

Regulatory Impact Statement

Small Issues Rule Amendments

Agency Disclosure Statement

This Regulatory Impact Statement has been prepared by the Civil Aviation Authority (CAA) and the Ministry of Transport.

The New Zealand Civil Aviation Act 1990 establishes safety obligations for participating in New Zealand's civil aviation system, including for persons, aircraft and flight. Further requirements for safe participation are provided by the Civil Aviation Rules.

A suite of amendments to the Civil Aviation Rules is proposed, to address safety risks and regulatory burdens. These proposals are expected to entail little or no additional cost to operators, and so have been packaged together as these Small Issues Rule Amendments for the most cost-effective regulatory change.

As these proposals do not represent significant policy changes, the analysis included in this Regulatory Impact Statement is limited to describing each policy problem, options for addressing it and recommended solutions, rather than a comprehensive cost-benefit analysis.

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Executive Summary

This Regulatory Impact Statement (RIS) presents a set of proposals that do not meet criteria for an Omnibus rule change but that also do not, taken individually, warrant the resources of a standard rule change process.

The problems identified are that the Civil Aviation Rules are inconsistent with the standards and recommended practices of the International Civil Aviation Organization (ICAO), pose unnecessary regulatory burdens for no safety gains, or do not appropriately address known safety risks. Problem statements specific to each of the individual issues are provided throughout the discussion.

The nine proposals and the main Civil Aviation Rules affected are as follows.

- A. Reduce the frequency of airworthiness reviews for standard category certificated aircraft that are not operated for hire or reward (rule 91.615).
- B. Permit all pilots operating in adventure aviation to allow passengers to manipulate aircraft controls (rule 115.215).
- C. Permit large balloons to be maintained by the same organisations as small balloons (rule 43.54).
- D. Align the rules with ICAO recommendations for how far aircraft can fly from possible emergency landing sites (Extended Diversion Time Operations (EDTO) requirements) (Part 121 Subpart N).
- E. Permit the use of more accurate ways of calculating required landing distances (rules 121.221, 121.223, 125.233, 125.235, 135.233, 135.235).
- F. Only allow helicopters to be left unattended with rotors turning under power if this can be done safely (rule 135.67).
- G. Rationalise requirements for single engine aircraft to have backup batteries (rule 125.361).
- H. Enable the Director to require special safety training for operators of particular aircraft (which is necessary for certain Robinson helicopters) (Part 61 Subpart L (new)).
- I. Require aircraft operators to provide statistical data on freight carried (rule 12.151).

The primary objectives of these proposals are to:

- a. reduce regulatory burdens on aviation operators
- b. address risks to aviation safety
- c. achieve consistency with ICAO standards and recommended practices (SARPs)
- d. maintain effective enforcement of requirements
- e. achieve the above objectives (a–d) with no reduction of aviation safety, and at minimal cost to the aviation industry, the travelling public and government.

For all issues, the possible alternative options to a rule change are: exemptions, changes to Civil Aviation Authority procedures and practices, and education. In all cases, a rule change is assessed as best meeting the objective, especially if included with the other changes in a single cost-effective package.

Each issue has been consulted on to varying degrees, and, as a collection, via a comprehensive Notice of Proposed Rule Making. The impact of these proposals on industry is expected to be neutral or positive.

Rule changes that are ultimately implemented will be supplemented by guidance material and other information to support industry compliance.

Introduction

1. Traditionally, there have been two categories of Civil Aviation Rule changes: Omnibus, for minor editorial and technical changes; and standard rules for all others. In 2016, a third category was developed, Small Issues, to package together distinct rule changes that do not meet the criteria for an Omnibus rule¹ but that also do not warrant the more resource-intensive standard rule change process. Individually, these changes are not likely to meet cost-benefit or significance thresholds to be prioritised for rule development. However, as a suite of changes progressed simultaneously, these amendments provide to government and the aviation industry considerable benefits and safety improvements, including reducing the regulatory burden. Like Omnibus rules, Small Issues rule changes are anticipated to be proposed on a regular basis.
2. This Regulatory Impact Statement (RIS) provides the policy rationale for the 2016 suite of Small Issues rule changes. There are nine proposed rule changes.
 - A. Reduce the frequency of airworthiness reviews for standard category certificated aircraft that are not operated for hire or reward (rule 91.615).
 - B. Permit all pilots operating in adventure aviation to allow passengers to manipulate aircraft controls (rule 115.215).
 - C. Permit large balloons to be maintained by the same organisations as small balloons (rule 43.54).
 - D. Align the rules with International Civil Aviation Organization (ICAO) recommendations for how far aircraft can fly from possible emergency landing sites (Part 121 Subpart N).
 - E. Permit the use of more accurate ways of calculating required landing distances (rules 121.221, 121.223, 125.233, 125.235, 135.233, 135.235).
 - F. Only allow helicopters to be left unattended with rotors turning under power if this can be done safely (rule 135.67).
 - G. Rationalise requirements for single engine aircraft to have backup batteries (rule 125.361).
 - H. Enable the Director to require special safety training for operators of particular aircraft (which is necessary for certain Robinson helicopters) (Part 61 Subpart L (new)).
 - I. Require aircraft operators to provide statistical data on freight carried (rule 12.151).

International obligations

3. As a signatory to the Convention on International Civil Aviation 1944, New Zealand's civil aviation system is guided by Standards and Recommended Practices (SARPs) set by the International Civil Aviation Organization (ICAO) for aviation safety, security, efficiency and environmental protection.
4. ICAO member states, including New Zealand, are expected to follow SARPs to the extent practicable but are not required to where it would be unreasonable or impractical. Where alignment with SARPs is not possible, states may file differences with ICAO, indicating whether their aviation regulations align with individual SARPs partly or not at all, or whether an alternative standard is used that achieves the same or similar outcome as the SARP.

¹ Traditional omnibus criteria are: minor or insignificant policy change; minor technical matters or updates; no significant compliance cost or safety risks result; not controversial; little or no regulatory impact; grammatical or editorial changes of an insignificant nature.

New Zealand regulatory environment

5. The New Zealand Civil Aviation Act 1990 sets overarching requirements for participation in the aviation system. The Act requires that rules made by the Minister of Transport are not inconsistent with the ICAO Standards relating to aviation safety and security, to the extent adopted by New Zealand.² Under section 14 of the Act, an objective of the Minister is to ensure that New Zealand's obligations under international civil aviation agreements are implemented. Some proposals in this RIS aim to achieve this.

Summary Problem Statement

6. In some instances, the Civil Aviation Rules are inconsistent with ICAO SARPs, impose unnecessary regulatory burdens on aviation participants for no safety benefit, or do not appropriately address known safety risks.
7. The degree of regulatory change required to address each individual issue does not meet the criteria for inclusion in an Omnibus rule; however, on a cost-benefit basis, it also does not merit the resources required to develop a separate rule. Thus, the issues remain unresolved.
8. Where New Zealand's rules are not consistent with ICAO SARPs, they are likely to become out of step with actual international practice. This could affect New Zealand's aviation system and economy by making mutual recognition agreements or trade more difficult.
9. Problem statements specific to each of the nine issues in this RIS are provided in the respective sections below.

Objectives

10. The overall objectives of the proposals presented here are to:
 - a. reduce regulatory burdens on aviation operators
 - b. address risks to aviation safety
 - c. achieve consistency with ICAO SARPs
 - d. maintain effective enforcement of requirements
 - e. achieve the above Objectives (a–c) with no reduction of aviation safety, and at minimal cost to the aviation industry, the travelling public and government.

Options Identification

11. The same options were identified for potentially resolving each problem addressed by the proposals in paragraph 2.
 - 11.1. **Status quo:** maintaining the status quo for each identified problem is an option. While there would be no direct costs, the identified safety risks or regulatory burdens would remain, and in some cases could become worse over time.
 - 11.2. **Rule amendments (recommended option):** for each identified problem, a rule amendment is the recommended option. This best meets the stated objectives and, packaged together, provides government with a cost-effective approach. The other possible approaches identified here (except the status quo) are not feasible as they would risk being *ultra vires* to the rule or the Civil Aviation Act.

² Civil Aviation Act, section 33(1)(a).

- 11.2.1. In some cases, there may be more than one rule amendment option. For example, for proposal F (which restricts leaving helicopters unattended with rotors turning under power), it would be possible to amend the rules to place a blanket prohibition on leaving turning rotors unattended or to require equipment that would make it impossible to do so. In these cases, the possible alternative rule amendments are not proposed because they would not meet the objectives above and would not be consistent with the Civil Aviation Authority's (CAA's) risk- and performance-based approach to regulation.
- 11.2.2. Where rule changes are made, these would be supplemented by the necessary changes to the CAA's procedures and practices, and education campaigns to support effective implementation of the amendments (see the 'Monitoring, Evaluation and Review' section).
- 11.3. **Exemptions:** for many of the identified problems, issuing an exemption under section 37 of the Civil Aviation Act is possible, but would risk undermining the integrity of that rule (and possibly other rules). Reliance on exemptions for setting standards or addressing wider systemic issues is not good regulatory or legal practice. Because each of the problems discussed here applies to a number of industry participants, and their resolution requires a sustainable option, exemptions are not preferred. Furthermore, exemptions come at a cost to industry of the standard CAA hourly charge (\$284) for assessing exemption applications. This cost applies regardless of whether the application is successful.
- 11.4. **Changes to procedures or practices:** for most of the identified problems, there are non-legislative options for instituting changes to the CAA's procedures and other practices. For example, for proposal C (maintenance on large balloons), the CAA could establish regular safety reviews of large balloon maintenance providers, similar to what was done following the TAIC investigation (discussed below). However, without a supporting rule change this option is not preferred as it would not address the regulatory burden of balloon maintenance, risks establishing de-facto standards that contradict the rules and the cost-benefit ratio is not acceptable. In some cases, procedural and practice changes are simply not feasible given the current rule requirements.
- 11.5. **Education:** developing and implementing educational campaigns for industry is an option for all identified problems, particularly those addressing safety risks. Such campaigns could inform participants about good practice, clarify expectations and educate about means of compliance, all with a view towards improved compliance and safety. However, this option would not resolve the problems discussed, and the identified regulatory burdens or safety risks would remain. Such campaigns would not satisfactorily resolve problems without being underpinned by a rule change. Where rule amendments are progressed, these would be supplemented by education and awareness campaigns.

Analysis of Proposed Options

A. Reduce the frequency of airworthiness reviews for standard category certificated aircraft that are not operated for hire or reward (rule 91.615)

Status quo

12. Rule 91.615(a)(i) requires that a standard category certificated aircraft can only be operated if it has passed a review of airworthiness within the previous year. Such aircraft that are operated regularly therefore require annual reviews of airworthiness.

91.615 Review of airworthiness

- a) *Except as provided in paragraphs (b) and (c), a person must not operate an aircraft unless—*
- 1) *a review of airworthiness for the aircraft has been certified as completed in accordance with Subpart D of Part 43 within—*
 - i) *the preceding 365 days; or*
 - ii) *for an aircraft that has a special category airworthiness certificate that is not operated for hire or reward, the preceding 730 days; or*
 - 2) *the aircraft has been issued with an airworthiness certificate in accordance with Part 21 within the preceding 365 days.*

13. Reviews of airworthiness check that an aircraft's maintenance complies with the rules and that the required documentation is accurate. Airworthiness reviews generally do not involve any maintenance, but they serve as an independent quality check conducted on behalf of the CAA. Often, aircraft not used in hire or reward operations are maintained by uncertificated maintenance organisations which receive less regulatory surveillance than those certificated under Civil Aviation Rule Part 145. In these cases, the airworthiness review may be the only oversight of the quality of the maintenance work undertaken on the aircraft.
14. An airworthiness review generally costs upwards from \$600. Completed reviews must be submitted to the CAA for processing. The CAA does not charge operators for processing airworthiness reviews.
15. Rule 91.605(c) also requires aircraft maintenance plans to include airworthiness inspections at regular intervals. Such inspections complete standard maintenance care (e.g. oil and filter check, tyre and brake check, systems check) and must be carried out at least every 12 months regardless of time in service.

91.605 Maintenance programmes and schedules

- ...
- c) *If the manufacturer's maintenance schedule referred to in paragraph (a)(4) does not provide for an aircraft that operates for less than 100 hours of time in service per year, the operator must ensure that the manufacturer's 100-hour inspection or an equivalent inspection is completed within the preceding 12 months.*

16. Often, airworthiness inspections are completed at the same time as the airworthiness review to save costs for operators.

Maintenance-related accidents and incidents in standard category aircraft

17. CAA data indicates that there are few accidents that might be caused by poor maintenance for operations that are not for hire or reward. From 2008 through September 2014, there were 11 accidents that were or might have been related to maintenance, involving standard category aircraft not operated for hire or reward. Such accidents are also only a small proportion of overall accidents, and affected only 0.8 percent of all standard category certificated aircraft.
18. It is difficult to determine what role airworthiness reviews contribute to this low rate of maintenance-related accidents in this category of aircraft. To better understand the issue, CAA worked with the Aircraft Owners and Pilots Association (AOPA) to use their register of around 600 aircraft belonging to AOPA members. The information from the register was cross-referenced with relevant aircraft defects recorded in the CAA system.
19. Excluding aircraft not standard category or not subject to reviews (e.g. microlights), the records of 451 aircraft were checked for their airworthiness review and defect status. Of these, 12 aircraft (2.7 percent) had had defects identified by an annual airworthiness review. Defects included both airworthiness and safety issues, such as unapproved modifications or expired carbon monoxide detectors, and compliance issues not related to safety, such as expired first aid kits.

20. The analysis indicates that accidents in standard category aircraft are rarely caused by poor maintenance, and that annual airworthiness reviews rarely identify problems that would result in flight safety risks.
21. One caveat is the possibility that maintenance issues that might affect safety are identified and rectified in the annual review process but are not recorded on the annual review returns submitted to the CAA. There are a number of existing mechanisms that would mitigate the risk of these issues no longer being identified, such as 100 hour/12 month maintenance inspections and manufacturers' maintenance programme requirements.

Problem statement

22. The requirement for an airworthiness review within the year prior to operation imposes cost on operators that does not appear justified by the incidence of defects or accidents, and which largely duplicates the requirement for at least annual airworthiness inspections. Without demonstrable safety benefits, this level of regulatory intervention is unjustified

Recommendation

23. It is recommended to amend the rules to allow for reviews of airworthiness for aircraft that are not operated for hire or reward to be completed within two years prior to use. This would have a negligible impact on safety, or none at all, but would significantly reduce financial and regulatory burdens on operators.
24. Other existing safety measures would remain in place with this proposed change. Rule 91.605 would continue to require maintenance inspections at every 100 hours of flight time or 12 months, and major modifications and other changes to the aircraft would require airworthiness assessment and CAA approval. Operators could also continue to align their airworthiness inspections with their biennial airworthiness review where possible.

B. Permit all pilots operating in adventure aviation to allow passengers to manipulate aircraft controls (rule 115.215)

Status quo

25. Civil Aviation Rule Part 115 regulates adventure aviation operations, defined in Part 1 as "operations for the carriage of passengers by air for hire or reward where the object of the operation is for the passenger's recreational experience of participating in the flight, or engaging in the aerial operation."
26. "Manipulation of the controls" is not defined in Part 115; however, the CAA considers it to mean use of the flight controls to alter the heading, altitude, attitude, speed or other flight parameter of the aircraft.
27. Rule 115.215 places restrictions on who can manipulate aircraft controls:

115.215 Manipulation of controls

Except as provided in 115.613, 115.617 and 115.759, a holder of an adventure aviation operator certificate must ensure that a person does not manipulate the flight controls of an aircraft performing an adventure aviation operation under the authority of the certificate, unless the person is—

- 1) a flight crew member assigned for the flight; or*
- 2) an authorised representative of the Director who—*

- i) *has the permission of the certificate holder and the pilot-in-command; and*
- ii) *is performing a required duty.*

28. The exceptions provided in rules 115.613, 115.617 and 115.759 allow another person to manipulate the controls of a glider, hang-glider or during a simulated military operation respectively, as long as the operator meets certain conditions. The pilot in command always has the discretion to allow a person to use the flight controls. Operators of other aircraft under Part 115, namely hot air balloons, parachute drop operations, tandem parachute operators, special aircraft operations (other than simulated military operations) and microlight aircraft operations, must not allow passengers to manipulate flight controls unless the operator has an exemption from the CAA.
29. The CAA has granted two exemptions to rule 115.215: one to an operator of a light sport aircraft to allow passenger manipulation of the controls during aerobatics flights, and one to allow training in parachute drop operations.
30. The standard hourly rate of \$284 applies to consideration of applications for an exemption, whether or not the CAA actually grants the exemption.

Problem statement

31. The distinction between which operators can and cannot offer manipulation of controls was based on an assessment of which operators were likely to want to offer the option. It is not based on a safety assessment. As a result, the rule creates an artificial distinction between some Part 115 operators.
32. Adventure aviation operators can charge more for flight experiences that offer passengers the opportunity to manipulate the controls. The status quo means that some operators can offer the opportunity without incurring the expense of applying for an exemption.
33. CAA has granted exemptions to allow passenger manipulation of controls on the grounds that the operators concerned have proposed risk management actions that are at least as effective as prohibiting the manipulation of controls. This indicates that CAA considers operator demonstration of adequate risk identification and mitigation is appropriate with regard to allowing manipulation of controls. The introduction of Part 100 *Safety Management Systems* and the requirement to have an exposition are existing measures that can be used to identify and mitigate risks.

Recommendation

34. Amend the rules to enable all Part 115 operators who wish to offer manipulation of controls to do so under specified safety conditions rather than generally prohibiting the activity. This change would create new business opportunities for some operators and create a more equitable market. This proposal would result in the removal of the current exemptions, thereby introducing more efficient and defensible regulation. It allows operators to identify and mitigate their specific risks while maintaining regulatory oversight through the approval of operator's expositions.
35. The same risk identification and management requirements would apply to all Part 115 operators wishing to offer manipulation of controls. As a result, the recommended amendment would not introduce any additional safety risk to the aviation system. Operators who do not want to allow passengers to manipulate the controls would not incur any additional costs. Operators who wish to offer this experience can do so subject to CAA approval of their exposition.
36. Given that the number of adventure aviation operators is low (currently less than 30), the CAA does not anticipate any significant additional costs for assessing operators who wish to take up the opportunity to offer manipulation of controls.

C. Permit large balloons large balloons to be maintained by the same organisations as small balloons (rule 43.54)

Status quo

37. Aircraft maintenance in New Zealand, including for hot air balloons, is primarily regulated by Civil Aviation Rule Parts 43 *General Maintenance Rules* and 145 *Aircraft Maintenance Organisations*. A Part 145 certificate is required for organisations maintaining certain aircraft (such as air transport aircraft), but not all aircraft maintenance businesses are required to have a Part 145 certificate.
38. A Part 145 certificate demonstrates that the organisation has a quality assurance (QA) system that has been accepted by the CAA. The QA system incorporates organisational procedures such as management reviews and safety policies; it does not direct maintenance activity or standards. This certification process provides the CAA with greater assurance and oversight of the organisation's policies and procedures.
39. Rule 43.54 restricts maintenance of balloons (and other aircraft) capable of carrying ten or more passengers to Part 145 certificated organisations:

43.54 Maintenance required under Part 145

a) A person must not (except under the authority of a maintenance organisation certificate issued by the Director under the Act and Part 145) perform maintenance on, or certify for release-to-service,—

1) an aircraft that has a MCTOW³ of more than 5700 kg or a certificated passenger seating configuration, excluding any required crew member seat, of 10 seats or more if the aircraft is used to perform—

- i) air operations under the authority of an air operator certificate issued by the Director under the Act and Part 119; or
- ii) adventure aviation operations under the authority of an adventure aviation operator certificate issued by the Director under the Act and Part 115; or

2) a component fitted or intended to be fitted to an aircraft referred to in paragraph (1).

40. Consequently, hot air balloons operating under Part 115 Adventure Aviation that can carry 10 or more passengers (large balloons) must be maintained by a certificated Part 145 organisation.
41. Part 43 is based on the equivalent regulations administered by the Federal Aviation Administration (FAA) in the United States. However, that FAA regulation does not include large balloons. Unlike most aircraft, the complexity of balloon maintenance does not increase as the size or carrying capacity of the balloon increases.
42. Part 115 *Adventure Operations* certificated organisations operating large balloons receive regular CAA audits of their maintenance programmes (and other areas of their operation) under the scope of their Part 115 certificate. There are currently four Part 115 operators operating a total of seven balloons capable of carrying 10 or more passengers.
43. There is only one Part 145 certificated organisation currently maintaining large balloons in New Zealand. This organisation charges approximately \$85–95 per hour for balloon maintenance services.
44. In 2014, the CAA issued an exemption to licensed aircraft maintenance engineers (LAMEs) with a lighter than air rating from complying with rule 43.54(a)(1)(ii) and (2) to allow them to work on

³ Maximum Certificated Take Off Weight (MCTOW).

lighter than air aircraft and components used for adventure aviation operations under Part 115. Simply put, this exemption allows LAMEs not operating under the authorisation of a Part 145 certificate holder to perform maintenance on large balloons. The exemption has no specified end date.

45. The basis of this exemption was that balloons were erroneously included in rule 43.54(a)(1)(ii), balloon maintenance complexity does not increase with size and, in general, balloon maintenance expertise is more readily available in the non-Part 145 environment (e.g. Part 66 licensed aircraft maintenance engineers not operating under the authority of a Part 145 organisation).

TAIC findings

46. In its report on a commercial hot air ballooning accident near Carterton in 2012, the Transport Accident Investigation Commission (TAIC) found no evidence that maintenance issues contributed to the accident. However, TAIC did find that the practices of the maintenance provider in question did not comply with the rules. TAIC recommended that the Director of Civil Aviation “conduct an urgent check on all maintenance organisations and licensed engineers approved to maintain hot-air balloons to ensure that their balloon maintenance practices fully comply with Civil Aviation Rules.”
47. The Director agreed with this recommendation and commissioned the investigation. The CAA identified that of the very few balloon maintenance providers only one displayed practices of concern to the CAA (a Part 145 certificated organisation). In response, that organisation addressed the identified deficiencies, the relevant licensed aircraft maintenance engineer had their Inspection Authorisation rating suspended for a period of time, and the CAA continues monitoring and surveillance as appropriate.

Problem statement

48. There is no evidence of a safety risk or policy justification for capturing large balloons within the requirements of rule 43.54. CAA understands that large balloons were erroneously included in the requirements of rule 43.54 with the insertion of 43.54(a)(1)(ii) after the adoption of Part 115 and no consideration was given to the different types of Part 115 operations. There are a number of other safety checks in the maintenance and aviation systems which provide a sufficient minimum level of safety.
49. The inclusion of large balloons operating under a Part 115 certificate in rule 43.54(a) requiring them to obtain their maintenance from a Part 145 certificated organisation poses a regulatory burden on operators of these balloons for no additional safety benefit. This burden is currently mitigated by the 2014 exemption, but this is not considered a reasonable long-term solution.

Recommendation

50. Amend the rules to permit maintenance of large balloons to be carried out by non-certificated maintenance organisations. This would formalise the existing exemption of 2014 and provide a more legally-sound long-term solution.
51. Maintenance standards would continue to be as established in Part 43. Large balloons are no more complex to maintain than smaller balloons. Because large balloons are required to be maintained according to Part 43 requirements and this can be sufficiently audited and checked through the Part 115 scheme, the need for large balloons to be maintained by a Part 145 certified organisation is considered a regulatory burden that provides no additional safety benefits. There would be cost saving benefits to operators where they can more easily access maintenance providers.

D. Align the rules with International Civil Aviation Organization (ICAO) recommendations for how far aircraft can fly from possible emergency landing sites (Part 121 Subpart N)

Status quo

52. Civil Aviation Rule Part 1 *Definitions and Abbreviations* defines EDTO as “a flight by a multi-engine turbine powered aeroplane where the flight time...from a point on the route to an adequate aerodrome is greater than the threshold time for the aeroplane.”
53. Threshold time is the time it takes to reach the flight’s alternate airport, defined in Part 1 as: “60 minutes for an aeroplane with 2 turbine powered engines; and 180 minutes for an aeroplane with more than 2 turbine powered engines.”
54. EDTO and threshold time requirements are designed to ensure that the aircraft can safely divert to an alternate aerodrome in the case of engine failure. CAA New Zealand EDTO rules in Part 121 Subpart N only affect New Zealand-registered international air transport operators.
55. In November 2010, Part 121 was revised to align with proposed ICAO amendments to Annex 6 Part 1 in relation to EDTO standards. Since that proposal, ICAO made three further changes to Annex 6 Part 1 before approval in 2014. As a result, Part 121 is not consistent with international standards for EDTO.

Problem statement

56. EDTO and threshold time requirements are important safety measures, particularly for New Zealand aircraft that operate long distances over water. Due to some late amendments from ICAO to Annex 6 Part 1, there are now minor differences between international requirements and New Zealand’s EDTO rules in Part 121, Subpart N.
57. Because Annex 6 Part 1 applies to international commercial air transport operations, the misalignment could have implications for New Zealand’s international reputation as a responsible regulator for EDTO requirements. There is no reason not to align the Civil Aviation Rules with ICAO’s standards for EDTO.

Recommendations

58. Amend the rules to bring Part 121 Subpart N into full alignment with ICAO requirements in Annex 6 Part 1 of the Convention. This would create a new requirement for a safety risk assessment that demonstrates how an equivalent level of safety will be maintained before the CAA will approve operations beyond the time limits of the most time-limited system of the aircraft in question. This assessment would include considerations of the:
 - capabilities of the operator
 - overall reliability of the aeroplane
 - reliability of each time-limited system
 - relevant information from the aeroplane manufacturer, and
 - specific mitigation measures.
59. This proposed amendment would require an additional change to Part 1 *Definitions and Abbreviations* to bring EDTO definitions into alignment with ICAO requirements. Specifically, to add definitions for:
 - “EDTO critical fuel” and

- “point of no return”.

E. Permit the use of more accurate ways of calculating required landing distances (rules 121.221, 121.223, 125.233, 125.235, 135.233, 135.235)

Status quo

60. To aid safe take-off and landing, operators must calculate the distance required for landing different aircraft types at different airports based on a range of factors such as weather, runway surface conditions, and runway length and width.
61. New Zealand rules for calculating take-off and landing distance assessments are prescriptive and limited in the conditions they account for (wet or dry runways only).
62. In 2009, a Federal Aviation Administration of the USA (FAA) Take-off and Landing Performance Assessment Aviation Rulemaking Committee (TALPA ARC) reviewed runway landing distance requirements and developed new procedures for good practice. These provide a standardised approach to assessing the condition of runways and determining the length of runway required for landing.
63. Under the TALPA procedure, runway condition is categorised into seven different contaminant types and depths. Boeing and Airbus (the largest commercial aircraft manufacturers) have both developed and tested aircraft performance data for each of the seven categories. This allows operators of those aircraft to more accurately identify the runway length required for landing, which improves both safety and operator efficiency.
64. The FAA, EASA and CASA⁴ have all implemented, or are working towards implementing the revised procedures into their regulatory systems. Due to the complexity of the procedure, these countries are limiting the use of the TALPA procedure to larger passenger carrying air operations (e.g. Part 121 airlines). ICAO followed on 29 May 2015, with a State Letter proposing changes to the ICAO annexes to implement the TALPA procedures.
65. In anticipation of the ICAO changes, a provision has also been included in Part 139 *Aerodrome Certification, Operation and Use*. The amended Part 139 came into force on 1 August 2015, and will require (among other things) real-time reporting of contamination on runways using standardised reporting methods.

Problem statement

66. The current rules set out a relatively crude method for the calculation of safe landing distances, focused on wet or dry runways only and with reasonably wide margins of error. The calculations do not take into account the range of factors that affect braking distance, nor the behaviour of different aircraft when exposed to these factors.
67. The current regime is resulting in lower safety in some circumstances compared to what could be achieved using recognised best practice. For example, the current regime does not adequately calculate landing distances on runways where ice or snow is present on the surface.

⁴ Federal Aviation Administration (USA), European Aviation Safety Agency and Civil Aviation Safety Authority (Australia), respectively.

68. In other cases, a landing distance margin of error that is greater than it needs to be results in greater operating costs for airlines when they have to divert to another airport, even though it would have been safe to land on the planned runway. This increases costs compared to operating in other jurisdictions.
69. Attempts by New Zealand operators to implement procedures based on the TALPA recommendations that align with the revised manufacturer's performance data and international practice are failing due to the conflict with the current rules. This is resulting in a reputational risk to the CAA from not implementing internationally recognised good practice.

Recommendation

70. Amend the rules to enable a performance-based set of options for determining landing distance calculation procedures (including TALPA or another acceptable method) subject to approval from the Director. The Director will need to consider a range of factors when making the decision. Airlines may use either the current permitted procedure or obtain approval from the Director to use an alternative permitted procedure for calculation taking into account various factors. This will create a future-proofed rule, enabling TALPA-based and future landing distance procedures to be used without the need for further rule amendments, and will allow consistency with expected ICAO standards where appropriate (e.g. for international operations).
71. The rule will apply to Part 121, 125 and 135 operators. As it will be a discretionary option for operators, it will come into force when the rule is signed. The aim of the rule design is to future-proof the rule so that future methods of calculation are enabled, not just the TALPA landing distance procedure.

F. Only allow helicopters to be left unattended with rotors turning under power if this can be done safely (rule 135.67)

Status quo

72. Anecdotal reports from the helicopter industry suggests that it is common practice for private and commercial helicopter pilots to leave the aircraft controls unattended with the rotors turned under power in order to, for example:
- direct passengers to and from the aircraft to ensure safe embarking and disembarking
 - discuss an agricultural job with the land owner
 - hot refuel (refuel with the engines running) where permitted under Rule 91.15
 - complete aircraft safety checks, and/or
 - load and unload gear.
73. Operators may advise pilots of how a running helicopter can be safely left unattended, if at all, through their Standard Operating Procedures (SOPs) manual. An assessment of a sample of SOPs and discussion with industry representatives showed that SOPs vary with regard to whether they include policies and procedures for leaving an aircraft running whilst unattended and, if so, what those procedures are.
74. Since June 2005, 11 of 192 helicopter accidents were the result of an unattended helicopter with the engine running taking flight or rolling over. Of these 11 accidents, one resulted in minor injury, three aircraft were destroyed and seven aircraft sustained substantial damage. None of these 11 accidents resulted in serious or fatal injuries. Similar accidents have occurred in Australia and the United States, with each reporting five such accidents in the past ten years.

75. CAA Rules relating to helicopter operations are set out in Part 91 *General Operating and Flight Rules*, Part 133 *Helicopter External Load Operations*, Part 135 *Air Operations – Helicopters and Small Aeroplanes*, and Part 137 *Agricultural Aircraft Operations*. In summary, these rules require the pilot-in-command to ensure the safety of the passengers and aircraft at all times. There are no rules that directly prohibit or regulate a pilot leaving the aircraft controls unattended with the engine running. The CAA Advisory Circular (AC119-3) contains guidance and the acceptable means of compliance for Part 135 operations. It does not specify recommended operating procedures for leaving helicopter controls unattended when the engine is still running.
76. Under rule 91.109 “no person shall operate an aircraft unless it is operated in compliance with the operating limitations specified in the aircraft flight manual.” A flight manual may specify that the controls should not be left unattended, and the CAA considers that in these cases, the practice is prohibited. The CAA is aware of an alternative interpretation of this rule in which the rule refers to the flight manual’s ‘Limitations’ section rather than the entire flight manual. Other flight manuals are silent on the subject.
77. New Zealand differs from other jurisdictions. Australia, the United Kingdom and Canada have rules prohibiting this practice. The United States does not regulate it, but relies on formal guidance and education to discourage it.

Problem statement

78. Pilots are leaving helicopter controls unattended while the engine is still running, which has the potential to cause serious harm when a gust of wind, a displacement or decrease in weight, incorrect parking, or an uneven landing surface moves the collective control up. This increases both pitch and throttle, allowing the helicopter to lift off the ground and roll out of control.⁵
79. CAA accident data and anecdotal evidence indicate that this behaviour is motivated by several factors, including environmental, human, economic, organisational culture and concerns about passenger behaviour. There is no consistent approach to identifying and mitigating this risk, and safety is lower than the rules are intended to provide.
80. The current rules do not provide operators with clear or sufficient requirements on this issue. The reference to flight manuals results in different practices depending on the aircraft rather than the actual safety risks, and operators are not required to demonstrate that they have considered and mitigated the risks. Without rule changes, these factors will continue to override safe practice.

Recommendation

81. Amend the rules to specify that helicopter rotors under power may only be left unattended under certain conditions: if the flight manual or flight manual supplement authorises it; or, if the flight manual says nothing about it, a risk assessment and appropriate action is undertaken. This option is consistent with the Safety Management System approach set out in Part 100 *Safety Management*, and would improve New Zealand’s compliance with ICAO SARPs.
82. Regulation is necessary to deal with safety risks as there is a relatively high accident rate (one per year) and such accidents are potentially serious. Among comparable regulators, such as those for Australia, the United States, Canada and the United Kingdom, New Zealand is the only jurisdiction that has not made either regulatory or non-regulatory changes to address the problem. Additionally, operators have economic incentives to continue leaving powered

⁵ The same risk is not present with fixed-wing aircraft or non-rotorcraft, so these aircraft have not been included within the scope of this assessment.

helicopters unattended. Regulatory intervention will create a consistent standard for all operators, rather than relying on aircraft manufacturers' flight operations manuals.

83. The proposed amendment will address known safety risks in a more cost-effective and risk-based manner than prohibiting the practice, which would cost the sector in terms of profitable flight hours and turbine engine costs. For example, the New Zealand Helicopter Association estimates that waiting for rotors to come to a complete stop with each landing would reduce revenue hours by up to 50 percent on flights that are 15 minutes or less, and increase the cost of maintaining turbine aircraft by up to 240 percent (for example, new turbine wheel installation and inspection is approximately \$63,000NZD for a RR Allison C20B aircraft).
84. In comparison, a performance-based rule in which a risk assessment is required, taking account of the type of helicopter used and the nature of the operation, would mean that in some circumstances turning rotors could be left unattended safely. This would reduce the financial impost of shutting the engine down. For example, it may be acceptable for a pilot to leave the aircraft unattended with the rotors running if there are no other passengers or people in the vicinity of the aircraft, a collective control lock is installed and applied, wind speed is minimal, and the landing area is flat. However, it would not be acceptable to leave the helicopter unattended with the engine running when these conditions cannot be met, or the aircraft flight manual explicitly prohibits it.
85. Given the performance-based nature of this proposal and the various types of helicopter operations, the costs of this proposed change for operators are difficult to quantify. Commercial operations that regularly carry passengers from busy aerodromes to potentially hazardous environments, such as glacier sight-seeing or heli-skiing, may face increased costs. This is because their SOPs may require them to either shut down the engine or to have extra staff to move people in and around the aircraft. Agricultural pilots spreading fertiliser on farmland will probably not face increased cost, as there is less risk of harming passengers and or public, so it may be acceptable to leave the engine running with the aircraft unattended.

G. Rationalise requirements for single engine aircraft to have backup batteries (rule 125.361)

Status quo

86. Civil Aviation Rule Part 125 *Air Operations – Medium Aeroplanes* prescribes operating requirements for medium size air transport operations.⁶ Passenger operations using Single Engine Instrument Flight Rules (SEIFR) come under this category.
87. Rule 125.361(c) details the emergency power supply (battery) requirements for aircraft conducting SEIFR passenger operations in case their engine-powered electrical generating systems fail (i.e. either engine failure or alternator/generator failure).

125.361 Instrument flight rules

...

c) A holder of an air operator certificate must ensure that each aeroplane that is used to conduct a SEIFR passenger operation under the authority of the certificate is equipped with an emergency electrical supply system with sufficient capacity for the following in the event that all engine-powered electrical generating systems fail:

⁶ Part 125 operations are those using aeroplanes that have a seating configuration of 10 to 30 seats, excluding any required flight crew member seat, or a payload capacity of 3410 kg or less and a MCTOW of greater than 5700 kg; carried out by the holder of an Airline Air Operator Certificate (AOC) issued under Part 119 of the Rules. SEIFR passenger operation also comes under this class.

- 1) *the extension of landing gear, if appropriate*
- 2) *the extension of flaps:*
- 3) *the operation of those aeroplane systems essential for continued safe IFR flight and landing, including those required by paragraphs (d)(3), (d)(4), and (d)(5):*
- 4) *either of the following whichever requires the higher electrical load—*
 - i) *the descent of the aeroplane from maximum operating altitude to sea level, assuming the aeroplane is configured in the optimum gliding configuration and operated at the optimum still air range gliding speed for the descent, plus one attempt at engine restart;*
or
 - ii) *the continuation of flight for a minimum of one hour.*

88. SEIFR operators in New Zealand carry over 100,000 passengers per year, with operations across stretches of water and mountainous terrain, often on short commuter hops. These operations are carried out by either Cessna Caravan (either model 208 or 208B) or Pilatus PC-12 aircraft. The PC-12s are capable of meeting full Part 125 requirements but most Caravans are not.
89. The existing battery configuration for most Cessna Caravans used in New Zealand (either model 208 or 208B) is capable of meeting the descent requirement under rule 125.361(c)(4)(i) but not the one hour endurance requirement under rule 125.361(c)(4)(ii). Only Caravans that are certificated to fly at 30,000 feet can meet the requirements of rule 125.361(c)(4)(ii). Only two Cessna 208s are certificated to meet this requirement in New Zealand. The remaining 13 are certificated to fly at 25,000 feet and cannot meet (c)(4)(ii).
90. In the case of engine failure, the current rule requires aircraft, such as Caravans, to have at least one hour emergency battery endurance. Caravans in New Zealand are not pressurised, so SEIFR passenger operations must operate at an altitude below 10,000 feet. With an average rate of descent of 500 feet per minute, a Caravan should reach the ground in about 20 minutes.
91. In the case of alternator or generator failure, the engine may continue to run, but the electrical systems will only work for as long as the emergency electrical supply lasts. In instrument meteorological conditions (generally when the flight crew cannot use visual ground cues to navigate), this can be dangerous if the aircraft navigation system or other critical electrical systems fail before the pilot can return the aircraft to the ground.
92. The CAA places strict route restrictions on all Caravans involved in SEIFR passenger operations. The aircraft must be within 30 minutes of an alternate aerodrome at any point along their route, so they have enough reserve power to return to the ground safely.
93. ICAO and general international practice, including in Canada and Australia, is to not specify specific times for the continuation of a flight in these events. Rather, the practice is for performance-based standards requiring sufficient backup battery to enable a safe landing.

Problem statement

94. New Zealand's civil aviation rules are currently undermined by requiring something that is not technically possible under the conditions most single engine IFR operations operate under in New Zealand.
95. The route restrictions for these operations mitigate risks to safety; however, they place an undue burden on operators whose risks could be effectively mitigated through alternative, performance-based standards.

Recommendation

96. Amend the rule to require operators to have sufficient backup battery for any particular operation to enable them to land safely, and provide these details in their exposition.

97. The proposed amendment creates a more resilient, performance-based rule. It will also be in line with the ICAO standards (Annex 6, Part 1 Appendix 3) and the approach taken by other countries.

H. Enable the Director to require special safety training for operators of particular aircraft (which is necessary for certain Robinson helicopters) (Part 61 Subpart L (new))

Status quo

98. Section 21(1)(c) of the Civil Aviation Act 1990 provides that the Director may, if authorised by a warrant from a judicial officer, prohibit or impose conditions on the operation of an aircraft or class of aircraft where the Director believes on reasonable grounds that its operation or use may endanger persons or property. The Director may not exercise this power without a warrant, which only applies for a limited period of time.

99. On 29 October 2015, the District Court in Wellington issued a warrant under section 21 authorising the Director to impose conditions on the operation of Robinson Helicopter's R22 and R44 helicopter types. This was in response to a Robinson helicopter accident that raised significant safety concerns, and to international action on such concerns.

100. The warrant was sought and issued on the basis that the operation of R22 and R44 helicopters may endanger persons or property, creating an unacceptable risk during the time it would take to amend a Civil Aviation Rule. The warrant has been renewed twice, pending a rule change, and a third renewal is being sought. The Court's expectation is that a more sustainable solution will be pursued.

101. Section 28(5) of the Act allows a rule to be made empowering the Director of Civil Aviation to require specific training or place conditions on operation for particular types of aircraft. This would enable any similar situations in the future to be dealt with more easily, and without further rule amendments.

Robinson Safety Awareness training

102. The Robinson Safety Awareness (RSA) training is based on training required by the FAA in Special Federal Aviation Regulation 73 (SFAR 73). RSA training was introduced in the USA in 1995 following a number of accidents involving Robinson helicopters. SFAR 73 applies to all persons who manipulate the controls or act as pilot in command of R22 and R44 helicopters. It sets minimum training requirements and flight hours for any person seeking to manipulate the controls of an R22 or R44, pilots in command of an R22 or R44 and flight instructors. The RSA training includes instruction in energy management, main rotor divergence, low rotor revolutions per minute (RRPM or blade stall), low-g hazards and rotor revolutions per minute decay.

103. In its investigation into the fatal accident of a R66 helicopter in 2013⁷, the New Zealand Transport Accident Investigation Commission (TAIC) identified SFAR 73 as a means of mitigating the risks associated with Robinson helicopters. In 2014, TAIC recommended that the DCA conduct a review of SFAR 73 in the context of the New Zealand aviation system. TAIC also recommended that the DCA facilitate the development and adoption of best

⁷ Aviation Inquiry AO-2013-003, published April 2016

practice across the sector, including ensuring a level of consistency in the way instructors deliver the RSA training.

104. The CAA responded that it would undertake reviews in relation to the recommendations. These reviews led to the application for the s21 warrant and the imposition of conditions which largely reflect SFAR 73, with some additional requirements to account for the New Zealand operating environment.
105. The 2013 TAIC investigation into the single R66 accident found that it was the result of main rotor divergence causing the helicopter to break up in flight. TAIC recommended that R66 pilots also undergo RSA training as a prerequisite to the issue of a type rating. The CAA responded that it would not include the R66 at this stage, as the FAA has twice rejected the inclusion of the R66 model in SFAR 73. The FAA's decision is on the basis that the R66 has a different design, including a different engine and other characteristics that distinguish it from the R22 and the R44.
106. However, in discussions with the CAA, the FAA and Robinson Helicopter Company recently indicated that the training conditions in SFAR 73 may be extended to the R66 model.

Problem statement

107. The Director's power, under Section 21(1)(c) of the Civil Aviation Act 1990, to prohibit or impose conditions on the operation of an aircraft or class of aircraft where the Director has evidence that this is unsafe, depends on a warrant from a judicial officer. This is not a robust solution to an ongoing problem. In the present case, training necessary for the safe operation of certain Robinson helicopters is required under a warrant that will soon expire.

Recommendation

108. Amend the rules to enable the Director to impose requirements or conditions by means other than a time-limited court warrant.
109. As outlined above, the requirements of SFAR 73 (as reflected in the conditions) have the potential to significantly reduce the rate of R22 and R44 accidents resulting from main rotor divergence and other Robinson-specific causes.
110. Section 28(5) of the Civil Aviation Act allows for the rules to provide for a matter to be determined, undertaken or approved by the Director; or empower the Director to impose requirements or conditions on the performance of any activity, including any procedures to be followed. The proposed rule amendment, in line with section 28(5), would allow the Director to impose safety conditions in this case, and in any comparable cases that arise in the future. The details of the conditions would be provided in a notice issued by the CAA, that could be easily amended in response to changing information and circumstances. ⁸
111. Should the requirements in SFAR 73 change, New Zealand would consider whether to amend its requirements in order to ensure ongoing alignment. This proposal provides flexibility in case it is decided to introduce type-specific safety training for other types of aircraft, such as the R66.

⁸ <http://www.caa.govt.nz/notices/>

I. Require aircraft operators to provide statistical data on freight carried (rule 12.151)

Status quo

112. As part of its 2015/16 Triennial Funding Review, the CAA recommended introducing levies for commercial operations (excluding airlines), based on their level of aviation activity. The changes came into effect from 1 July 2017. The new levies will ensure that all operators make more equitable contributions towards the regulatory oversight of the aviation system in New Zealand. Previously, the oversight costs of some operators were subsidised by the airline sector.
113. Rule Part 12 Accidents, Incidents and Statistics requires certain operators to submit specified operating data to the CAA for statistical purposes. The required data includes levels of aviation activity, such as the number of hours flown and the number of flights with passengers or freight.
114. The CAA can use the data provided by operators to check payment by those operators of the new levies, because it has the power to audit operators to ensure the validity of statistical information required by Rule Part 12.
115. The statistical data needed to verify correct payment is already collected by the CAA under Rule Part 12, with one exception. The levy on freight-only operations is based on tonnes of freight carried – information that operators are not currently required to supply.

Problem statement

116. Correct payment of a levy on freight-only aircraft operations, which was introduced from 1 July 2017, cannot be verified without a requirement for operators to report how much freight they carry.

Recommendation

117. Amend Part 12 to require freight-only operators to report to the CAA how much freight they have carried.
118. The requirement would apply to domestic operators and international operators departing from or operating within New Zealand. There are currently three domestic freight-only operators and five international freight-only operators that would be affected. The impost on these operators would be small as they already have this basic operational data. These operators are also required to report flights and flight-hours data, so reporting mechanisms are already established.

Conclusion

119. A suite of rule amendments is proposed to address the problems discussed here. These proposals achieve the objectives of reducing regulatory burdens without reducing safety, addressing known safety risks, and doing so with little or no cost to operators or government. Progressing these proposals as a single package improves the cost-effectiveness of making the changes.

Consultation

120. These proposals were developed by the CAA in consultation with external subject matter experts. The submitters of the initial requests for change to the CAA were also consulted on their respective submissions.
121. The proposals were consulted on as a package from 20 February to 13 March 2017, following the procedure outlined in the Civil Aviation Act, including a Notice of Proposed Rule Making. Stakeholders affected by proposal I (require aircraft operators to provide statistical data on freight carried) were further consulted from 13-20 March 2017, to validate changes made to the proposal after initial feedback. A summary of submissions will be available on the CAA website when these proposed rules are decided upon.

Implementation

Transition

122. All the provisions will be active from the date the rule comes into force.
123. Transition provisions are not needed as there is no impact on aviation document holders' privileges or documents. The proposed rule amendment confers a benefit, or it minimally affects existing systems and processes.
124. The proposed recommendation for small issue H, which will in the first instance concern Robinson helicopters, is not considered to impose significant new burdens on industry, even though it may require a higher standard of training in a particular case. The proposed requirements are currently in place via a section 21 warrant, as discussed, and industry is compliant. Future uses of the provision would be assessed on their merits.

Industry notification, guidance and information

125. If the Minister signs the Rule, the CAA will notify relevant groups in the aviation sector. The new Rule will be available on the CAA website, and the CAA will update the relevant advisory circulars to ensure that affected parties are aware of the changes in their obligations and rights.

Training and procedures

126. The changes proposed in these rule amendments can all be implemented using existing CAA systems. There will be some CAA staff training and education involved, which will be supported from within the organisation.
127. Education and guidance on the proposed changes will also be provided to operators, primarily through updated Advisory Circulars, notifications and publications.

Offences and penalties

128. Offences will be updated to reflect the proposed changes. In some cases a new offence is required or offence description altered. Three new offences are created as a result of proposals relating to leaving helicopters unattended with rotors turning and enabling the Director to impose conditions for the use of particular aircraft. New offences and

corresponding penalties will reflect the offences and penalties set for other similar provisions. The schedule of offences is as follows.

Provision	Brief Description	Fines and Fees (\$)				Justification
		Summary Conviction		Infringement Fee		
		Individual	Body Corporate	Individual	Body Corporate	
Part 121 Air Operations – Large Aeroplanes						
121.221(b)	Corresponding to changes in the rule, the description of the offence needs to be amended to “Responsibilities of air operator certificate holder for calculating the landing distance for aircraft on a runway.” The existing penalties are inconsistent with equivalent offences and should be changed.	5,000	30,000	2,000	12,000	The offence requires an editorial change consequential to the amended rule. The penalties are amended consistent with the equivalent offences for parts 125 & 135.
121.223(a)	Offence is revoked as rule 121.223 is revoked.					Because this rule is being revoked, this corresponding offence needs to be revoked.
Part 125 Air Operations – Medium Aeroplanes						
125.233(b)	Corresponding to changes in the rule, the description of the offence needs to be amended, to “Responsibilities of air operator certificate holder for calculating the landing distance for aircraft on a runway.” Penalties stay the same.	5,000	30,000	2,000	12,000	This is an editorial change consequential to the amended rule.
125.235	Offence is revoked as rule 125.235 is revoked.					Because this rule is being revoked, this corresponding offence needs to be revoked.

Part 135 Air Operations – Helicopters and Small Aeroplanes						
135.233(b)	Corresponding to changes in the rule, the description of the offence needs to be amended, to “Holder of air operator certificate must use prescribed procedures for calculating the landing distance for aircraft on runway.” Penalties stay the same.	5,000	30,000	2,000	12,000	This is an editorial change consequential to the amended rule.
135.235	Offence is revoked as rule 135.235 is revoked.					Because this rule is being revoked, this corresponding offence needs to be revoked.

Provision	Brief Description	Fines and Fees (\$)				Justification
		Summary Conviction		Infringement Fees		
		Individual	Body Corporate	Individual	Body Corporate	
Part 91 General Operating and Flight Rules						
91.120	A new offence needs to be created for the new rule which prohibits leaving helicopters unattended with rotors turning under power unless prescribed requirements are met.	2,500	15,000	1,000	6,000	The penalty levels are consistent with penalties for similar Part 91 offences, such as those relating to the duties of persons performing operational flight checks, or packing requirements for dangerous goods.

Provision	Brief Description	Fines and Fees (\$)				Justification
		Summary Conviction		Infringement Fees		
		Individual	Body Corporate	Individual	Body Corporate	
Part 61 Pilot licences and Ratings						
61.311	A new offence is needed requiring flight instructors to implement additional training when required under Part 61 Subpart I.	5,000		1,000		The penalty levels are consistent with penalties for similar Part 61 offences relating to pilots adhering to the prescribed conditions of their licences.
61.911	A new offence is needed requiring flight examiners to implement additional training when required under Part 61 Subpart I.	5,000		1,000		

Consequential amendments

129. The proposals entail minor consequential changes, mainly to Part 1 Definitions.

Monitoring, Evaluation and Review

130. The relatively minor nature of the proposals put forth here mean a comprehensive and detailed monitoring, evaluation and review plan is not necessary.

131. The CAA would monitor the implementation and effect of the proposed changes through its usual certification, auditing and surveillance functions.