Explanatory Statement

Civil Aviation Safety Regulations 1998

CASA 39/19 — Operating Limitations (Aircraft Fitted with Engines Manufactured by Jabiru Aircraft Pty Ltd) Instrument 2019

Purpose

CASA 39/19 — Operating Limitations (Aircraft Fitted with Engines Manufactured by Jabiru Aircraft Pty Ltd) Instrument 2019 (the ***instrument***) prescribes operating limitations on aircraft (***Jabiru-powered aircraft***) fitted with engines manufactured by Jabiru Aircraft Pty Ltd (***Jabiru***), or by a person under a licence from or a contract with Jabiru, to manage risks arising from a high incidence of loss-of-engine-power events and other engine reliability issues. The operating limitations must be complied with, unless all the requirements stated in the instrument have been met in relation to the aircraft. The instrument, in effect, reproduces instrument CASA 65/16, *Conditions and direction concerning certain aircraft fitted with engines manufactured by Jabiru Aircraft Pty Ltd (**CASA 65/16**)*.

Legislation

Section 98 of the *Civil Aviation Act 1988* (the ***Act***) empowers the Governor-General to make regulations for the Act and in the interests of the safety of air navigation. Relevantly, the Governor-General has made the *Civil Aviation Regulations 1988* (***CAR***) and the *Civil Aviation Safety Regulations 1998* (***CASR***).

Under regulation 11.068 of CASR:

(1) For subsection 98 (5A) of the Act, the Civil Aviation Safety Authority (***CASA***) may issue a legislative instrument that imposes a condition relating to a matter mentioned in that subsection on a specified class of authorisations.
(2) The class of authorisations may include authorisations granted before the imposition of the condition.
(3) A condition imposed by a legislative instrument under subregulation (1) is taken to be a condition of every authorisation of the class mentioned in the instrument.
(4) As far as is relevant, a condition imposed by a legislative instrument under subregulation (1) takes effect:
    (a) for an authorisation that takes effect before the day on which the instrument comes into force — when the instrument comes into force; or
    (b) for an authorisation granted on or after the day on which the instrument comes into force — when the authorisation comes into effect.

Under regulation 11.077 of CASR, a person commits an offence of strict liability if the person breaches a condition of an authorisation.

Subpart 11.G of CASR enables CASA to issue directions in relation to matters affecting the safety of air navigation. Subregulation 11.245 (1) of CASR empowers CASA, for subsection 98 (5A) of the Act, to issue a direction about any matter affecting:

(a) the safe navigation and operation of aircraft; or
(b) the maintenance of aircraft; or
(c) the airworthiness of aircraft.

Under subregulation 11.245 (2) of CASR, CASA may issue such a direction:
(a) only if CASA is satisfied that it is necessary to do so in the interests of the safety of air navigation; and
(b) only if the direction is not inconsistent with the Act; and
(c) only for the purposes of CASA's functions.

Under paragraph 11.250 (a) of CASR, a direction under regulation 11.245 ceases to be in force on the day specified in the direction. Under regulation 11.255 of CASR, a person commits an offence of strict liability if the person contravenes a direction under regulation 11.245.

Civil Aviation Order 95.55 (***CAO 95.55***) applies in relation to certain ultralight aeroplanes registered with Recreational Aviation Australia Limited (***RAAus***). Under CAO 95.55, CASA grants exemptions to relevant persons from compliance with certain provisions of CAR, subject to stated conditions.

Subsection 98 (5D) of the Act states that a legislative instrument made under the Act or the regulations may apply, adopt or incorporate any matter contained in any instrument or other writing as in force or existing from time to time, even if the other instrument or writing does not yet exist when the legislative instrument is made.

Background
In 2014, CASA became aware of a high, and increasingly high, rate of loss-of-engine-power events and other engine reliability issues in relation to Jabiru-powered aircraft. The loss-of-engine-power events and other engine reliability issues appeared to:

(a) be the result of several failure modes, including engine through bolt failure, cylinder cracking, flywheel bolt failure and failure of the valve train assembly; and
(b) affect a range of Jabiru engine models, although CASA has only a small sample size for some models; and
(c) happen across the range of different operational activities in which Jabiru-powered aircraft are employed, although a disproportionate number of events appear to happen in flying training activities.

As a precautionary measure, in the absence of determinative evidence as to the specific causes of these problems, and following an appropriate consultation process, CASA first made instrument CASA 292/14, *Conditions and direction concerning certain aircraft fitted with engines manufactured by Jabiru Aircraft Pty Ltd* (***CASA 292/14***), effective from 23 December 2014, which imposed a range of operating limitations on Jabiru-powered aircraft until 30 June 2015. Those limitations were largely continued by the making of instrument CASA 102/15, *Conditions and direction concerning certain aircraft fitted with engines manufactured by Jabiru Aircraft Pty Ltd* (***CASA 102/15***), and, subsequently, CASA 65/16.

The Australian Transport Safety Bureau (the ***ATSB***) conducted an aviation research investigation into these matters. Consistent with the reports of its preliminary investigation findings published in July 2013, August 2014 and December 2014, in its final report, Engine Failures and Malfunctions in Light Aeroplanes (AR-2013-107), which was published on 9 March 2016, the ATSB found:

> *Aircraft powered by Jabiru engines were involved in the most engine failures or malfunctions with 130 reported over the six years [from 2009 to 2014]. This represents about one in ten aircraft powered by Jabiru engines in the study having reported an engine failure or malfunction.*

In conclusion, the ATSB found:

> *When factoring in the hours flown for each of these engine manufacturers, aircraft with Jabiru engines had more than double the rate of engine failure or malfunction than any other of the manufacturers in the study set with 3.21 failures per 10,000 flown.*

Progress has been made since June 2015 to identify appropriate corrective actions to mitigate the risk of loss-of-engine-power events of the kind giving rise to CASA's initial precautionary action. CASA remains satisfied that the corrective actions or requirements stated in the instrument will be sufficient to justify removing the operating limitations, provided the corrective actions or requirements stated in the instrument are all complied with. If they are not all complied with, CASA remains of the view that its functions under the Act require it, in the interests of safety, to mitigate the potentially heightened risks associated with Jabiru-powered aircraft, having particular regard to:

(a) people who fly, or fly in, a Jabiru-powered aircraft, without being in a position to make a properly informed choice about whether to expose themselves to the potentially heightened risks; and

(b) people who fly a Jabiru-powered aircraft who may lack sufficient skill and experience to deal competently with a loss-of-engine-power event; and

(c) people who share airspace with Jabiru-powered aircraft, without having the opportunity to minimise or eliminate their exposure to the potentially heightened risks; and

(d) people on the ground, who may be entirely unaware of the potentially heightened risks posed by Jabiru-powered aircraft, and are unable to take steps to minimise or eliminate their exposure to these potentially heightened risks.

In CASA's view, it is necessary and appropriate to continue to limit the exposure of these classes of persons to the heightened potential risks attendant on an in-flight failure, or malfunction, of Jabiru-powered aircraft engines. In effect, the instrument re-imposes the same operating limitations stated in CASA 292/14, CASA 102/15 and CASA 65/16 on Jabiru-powered aircraft. But those limitations need not be complied with if all the stated requirements, identified as required to mitigate the risk of loss-of-engine-power events and other engine reliability issues, are met in relation to the aircraft. These requirements were first introduced by CASA 65/16, and are replicated in the instrument.

The sustained reduction in loss-of-engine-power events in relation to Jabiru-powered aircraft whilst CASA 65/16 has been in force may be attributed to the safety measures in the instrument. To ensure the ongoing management of loss-of-engine-power events in relation to the aircraft, CASA has determined that the continuation of the safety measures in that

instrument is warranted for a further period of 3 years. During this period, CASA will continue to monitor the instances of loss-of-engine-power events in relation to the aircraft, to ensure the safety measures in the instrument remain effective.

Overview of instrument

The instrument states operating limitations for Jabiru-powered aircraft, which mitigate certain risks of loss-of-engine-power events, particularly in relation to those classes of persons who are unable to gauge or control those risks, being passengers, trainee pilots and persons on the ground. The operating limitations are stated to apply to:

(a) the pilots in command of the aircraft; and

(b) the chief flying instructor of a flying school who permits a student, who is being trained at the school, to undertake a solo flight in the aircraft.

The instrument also states requirements that must all be met, in relation to Jabiru-powered aircraft, in order for the operating limitations not to apply.

Documents incorporated by reference

In accordance with paragraph 15J (2) (c) of the *Legislation Act 2003* (the ***LA***), the following table has a description of the documents incorporated by reference in the instrument, the organisation responsible for each document and how they may be obtained. The table also states how the document is incorporated.

Document	**Description**	**Source**
Jabiru Engine Overhaul Manual JEM0001-7, or later issue	A manual for the use and guidance of the operations personnel of an operator, and registered owner, of a Jabiru-powered aircraft	The latest issue is freely available from Jabiru via the Internet on the following webpage: https://jabiru.net.au/service/manuals/
Jabiru Engine Overhaul Manual JEM0002, as it exists from time to time	A manual containing the maintenance schedule for a Jabiru engine	The latest issue is freely available from Jabiru via the Internet on the following webpage: https://jabiru.net.au/service/manuals/
Jabiru Service Bulletin JSB031-3 (Engine Through Bolt Replacement and Upgrade), or later issue	A service bulletin for the use and guidance of the operations personnel of an operator, and registered owner, of a Jabiru-powered aircraft	The latest issue is freely available from Jabiru via the Internet on the following webpage: https://jabiru.net.au/service/service-bulletins/
Jabiru Service Letter JSL008-1 (Valve Spring Washer Adverse Wear), or later issue	A service letter for the use and guidance of the operations personnel of an operator, and registered owner, of a Jabiru-powered aircraft	The latest issue is freely available from Jabiru via the Internet on the following webpage: https://jabiru.net.au/service/service-bulletins/

Document	Description	Source
Jabiru Service Letter JSL010-1 (Service Time Intervals), or later issue	A service letter for the use and guidance of the operations personnel of an operator, and registered owner, of a Jabiru-powered aircraft	The latest issue is freely available from Jabiru via the Internet on the following webpage: https://jabiru.net.au/service/service-bulletins/
Jabiru Service Letter JSL014-3 (Jabiru Cylinder Head Inspection), or later issue	A service letter for the use and guidance of the operations personnel of an operator, and registered owner, of a Jabiru-powered aircraft	The latest issue is freely available from Jabiru via the Internet on the following webpage: https://jabiru.net.au/service/service-bulletins/

Content of instrument
Attachment 1 has a detailed provision-by-provision description of the instrument.

Legislation Act 2003
Paragraph 98 (5A) (a) of the Act states that CASA may issue instruments in relation to matters affecting the safe navigation and operation, or the maintenance, of aircraft. Additionally, subsection 98 (5AA) of the Act states that an instrument issued under paragraph 98 (5A) (a) is a legislative instrument if the instrument is expressed to apply in relation to a class of persons or class of aircraft.

The instrument applies to:

(a) the pilots in command of Jabiru-powered aircraft (a class of persons);

(b) the chief flying instructor of a flying school who permits a student, who is being trained at the school, to undertake a solo flight in a Jabiru-powered aircraft (a class of persons); and

(c) Jabiru-powered aircraft (a class of aircraft).

The instrument is, therefore, a legislative instrument, and is subject to tabling and disallowance in the Parliament under sections 38 and 42 of the LA.

Consultation
CASA consulted Jabiru and RAAus in relation to the instrument. CASA did not receive any comments, in relation to the instrument, from either entity.

CASA is satisfied that no further consultation is appropriate or reasonably practicable, for the instrument, for section 17 of the LA.

Office of Best Practice Regulation (*OBPR*)
OBPR considers that the operational limitations, stated in the instrument, are likely to have a minor regulatory impact on business, community organisations and individuals, and that no further analysis in the form of a Regulation Impact Statement (***RIS***) is required (OBPR id: 18075).

Also, a RIS is not required as the instrument is covered by a standing agreement between CASA and OBPR under which a RIS is not required for directions or approvals issued by CASA (OBPR id: 14507).

Statement of Compatibility with Human Rights

The Statement of Compatibility with Human Rights at Attachment 2 has been prepared in accordance with Part 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*. To the extent the instrument may indirectly limit the right to work, those limitations are necessary and proportionate in the interests of aviation safety (as explained in the Statement).

Also, the instrument promotes the right to life of persons who choose to fly in Jabiru-powered aircraft, people who share airspace with the aircraft and people on the ground, by imposing operating limitations on the operation of the aircraft (as explained in the Statement).

Making and commencement

The instrument has been made by a delegate of CASA, relying on the power of delegation under subregulation 11.260 (1) of CASR.

The instrument commences on 1 July 2019, and is repealed at the end of 30 June 2022.

Attachment 1

Description of the instrument

Section 1 — Name
This section states the name of the instrument.

Section 2 — Duration
This section states the instrument commences on 1 July 2019 and is repealed at the end of 30 June 2022.

Section 3 — Definitions
This section has definitions of terms used in the instrument. The following are key definitions:

- ***engine grouping*** means one of the following engine group classifications:

Group	Description of configuration	Manufactured serial no. range (4 cylinder)	Manufactured serial no. range (6 cylinder)
A	Engines with flat-faced hydraulic valve lifters	22A2068 through 22A3595	33A0961 through 33A2539
B	Engines with solid valve lifters and 3/8" engine through bolts	22A0001 through 22A2067	33A0001 through 33A0960
C	Engines with roller or flat-faced hydraulic valve lifters and 7/16" engine through bolts	22A3596 and above	33A2540 and above

- ***relevant operation*** means an operation involving an increased number of take-off and landing events, go-arounds, simulated engine failure operations or stall recovery operations, which subjects an engine, within an engine grouping, to quick changes in throttle setting and relatively fast changes, and extremes, in temperature.

  Note This definition is concerned with a Jabiru-powered aircraft that is mainly used for flying training or that is exposed to other types of operation that have similar characteristics to flying training.

- ***student*** means a person who:
  (a) holds a student pilot certificate granted by Recreational Aviation Australia Limited, ARN 224806; or
  (b) is a student pilot.

Section 4 — Application
Subsection (1) states that the condition imposed, by CASA, under section 5 applies to the following classes of authorisations, issued in relation to a Jabiru-powered aircraft:

(a) an experimental certificate;
(b) a certificate of airworthiness;
(c) a special flight permit.

Subsection (2) states that the direction issued, by CASA, under section 6 applies to a Jabiru-powered aircraft to which CAO 95.55 applies.

Section 5 — Condition on authorisations

This section states that, for subregulation 11.068 (1) of CASR, it is a condition that the aircraft must be operated in accordance with the operating limitations stated in Schedule 1, unless all the requirements stated in Schedule 2 have been met in relation to the aircraft.

Section 6 — Direction

A significant number of Jabiru-powered aircraft operate under the regime in CAO 95.55. Such aircraft are not the subject of an authorisation, under Subpart 11.BA of CASR, to which a condition imposed under regulation 11.068 of CASR can apply.

This section issues a direction requiring such aircraft to be operated in accordance with the operating limitations stated in Schedule 1, unless all the requirements stated in Schedule 2 are met in relation to the aircraft.

CASA is satisfied it is necessary to issue the direction in the interests of the safety of air navigation.

Schedule 1 — Operating limitations

Clause 1

Clause 1 restricts the aircraft to flight by day under the Visual Flight Rules, unless otherwise approved by CASA. Pilots are at much greater risk if they make an emergency landing in other conditions.

Clause 2

Clause 2 imposes limitations to ensure the aircraft do not impact people on the ground. Paragraph (a) requires pilots to operate the aircraft so that they can at all times glide clear of a populous area in the event of a loss-of-engine-power event, and land at a suitable forced landing area (as that term is defined in section 3).

Paragraph (b) requires pilots to operate the aircraft at or above 1 000 feet above ground level, except to the extent necessary for the conduct of a safe take-off or landing. The paragraph ensures that flights in the aircraft operate at or above 1 000 feet above ground level as much as possible when over populous areas (as that term is defined in section 3). That is the height that CASA has assessed as providing the minimum altitude to identify, and utilise, a suitable location for an emergency landing.

Subject to air traffic control and other air traffic considerations, pilots are expected to exercise judgment to optimise rate of climb on take-off, and to determine the fastest safe rate of descent on landing, to maximise the time spent at or above 1 000 feet above ground level.

Clause 3

Clause 3 imposes restrictions on the circumstances in which passengers may be carried in the aircraft.

While CASA is prepared to allow passengers to accept the risk of flight in the aircraft, paragraph (a) requires passengers to sign a statement that puts them on notice about the risks

of flight in the aircraft. The pilot in command of the aircraft may only carry a passenger if the pilot has perused the statement, and the passenger signed the statement not more than 3 months before the date of the flight. For example, if a passenger signs the statement on 2 July 2019, the passenger would need to sign another statement for any flight in the aircraft on or after 2 October 2019.

If a passenger is aged under 18, or has a mental impairment, an adult having legal responsibility for the passenger must sign the statement.

The statement must be substantially in the form of the statement set out in clause 7.

Under paragraph (b), the pilot in command is obliged to reach a reasonable satisfaction that a person signing a statement under this clause has understood the terms of the statement. The pilot is obliged to make reasonable enquiries to reach this satisfaction, if necessary. The pilot must be satisfied both as to the signatory's understanding of the substance of the statement and any issues related to the signatory's English comprehension.

Paragraph (c) limits passenger-carrying flights in the aircraft to private operations. The intention is that the aircraft is not used for any commercial passenger-carrying operations.

Clause 4

Clause 4 requires the pilot in command to keep all statements under clause 3 in a secure location, not being on board the aircraft during flight, so that the statements are preserved if the aircraft is involved in an accident during a flight.

Clause 5

Clause 5 operates if there is a loss-of-engine-power event, involving a passenger-carrying operation, in the aircraft. In this situation, the pilot in command must send the signed statements of all the passengers, under clause 3, to CASA as soon as practicable after the event, even if the passengers were not injured. For evidentiary purposes, the statements must be sent to CASA by registered mail.

The obligation in this clause must be complied with by the pilot's legal representative, for example, if the pilot dies or is incapacitated as a result of the loss-of-engine-power event.

The pilot in command may dispose of a passenger's statement at any time after the passenger has safely disembarked the aircraft after the passenger flight. However, the Note to this clause recognises that the pilot may elect not to dispose of the statement if the pilot wishes to use the statement for a future flight carrying the same passenger (but subject to the validity period stated in clause 3). The pilot must obtain a newly-signed statement from a passenger if the pilot has disposed of a previous statement by the passenger.

Clause 6

Clause 6 imposes restrictions on the circumstances in which a student, who is being trained at a flying school, may undertake a solo flight in the aircraft.

Paragraph (a) requires that, before a student undertakes a first solo flight, in the aircraft, at a flying school, the chief flying instructor (***CFI***), however named, of the school must:

(a) confirm that the student has competently completed engine-failure exercises at the school in the preceding 2 hours of the student's flight time as a pilot; and

(b) note the student's competence in engine-failure exercises in the student's record, and obtain the student's countersignature on that record; and

(c) peruse and keep in a secure location, not on the aircraft during flight, a statement signed by the student, or a parent or guardian of the student if the student is aged under 18, that is substantially in the form of the statement set out in clause 7; and

(d) determine on reasonable grounds that a person signing a statement under this clause has understood the terms of the statement, after making reasonable enquiries, if necessary.

The CFI of the school must be satisfied both as to the signatory's understanding of the substance of the statement and any issues related to the signatory's English comprehension.

Paragraph (b) requires that, before a student undertakes any subsequent solo flight, in the aircraft, at a flying school, the CFI of the school must confirm that the student has competently performed engine-failure exercises at the school in either the preceding 2 hours of the student's flight time as a pilot, or 7 days, whichever is the more recent. Accordingly, a student who has conducted 3 hours of flight time since the student's previous engine-failure exercises must re-complete those exercises before flying solo, even if the previous exercises happened less than 7 days ago. Conversely, a student may fly solo at any time in the 7 days since the student's previous engine-failure exercises until the student has completed 2 hours of flight time. However, the 7 day/2 hour requirement does not override any more onerous recency requirement for engine-failure exercises before a solo flight.

The CFI of the school must again note the competence of the student in the student's record, and the student must countersign the note.

The limitations in this clause ensure that the CFI of the school is satisfied that a student, before undertaking a solo flight in the aircraft, is current and competent in the student's ability to conduct an emergency landing, and has a heightened awareness of the engine's reliability issues.

Clause 7

Clause 7 sets out the statement to be signed by a passenger, or student of a flying school, before a flight in the aircraft. The statement is drafted in the first person and requires the passenger or student (the ***signatory***) to insert the signatory's name and the identifying mark of the aircraft, and to sign and date the statement. A summary of the statement is as follows:

(a) Paragraph 1 of the statement acts as a notice to the signatory that CASA is aware of a high rate of reliability problems with the engine in the aircraft.

(b) Paragraph 2 acts as a notice to the signatory that CASA has imposed limitations on the use of the aircraft to protect people on the ground, uninformed passengers and students, and to assist passengers and students to understand and manage risks associated with the aircraft.

(c) Paragraph 3 acts as a notice to the signatory about the extent of risk. While the extent of risk cannot be fully quantified and most Jabiru engines can be expected to operate normally, this paragraph notes that there is an abnormal risk that the engine in the signatory's aircraft will malfunction. The paragraph is intended to heighten the signatory's awareness of the personal risk involved, allowing the signatory to make a better informed judgment about whether to proceed with the flight.

(d) Paragraph 4 provides an opportunity for the signatory to focus the signatory's mind on whether to accept the risk of flying in the aircraft. The paragraph requires the signatory to accept the risks involved if the pilot force-lands the aircraft while avoiding a populous area or otherwise fails to make a safe emergency landing.

(e) Paragraph 5 provides a further opportunity for the signatory to focus the signatory's mind on whether to accept the risk of flying in the aircraft, by stating that CASA advises the signatory not to fly in the aircraft if the signatory is not prepared to accept the heightened risk involved.

(f) Paragraph 6 requires the signatory to accept the risk in the specific circumstance that the engine reliability problems may be resolved in the near future, as distinct from posing an ever-present risk.

(g) Paragraph 7 is a notice to the signatory that the statement must be signed before the pilot is authorised to conduct the flight. While the notice is redundant once signed, it explains to a potential signatory the legal position of pilots in command of Jabiru-powered aircraft and CFIs of flying schools, who have obligations to passengers and students, respectively, under the instrument.

Schedule 2 — Requirements

The operating limitations in Schedule 1 do not apply if all the following requirements are met in relation to the aircraft:

(a) the engine grouping, for the aircraft's engine, is identified by reviewing the engine's serial number and maintenance records to confirm engine configuration, based on through bolt and valve lifter type;

(b) the registered owner of the aircraft adopts, and uses, the maintenance schedule, for the aircraft's engine in JEM0002 (as that term is defined in section 3);

(c) the aircraft engine's top valve spring washers are inspected in accordance with JSL008 (as that term is defined in section 3), and any worn washers are replaced with the current washer configuration and installed in accordance with JEM0001 (as that term is defined in section 3);

(d) the aircraft's cylinder heads are inspected in accordance with JSL014 (as that term is defined in section 3), and any requisite corrective action required by the service letter is completed;

(e) all the aircraft engine's through bolts are replaced in accordance with JSB031 (as that term is defined in section 3), with any replacement parts being the current engine through bolt, nut and washer configuration installed in accordance with JEM0001 by the following time:

  (i) for an engine with 3/8" through bolts, within the Group A engine grouping, which has engaged in a relevant operation (as that term is defined in section 3):

    (A) before 500 hours Hobbs time since the last engine through bolt replacement; or

    (B) as soon as practicable after reaching 500 hours Hobbs time since the last engine through bolt replacement, but before another flight; or

  (ii) for an engine with 3/8" through bolts, within the Group A engine grouping, which has not engaged in a relevant operation — at, or before, 1 000 hours Hobbs time since the last engine through bolt replacement; or

  (iii) for any other engine within an engine grouping — at, or before, 1 000 hours Hobbs time since the last engine through bolt replacement.

This schedule incorporates by reference various Jabiru documents. The terms used to refer to the documents are defined in section 3. The definition for each document, except JEM0002, refers to a particular version number of the document, and includes the words “or a later issue”. The intent is that if there is a later issue of a relevant document, it is enough for the requirements stated in an earlier issue of the document to be met, subject to the earlier issue not being earlier than the issue with the version number referred to in the definition for the document.

Attachment 2

Statement of Compatibility with Human Rights

Prepared in accordance with Part 3 of the Human Rights (Parliamentary Scrutiny) Act 2011

CASA 39/19 — Operating Limitations (Aircraft Fitted with Engines Manufactured by Jabiru Aircraft Pty Ltd) Instrument 2019

The legislative instrument is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Overview of the legislative instrument

The legislative instrument prescribes operating limitations on aircraft fitted with engines manufactured by, or under a licence from or a contract with, Jabiru Aircraft Pty Ltd (***Jabiru-powered aircraft***), to manage risks arising from a high incidence of loss-of-engine-power events and other engine reliability issues. The operating limitations must be complied with, unless all the requirements stated in the instrument have been met in relation to the aircraft.

Therefore, the legislative instrument provides for safety measures designed to mitigate risks to persons who choose to fly in Jabiru-powered aircraft, people who share airspace with the aircraft and people on the ground.

Human rights implications

To the extent the legislative instrument limits Jabiru-powered aircraft from being used for commercial flying training purposes by business, it might be said that the rights to work, equality and non-discrimination under the International Covenant on Civil and Political Rights (the ***ICCPR***) and the International Covenant on Economic, Social and Cultural Rights are engaged. However, such differential treatment arises from the requirements of aviation safety relating to the operation of the aircraft, and thereby promotes safe and healthy working conditions.

Also, the legislative instrument promotes the right to life, under the ICCPR, of persons who choose to fly in Jabiru-powered aircraft, people who share airspace with the aircraft and people on the ground, by imposing operating limitations on the operation of the aircraft, or requirements in place of the operating limitations.

Conclusion

The legislative instrument is compatible with human rights. To the extent it may also limit human rights, those limitations are reasonable and proportionate in the interests of aviation safety. The limitations do not need to be complied with if all the requirements stated in the instrument have been met in relation to the aircraft.

Civil Aviation Safety Authority