working hours).

Section 3 — Background information

CAA's Responsibilities

The CAA has established a central unit for receipt, processing, and storage of accident and incident notifications and the details submitted in accordance with Part 12. The unit's main responsibilities are:

- (a) Receiving all accident and incident notifications and details:
- (b) Notifying TAIC of accidents and incidents in accordance with section 27 of the Act:
- (c) Evaluation of all notified and detailed occurrences to identify those considered to warrant direct Authority follow-up action and to direct such submissions to the appropriate Authority section for action. Such submissions are classified as open:
- (d) Coding and recording of all accidents and incidents in a computer data store:
- (e) Continuously monitoring all incoming data for significant aspects and trends, using previously stored data when appropriate and alerting the appropriate CAA section and the aviation industry when necessary:
- (f) Co-ordinating and monitoring the progress of CAA follow-up on open occurrences:
- (g) Disseminating the basic information, or a summary of the information contained in the submissions:
- (h) Carrying out searches of the stored data in response to requests from within the Authority or appropriate sections of the aviation industry and preparing reports arising from such searches:
- (i) Providing statistics and conducting analyses of the incident data in order to establish trends and to determine when corrective action is desirable:
- (j) Drawing attention to the lessons learned from searches and analysis of the data through appropriate publications.

Occurrence information collection objectives

The objective of occurrence information collection is to improve the level of flight safety from the lessons learned during subsequent follow-up action on submitted information. Also, safety is enhanced by promptly alerting those organisations associated with the operation, servicing and manufacture of aircraft or equipment, for which information has been submitted.

The overall objective of the CAA is to use the notified and detailed information to improve the level of flight safety.

Confidentiality of Identity

It is fundamental to the objective of the Mandatory Occurrence Information System that the substance of the reports be disseminated in the interest of flight safety. Nevertheless, the name of the person submitting the report, or of a person to whom it relates, will not be disclosed unless—

- disclosure is required by law; or
- the person concerned authorises disclosure.

The Authority will take all reasonable steps to avoid disclosing the identity of the reporter, and those individuals involved in the reported occurrence should any flight safety follow-up action arising from a report be necessary.

Civil Aviation Rule 12.61 requires the Authority, when confidentiality is requested by a person submitting information about an occurrence in accordance with rule 12.55 or rule 12.57 to–

- as soon as practicable, remove any information which might reveal the identity of the source; and
- not make any other record of the information that is removed.

Prosecution immunity

Civil Aviation Rule 12.63 states that the Authority shall not use or make available for the purpose of prosecution investigation or for prosecution action any information submitted to it by a person under Part 12 unless–

- (1) the information reveals an act or omission that caused unnecessary danger to any other person or to any property; or
- (2) false information is submitted; or
- (3) the Authority is obliged to release the information pursuant to a statutory requirement or by order of a Court.

APPENDIX A — Incidents Required to be Notified or Detailed

Introduction

Rule 12.57 requires details of an incident to be submitted to the Authority within 14 days of the incident. Informants should note that an incident notified to the Authority under rule 12.55 must be followed up with a submission of the details to provide the complete information about the incident.

Holders of organisation certificates are required to establish procedures and systems for the submission of incident details. Such procedures and systems are required to be included in the organisation's certification exposition.

The CAA encourages the use of industry systems with a responsible person within the organisation being nominated to receive all information about incidents. That person's role is to establish which information from individuals, within the organisation, meets the criteria for the submission of incident details to the Authority. Correlation of operational and technical aspects, and the provision of any relevant supplementary information, is an important part of such activity.

Individuals are strongly advised, in the interests of safety, to submit details to their employer, except when confidentiality is regarded as essential. However, an individual may submit details of an incident direct to the Authority in any case.

A manufacturer, maintenance organisation, overhaul organisation, or repair organisation, of aircraft, components, or equipment, is not expected to submit information about an incident to the Authority if the aircraft operator has already done so. The Authority expects operators to advise manufacturers of incidents that have been notified and detailed to the Authority. A manufacturer should submit details of an incident, which they are required to submit, if they know that the operator concerned has not.

Where a repair or maintenance organisation is in doubt if an incident should be reported they should submit a report in order to ensure that Part 12 is complied with.

Any person or organisation specified in Part 12 must submit details about any incident, of which they have knowledge, unless they have good reason to believe that details of the incident have already been, or will be, submitted by someone else.

Definitions

It is important that persons submitting reports keep firmly in mind the definition of an incident when deciding whether to submit information. If in doubt, submit the information anyway.

While Part 1 provides a definition for an **incident** and a **serious incident** the following examples should assist in determining whether it is necessary to submit a report:

Incident

- a defective condition or
- an unsatisfactory behaviour or
- a procedure—

which did not immediately affect the safety of an aircraft operation, but which if allowed to continue uncorrected or which, if repeated in different, but likely circumstances, would affect the safety of an aircraft operation.

Serious incident

Part 12 requires notification of serious incidents to the Authority. ICAO Annex 13 provides a list of examples of serious incidents. The incidents listed below are typical examples of incidents that are likely to be serious incidents. The list is not exhaustive and only serves as guidance.

- near collisions requiring an avoidance manoeuvre to avoid a collision or an unsafe situation or when an avoidance action would have been appropriate.
- controlled flight into terrain only marginally avoided.
- aborted take-off on a closed or engaged runway.
- take-off from a closed or engaged runway with marginal separation from obstacles.
- landing or attempted landings on a closed or engaged runway.
- gross failure to achieve predicted performance during take-off or climb.
- fires and smoke in the passenger compartment, in cargo compartments, or engine fires, even though the fires were extinguished by the use of extinguishing agents.
- events requiring the emergency use of oxygen by the flight crew.
- aircraft structural failures or engine disintegrations not classified as an accident.
- multiple malfunctions of one or more aircraft systems seriously affecting the operation of the aircraft.
- flight crew incapacitation in flight.
- fuel quantity requiring the declaration of an emergency by the pilot.
- take-off or landing incidents such as undershooting, overrunning, or running off the edges of runways.
- system failures, weather phenomena, operations outside the approved envelope or other occurrences which could have caused difficulties controlling the aircraft.
- failures of more than one system, in a redundant system mandatory for flight guidance and navigation.

Guidance for reporting

Listed below are examples of other types of incidents, by each class of incident that are considered to meet the criteria for the submission of a notification and details. Although covering a wide range of items, this list is not exhaustive.

You may like to rearrange these incident groups, in your manuals, to suit your own methods.

Airspace incidents

Air traffic control service personnel impairment

Impairment of any personnel of an air traffic service unit when, as a consequence, an aircraft was, or could have been, exposed to hazard.

Air traffic control services incidents

- (a) Provision of incorrect altimeter setting:
- (b) Failure or inadequacy of prescribed let-down procedures:
- (c) Misidentification of aircraft by a radar operator:
- (d) Incorrect transmission, receipt or interpretation of significant messages:
- (e) Less separation between aircraft than that prescribed for the situation:

- (f) Unauthorised infringement of any form of designated airspace.

Flight crew interpretation of information and instructions incidents

- (a) Incorrect setting of an SSR code:
- (b) Incorrect setting of an altimeter sub-scale:
- (c) Flight at a level, or on a route, different from that allocated:
- (d) Flight outside the applicable position and altitude tolerances for operation in RNP and RVSM airspace;
- (e) Incorrect receipt, or interpretation, of significant radiotelephone messages.

Airborne Collision Avoidance System (ACAS/TCAS)

Resolution advisory

Bird incidents

- (a) A collision between an aircraft and one or more birds:
- (b) One or more birds pass the aircraft inside the wing span:
- (c) One or more birds pass sufficiently close to an aircraft in flight to cause alarm to the pilot.

Defect incidents

Damage to aircraft structure incidents

- (a) Damage to any primary structure, or any damage to secondary structure, that consequently created a hazard or could have created a hazard to the aircraft, unless it is minor accidental damage readily evident and notified to the aircraft operator at the time it occurred:
- (b) Damage or deterioration found as a result of a special inspection or check. For example an Airworthiness Directive:
- (c) Separation from the aircraft, in flight, of any part of the aircraft:
- (d) Significant defects or damage found as a result of a heavy landing, or a turbulence, check:
- (e) Significant deterioration, defects, or damage found during routine maintenance, being of a nature or type not normally expected to arise from normal service operation.

Any damage to aircraft structure that has not been reported as an accident should be reported – this refers to damage found in flight or on the ground resulting from in-service deterioration, such as cracks, corrosion, permanent deformation, and the like.

Substantial damage which occurs between the time any person boards an aircraft with the intention of flight and such time as all persons have disembarked, and the engine, or any propellers or rotors, come to rest, **is to be notified and reported as an accident.**

Aircraft systems incidents

- (a) Any failure, significant malfunction, or deterioration of any items, or systems, or equipment, found as a result of a special mandatory inspection or check. For example, manufacturer's alerts, Service Bulletins, Airworthiness Directives, and the like:
- (b) Significant defects, deterioration, or damage, to system components, found during routine maintenance or repair, of a nature or type not normally expected to arise from normal service operation.

- (c) System or component failures, or significant malfunctions, identified by routine testing and inspection procedures, either on the aircraft or in the workshops. For example, defects causing, or likely to cause, failure of an actuating system for flaps, spoilers, drag devices, landing gear, brakes, and the like.
- (d) Failure, or malfunction, of any item, not normally considered as reportable, where the circumstances of the failure, or its association with other failures, introduces an element of hazard. For example, furnishings and equipment, water systems, and items included in an allowable deficiency or minimum equipment list.
- (e) Emergency equipment and system failures. Any defect in an emergency system that may prevent the system from operating correctly when required. For example ELT found defective on routine check, escape slide that will not inflate, smoke detectors that do not function.

In-service defect incidents

- (a) Failure or malfunction of engines
- (b) Loss or shutdown of any engine.
- (c) Inability to shut down an engine, or to control power, thrust or RPM, by use of normal procedures:
- (d) Significant overspeed or runaway of engines, propellers, rotors, APU, or other high speed components:
- (e) Uncontained failure of any high speed rotating components. For example, APU, air starters, ACM, ATM, and the like:
- (f) Failure or malfunction of aircraft systems and equipment
- (g) Any loss, significant malfunction or out of tolerance operation of one main system, sub-system, or set of equipment. For example, hydraulic power, flight control system, electrical power, air systems, ice protection, communication systems, navigation systems and instruments, warning systems and devices, brake systems, wheels or tyres, or both, on each landing gear, when—
 - (i) it occurs at a critical phase or time, For example, V_1 :
 - (ii) exceptional circumstances exist or unforeseen consequences arise. For example, uncontained failure, fire, and the like:
 - (iii) relevant back-up systems, sub-systems, or equipment do not perform satisfactorily.
- (h) Significant asymmetry of flaps, slats, spoilers, and the like:
 - (i) Limitations of movement, stiffness, or poor or delayed response, in the operation of the primary flight control systems, or their associated tab and lock systems:
 - (j) Loss, or malfunction, of any rotorcraft auto stabiliser mode:
- (k) Inability to achieve the intended aircraft configuration for any flight phase:
- (l) Malfunction of any indication or navigation systems when the possibility of significantly misleading indication to the crew results:
- (m) Operation of any primary warning system associated with aircraft systems or equipment when—

- (i) it is clearly evident to the crew that the indication is false; or
- (ii) the indication is confirmed as false after landing.

For example, fire or smoke warning, door warning, and the like.

- (n) Operation of any other primary warning system associated with manoeuvring of the aircraft when—
 - (i) it is clearly evident to the crew that the indication is false; or
 - (ii) the indication is confirmed as false after landing.

For example, stall warning (stick shake), stall protection (stick push), over-speed warning, and the like.

- (o) Reversion to manual control of powered primary controls, other than for training or test purposes:
- (p) Failure of ice-protection equipment, or build up of ice on the aircraft beyond the capability of the ice-protection system:
- (q) Critical AC, or DC, power system, or electrical component failure:
- (r) Loss of cabin pressurisation:
- (s) Contamination of the cabin, cockpit, or baggage compartment:
- (t) For twin engine aircraft approved for extended range operations (ETOPS) there are additional reporting requirements. Refer to AC121-1 *Extended-range twin-engine operations*.
- (u) For helicopters—
defects causing, or likely to cause, failure of rotors, or rotor drive systems.

Dangerous goods incidents

- (a) Escape of smoke, or flames, from the container or package in which the dangerous goods are contained:
- (b) Breakage of the container, or package, in which the dangerous goods are contained:
- (c) The escape of dangerous goods from the container or package in which they are contained:
- (d) Leakage of fluid, or radiation, from the container or package in which the dangerous goods are contained:
- (e) Incorrect labelling or packaging of dangerous goods:
- (f) Incorrect loading of dangerous goods in the aircraft.

Facility malfunction incidents

Total failure, significant malfunction, or out-of-tolerance operation of any aeronautical telecommunication or navigational aid facility.

Aircraft incident

*Note: Substantial damage that occurs between the time any person boards an aircraft with the intention of flight and such time as all persons have disembarked, and the engine, or any propellers or rotors, come to rest, **should be notified and reported as an accident.***

Injury to a person

Any significant injury to any person, which directly results from the operation of the aircraft or its equipment but which is not considered to be an accident:

Impairment of the capacity of a crew member to undertake the function to which their licence or responsibilities relate—

- (a) Impairment of any flight crew member, including any occurrence prior to departure if it is considered that it could have resulted in incapacitation during flight:
- (b) Impairment of any flight attendant that renders the person incapable of performing essential emergency duties.

The use of any procedure taken for the purpose of overcoming an emergency

- (a) The use of emergency equipment, or prescribed emergency procedures, in order to deal with a situation, whether in flight or on the ground:
- (b) The use of any non-standard procedure, adopted by the flight crew, to deal with an emergency:
- (c) The declaration of an emergency:
- (d) An emergency, forced, or precautionary, landing:
- (e) Failure of any emergency equipment, or procedures, to perform satisfactorily including when being used for training.

Encountering wake turbulence during approach to land, or on climb after take-off

Failure or malfunction of engines

Loss, shutdown, or significant malfunction, of any engine when—

- (a) standard operating procedures, drills, and such like, are not satisfactorily accomplished; or
- (b) a hazardous situation arises, or might have arisen, from the decisions or actions of the crew subsequent to the malfunction or failure.

Failure or malfunction of aircraft systems and equipment

Any loss or significant malfunction of one main system, sub-system, or set of equipment when—

- (a) standard operating procedures, drills, and the like, are not satisfactorily accomplished; or
- (b) a hazardous situation arises, or might have arisen, from the decisions or actions of the crew subsequent to the malfunction or failure.

For example, hydraulic power, flight control systems, electrical power, air systems, ice protection, communication systems, navigation systems and instruments, warning systems and devices, brake systems, or wheels or tyres on each landing gear.

Incidents affecting all aircraft

- (a) Fire or explosion:
- (b) Smoke, or toxic or noxious fumes, in the aircraft:
- (c) Leakage of fuel that results in a major loss, significant fire hazard, or significant contamination:

- (d) Malfunction of the fuel jettisoning system that results in inadvertent loss of a significant quantity of fuel, significant fire hazard, possibly hazardous contamination of aircraft equipment, or inability to jettison:
- (e) Fuel system malfunctions having a significant effect on the fuel supply and distribution:
- (f) Leakage of hydraulic fluids, oil, or other fluid, which results in a significant fire hazard, or possibly, hazardous contamination:
- (g) Inability to re-light, or re-start, a serviceable engine:
- (h) Operation of any primary warning system associated with aircraft systems or equipment. For example, fire or smoke warning, door warning, and the like.

Any occurrence arising from the control of an aircraft, in flight, by its flight crew

- (a) Abandoned take-off resulting from, or producing, a hazardous, or potentially hazardous, situation. For example, at speeds close to, or over, V_1 :
- (b) Go-around resulting from, or producing, a hazardous or potentially hazardous situation:
- (c) Heavy landing— a landing deemed to require a *heavy landing check*:
- (d) Turbulence encounter— an encounter deemed to require a *turbulence check*.
- (e) Lightning strike:
- (f) Unintentional significant deviation from intended track, or altitude, caused by procedural systems, equipment defect, or human factor:
- (g) Unintentional deviation from intended track, or altitude, outside the applicable RNP or RVSM tolerances caused by procedural systems, equipment defect, or human factor:
- (h) Descent below decision height, or minimum descent height, in instrument landing conditions:
- (i) Unintentional contact with the ground, including touching down before the runway threshold:
- (j) Over-running the ends, or edges, of the runway:
- (k) Serious loss of braking action:
- (l) Approaching to, or landing on, a wrong runway or aerodrome:
- (m) Significant loss of control from any cause:
- (n) Occurrence of stall, or a *stick push* operation, other than for training or test purposes:
- (o) Significant inadvertent reduction in airspeed:
- (p) Contact, or near contact requiring avoiding action, with suspended wires or cables:
- (q) GPWS/TAWS *warning* when—
 - (i) the aircraft comes into closer proximity to the ground than had been planned or anticipated:
 - (ii) the warning is experienced in IMC, or at night, and is established as having been triggered by a high rate of descent (Mode 1):

- (iii) the warning results from failure to select landing gear, or flap, by the appropriate point on approach (Mode 4):
- (iv) any difficulty or hazard arises, or might have arisen, as a result of crew response to the warning. For example, possibly reduced separation from other traffic. This could include warning of any Mode, or Type, that is genuine, nuisance, or false:
- (v) any difficulty or hazard arises, or might have arisen, as a result of crew response to a GPWS/TAWS *alert*:
- (r) Operation of any other primary warning system associated with manoeuvring of the aircraft. For example, stall warning (*stick shake*), stall protection (*stick push*), over speed warning, and similar:
- (s) Inadvertent incorrect operation of any controls which resulted in, or could have resulted in, a significant hazard:
- (t) An incident, or hazard, which arises as a consequence of any deliberate simulation of failure conditions for training, system checks, or test purposes:
- (u) In-flight fuel quantity critically low.

Occurrence arising from the loading or carriage of passengers, cargo, or fuel

- (a) Loading of incorrect fuel quantities likely to have a significant effect on aircraft endurance, performance, balance, or structural strength.
- (b) Loading of contaminated, or incorrect type of, fuel or other essential fluids.
- (c) Incorrect loading of passengers, baggage, or cargo, likely to have a significant effect on aircraft weight and balance.
- (d) Inadequate securing of cargo containers or substantial items of cargo.
- (e) Incorrect stowage of baggage or cargo likely in any way to hazard the aircraft, its equipment or occupants, or to impede emergency evacuation.
- (f) Significant contamination of aircraft structure, systems, or equipment arising from the carriage of baggage or cargo.

Extended diversion time operations (EDTO)

An aircraft incident such as an in-flight shutdown of a propulsion system, a diversion or turn back, or an inadvertent fuel loss or unavailability associated with an aircraft performing an EDTO.

Additional rotorcraft related incidents

- (a) Loss of power margin in flight, when it results in contact with ground, or water, or other object:
- (b) Rotor overspeed in flight, in excess of the component change limits:
- (c) Mast bumping in flight:
- (d) Power settling, or settling with power, when it results in surface contact, or in a rate of descent in excess of 1000 feet per minute.
- (e) Main or tail rotor strike resulting in damage to the rotor.
- (f) Ground resonance requiring corrective action by the pilot.

Security incidents

- (a) Unlawful seizure of an aircraft:
- (b) An attempted unlawful seizure of an aircraft:
- (c) Violence against a person on board an aircraft in flight if that act is likely to, or has the potential to, endanger the safety of that aircraft:
- (d) Destroying an aircraft in service, or causing damage to such an aircraft, that renders it incapable of flight, or which is likely to endanger its safety in flight:
- (e) Placing, or causing to be placed, or attempting to place, on an aircraft in service, by any means whatsoever, a device or substance which is likely—
 - (i) to destroy that aircraft; or
 - (ii) to cause damage to it that renders it incapable of flight; or
 - (iii) to cause damage to it that is likely to endanger its safety in flight:
- (f) Destroying, or damaging, an aeronautical telecommunication facility, or interfering with its operation:
- (g) Unlawfully using any device, substance, or weapon, at an aerodrome to—
 - (i) use violence against a person which causes, or is likely to cause serious injury or death; or
 - (ii) destroy, or seriously damage, an aerodrome facility, or an aircraft on the aerodrome:
- (h) Attempted break-in to a parked aircraft:
- (i) Any other unlawful act which affects or could affect the immediate safety of aircraft operations:
- (j) Unlawful attempt to take on board an aircraft—
 - (i) any firearm; or
 - (ii) any ammunition; or
 - (iii) any explosive substance or device, or any other injurious substance or device of any kind whatsoever, which could be used to endanger the safety of the aircraft or of persons on board the aircraft; or
 - (iv) any other dangerous or offensive weapon, or any dangerous instrument of any kind whatsoever.

Promulgated information incidents

Provision of significantly incorrect, inadequate, or misleading promulgated information in any—

- (a) Aeronautical information publication:
- (b) Map:
- (c) Chart:
- (d) Manual:

- (e) Meteorological information.

Aerodrome incidents

- (a) Failure or significant malfunction of aerodrome lighting:
- (b) Failure or significant malfunction of a visual approach slope indicator system:
- (c) Significant deterioration of aerodrome wind indicators, markings, or signs:
- (d) Major failure, or significant deterioration, of surfaces in aerodrome manoeuvring areas:
- (e) Significant spillage of fuel on aerodrome aprons:
- (f) Errors, or inadequacies, in marking of obstructions or hazards on aerodrome manoeuvring areas:
- (g) Errors, or inadequacies, in lighting of obstructions or hazards on aerodrome manoeuvring areas or in the vicinity of an aerodrome:
- (h) Runway incursions, defined by ICAO as “Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take off of aircraft”. (ICAO Doc 4444 - PANS-ATM).
- (i) Any other obstruction of the aerodrome operational area or protrusion into the aerodrome obstacle limitation surfaces by aircraft, vehicles, persons, animals or foreign objects in a hazardous or potentially hazardous situation
- (j) Apron blast incidents resulting in significant damage or injury:
- (k) Collision between a moving aircraft and any other aircraft, vehicle, person, animal, or other ground object:
- (l) Aircraft departing from a paved surface which results in, or could have resulted, in a significant hazard.

Other incidents

Any other incident that affects, or if not corrected could affect, the safety of an aircraft, its occupants or any other person, being—

- (a) A failure, or malfunction, of ground equipment used for testing or checking aircraft systems and equipment, when the required routine inspection and test procedures did not clearly identify the problem before safe operation of the aircraft could have been affected:
- (b) Repetitive events, at an excessive frequency, of a specific type of failure, or malfunction, which in isolation would not be considered to be a reportable incident:
- (c) Minor loading errors at a particular aerodrome:
- (d) GPWS nuisance warning at a particular aerodrome:
- (e) Incorrect assembly of parts, or components, of aircraft, or any ground equipment, where the condition has not been found as a result of inspection and test procedures required for that specific purpose:
- (f) The supply or use of a suspected unapproved part (SUP) where there is suspicion that a part, component, or material does not meet the requirements of an approved part (refer to AC00-1 concerning unacceptable parts).

Appendix B – Filling in Form CA005 — pages 1 & 2

Introduction

Experience indicates that over 5000 occurrence submissions are made annually to the Authority. These submissions emanate from a wide range of sources within and outside the aviation industry. Relevant information from these submissions is stored in a computer database. From that it is possible to retrieve data for the purpose of flight safety studies. To facilitate both storage and subsequent analysis of data it is important that submissions contain sufficient basic information for the purpose of identification, comparison, and the like. This calls for answers to a number of selected questions presented in a standard format. To this end the Authority has devised Occurrence Report form CA005, Bird Report form CA005B and Defect Report form CA005D.

Organisations may wish to use an incident detail form designed to meet their own requirements or communication system. In such cases the format should, as far as possible, follow the general format of the CA005 (or CA005B or CA005D) report forms in order to facilitate data capture. Organisations should consult with the Authority when proposing an alternative system to ensure that it is acceptable to the Authority.

The CAA publishes statistical trend information on its web site and in safety publications. Specific trend or other statistical data is available on request.

Form CA005

Form CA005 is designed to gather detailed information about all accidents and incidents. Some of the information fields on pages 1 and 2 of the form may not be relevant to every incident. Information requested that is clearly **not relevant** may be omitted. On the other hand you might consider that you have relevant information not asked for. In such cases there should be sufficient blank spaces for you to provide the information. If you do run out of space please attach extra pages.

The individual field headings for all items of data are self-explanatory. The form comprises a combination of blank fields for entry of data, and tick-boxes listing alternatives appropriate to each occurrence.

The blue fields on the top of each page of the form are for CAA use.

Evaluation and processing of the data is simplified if the details are typewritten, if that is not possible fill them in with a black ballpoint pen in legible writing or block letters.

Page 1 and 2 of the form contains 7 blocks of fields and the following tables provide brief advice against each these blocks:

Provide details

Persons required to provide details of an accident, in accordance with rule 12.53, or of an incident, in accordance with rule 12.57, should do so by filling in pages 1 and 2 of form CA005, headed “Occurrence Report”, or the equivalent sections of forms CA005B or CA005D for Bird and Defect incidents, or through the online reporting system. This report must be submitted to the Authority within 10 days of the accident or 14 days of the incident.

The details required to be supplied are listed in rule 12.51(b) for accidents, and Part 12, Appendix A for incidents.

Submit investigation report

In accordance with rule 12.59 Certificate Holders are required to submit investigation reports no later than 90 days after the occurrence. These reports should be submitted using pages 3 and 4,

headed "Investigation Report", of form CA005. Further advice on completing an investigation and report can be found in AC12-2 *Incident Investigation*.

Table 1. First block on page 1

Data field	Filling advice
Date of occurrence	Use the format day/month/year. Make sure you have it right if you use UTC time!
Time	Fill the time box and then tick the appropriate box as NZ Standard time (NZST) or NZ daylight saving time (NZDT) or Co-ordinated universal time (UTC).
Location	Do not use abbreviations or Designators Plain text in relationship to a city, town, settlement, or the like. An example would be 10 nm south of Napier. Avoid using place names that will not easily be recognised by persons from outside the local area.
Aircraft manufacturer and model	You will find this in the aircraft flight manual.
Aircraft Registration	Include where an aircraft is involved. Include nationality marks for non ZK- aircraft.
Operator	This is the holder of the aircraft certificate of registration or the pilot's employer, usually it is the person that authorised the flight.
Client ID	If you know it, fill it, otherwise leave it blank as the CAA data base will generate it.
POB (Persons on Board)	Required for several incident types, so include if known.
Number of Injuries	Only required for accidents, however injuries should be reported if they occur for any incident.

Table 2. Block headed *Operational Details* on page 1

Data field	Filling advice
	This block is for accidents and in-flight incidents when relevant.
Flight No./Call sign	This is usually applicable to an airline operation.
Altitude	Fill the box with numerals then tick the appropriate above ground level (AGL) or above sea level (ASL) or flight level (FTL).
Runway used	Use the two-digit runway designator, if relevant.
Departure point	This is usually an aerodrome listed in the AIP but, if not, define it best you can.
Destination point	As for departure point above.
Nearest reporting point (NRP)	These are designated NRP promulgated in the AIP and associated charts. Complete for all operational occurrences including Bird Incidents
Distance and bearing from NRP	The first box is distance in nautical miles (nm), and the second box is degrees true. Complete for all operational occurrences including Bird Incidents
The next 4 boxes	Tick the appropriate flight rules being operated, <i>VFR or IFR</i> , followed by the flight conditions at the time of the occurrence, <i>VMC or IMC</i> .
Nature of flight	The two boxes referring to scheduled or non-scheduled are relevant to air transport operations only, while the boxes referring to domestic, international, and ETOPS could be relevant to any type of operation. The remaining boxes are self explanatory, but note that there is an <i>other (specify)</i> box should you not be able to find the type of flight in the detailed boxes.
Flight Phase	Tick as appropriate, or detail in <i>other</i> box.
Effect on flight	Tick as appropriate, or detail in <i>other</i> box. Note that more than 1 effect may apply.

Table 3. Block headed *Description of Occurrence* on page 1

Data field	Filling advice
Description of occurrence	This is a narrative field for you to fill, in plain English, giving as full a description as possible. See the note under the box to use a separate piece of paper if needed.
Pilot in command's name	Fill in the given names, in full, followed by the surname of the pilot in command, if known to the submitter .
Licence number	This is the pilot's licence number
Pilot flight hours in last 90 days	If known to the submitter.
Flight hours on type	If known to the submitter. Type means <i>aircraft type</i> .
Total flight hours	If known to the submitter.
Last checked	If known to the submitter. Place a tick in the relevant box.
by - name	If known to the submitter. This is the name of the person who conducted the check flight you ticked in the previous box.
Date checked	If known to the submitter. This is the date of the flight check you ticked in the box above.
Check pilot's ID	If known to the submitter. If you don't know, leave it blank as the CAA database will generate this information.

Table 4. Block headed *Type of Occurrence* on page 2

Data field	Filling advice
Accident/incident	This block provides you with a choice of descriptors for you to tick the relevant field or fields and has another field called <i>other (specify)</i> if the descriptors do not fit the circumstances.
Airspace Incident	The first field, Airspace ID - eg AA/TMA/C, is the airspace designation as promulgated in the AIP and associated charts. The remaining fields provide you with a choice of descriptors for you to tick the relevant field or fields and has another field called <i>other (specify)</i> if the descriptors do not fit the circumstances.
Facility malfunction	Facility ID, Name, and Facility Type, are promulgated in the AIP and associated charts consisting of a two letter designator, usually named after the aerodrome it serves, and the type such as <i>NDB, VOR</i> , and the like. The remaining fields provide you with a choice of descriptors for you to tick the relevant field or fields and has another field called <i>other (specify)</i> if the descriptors do not fit the circumstances.
Aerodrome occ.	This block of fields provides you with a choice of descriptors for you to tick the relevant field or fields and has another field called <i>other (specify)</i> if the descriptors do not fit the circumstances.
Dangerous goods	This block of fields provides you with a choice of descriptors for you to tick the relevant field or fields and has another field called <i>other (specify)</i> if the descriptors do not fit the circumstances. The field labelled mis/non-declaration means an article or substance classified as a dangerous goods mis-declared or not declared at all.
Bird Hazard	The fields are self explanatory, though you may have problems in identifying the species. If this is the case describe the bird if possible.
Aircraft defect/engineering details	As the title suggests these fields are filled by a maintenance organisation or an LAME. The terminology used in the fields should be familiar to the persons filling out the fields. If you do not know the client ID leave it blank as the CAA database will generate the ID.
Engineering Description of Incident	This is a narrative, filled out by a maintenance organisation or an LAME.
EDTO Incident	A check box on the CA005 form, labelled “ETOPS” on older printings of the form. Tick if applicable

Table 5. Block headed *Submitter’s Details*

Data field	Filling advice
All	These fields are self-explanatory but, again, if you do not know your client ID leave it blank as the CAA data base will generate the ID.

Quick guide table

Notification, Investigation and Reporting of Occurrences

Type of OCCURRENCE	Initial NOTIFICATION (as soon as practicable)	Provide DETAILS (to CAA within 10 days for accidents or 14 days for incidents)	Submit INVESTIGATION Report (to CAA within 90 days)
Accident	Pilot-in-command (or operator) Notify CAA 0508 ACCIDENT 0508 222 433 <i>Rule 12.51 or 12.55</i>	Pilot-in-command (or operator) Form CA005, online reporting <i>Rule 12.53 or 12.57</i>	
Serious incident or Immediate hazard to aircraft operations	Certificate holder or person involved Notify CAA 0508 ACCIDENT 0508 222 433 <i>Rule 12.55(a)</i>	Certificate holder or person involved Form CA005, CA005D (defect only), or online reporting <i>Rule 12.57</i>	Certificate holder Form CA005 or CA005D <i>Rule 12.59</i>
Aircraft ,Dangerous Goods, Facility Malfunction, Defect or Security incidents		Certificate holder Form CA005, CA005D (defect only), or online reporting <i>Rule 12.57(a)(1)</i>	Certificate holder Form CA005 or CA005D <i>Rule 12.59</i>
Airspace incident	Pilot in Command Form CA005 <i>Rule 12.55(c)</i>	Pilot-in-command Certificate holder Form CA005 or online reporting <i>Rule 12.57(a)(1) & 12.57(a)(3)</i>	Certificate holder Form CA005 <i>Rule 12.59</i>
Bird incident	Pilot in Command Form CA005 or CA005B <i>Rule 12.55(c)</i>	Pilot-in-command Form CA005, CA005B, or online reporting <i>Rule 12.57(a)(3)</i>	

<p>EDTO Incident</p>	<p>Certificate holder</p> <p>Notify CAA within 72 hours</p> <p>Form CA005</p> <p><i>Rule 12.55(e)</i></p>	<p>Certificate holder</p> <p>Form CA005, or online reporting</p> <p><i>Rule 12.57</i></p>	<p>Certificate holder</p> <p>Form CA005</p> <p><i>Rule 12.59</i></p>
<p>All other incidents</p>		<p>Person involved</p> <p>Form CA005</p> <p><i>Rule 12.57(a)(2)</i></p>	