



Australian Government
Civil Aviation Safety Authority

Legal Services Division

File Ref:
Your Ref: COR 2006 952 and 953

17 September 2013

Ms Briley Miller
Coroner's Registrar
Coroner's Court of Victoria
Level 11, 222 Exhibition Street
Melbourne VIC 3000



Dear Ms Miller,

INVESTIGATION INTO THE DEATHS OF JOHN AND SAMUEL HENDER

On 5 June 2013, Coroner Hendtlass handed down findings and recommendations in relation to the deaths of John and Samuel Hender in an aircraft accident at Mildura aerodrome on 12 March 2006.

This letter sets out the response of the Civil Aviation Safety Authority (**CASA**) in relation to each of those recommendations.

JOHN HENDER

Recommendation 1

This recommendation was directed to the ATSB. No comment or action is required from CASA.

Recommendation 2 - The Civil Aviation Safety Authority require applicants for an Australian Flight Radiotelephone Operator Licence to demonstrate radio competency across the spectrum of radio frequencies used to communicate weather and other information to pilots.

Part 5 of the *Civil Aviation Regulations 1988 (CAR)* provides for the issue of a Flight Radiotelephone Operator Licence (**FROL**). Specifically, subregulation 5.61(1) requires an applicant for a FROL to:

- (a) Pass a FROL theory examination;
- (b) Pass a FROL practical test.

These tests require applicants to demonstrate thorough practical and theoretical knowledge of the use of a radio, including across the spectrum of frequencies used to communicate weather and other information to pilots. On this basis, CASA does not consider that any further action is required in relation to this recommendation.

Recommendation 3 - The Civil Aviation Authority Safety Authority require applicants for an Australian Flight Radio telephone licence to undergo bi-annual review of their radio competency to access weather and other information transmitted on all radio frequencies used by other members of the aviation industry in their local area.

Flight crew licence holders are required to undergo a biannual flight review to demonstrate that they continue to have the aeronautical knowledge and skill to be the holder of the relevant licence. This includes a review of the pilot's competency in the operation of the radio. CASA provides guidance to industry on the requirements for an aeroplane flight review in Civil Aviation Advisory Publication (CAAP) 5.81-1, a copy of which can be accessed at the following link:

http://www.casa.gov.au/wcmswr/assets/main/download/caaps/ops/5_81_1.pdf

CASA therefore considers that the aviation legislation already caters for the requirements of this recommendation.

Recommendation 4 - The Civil Aviation Safety Authority requires applicants for the issue of a special Airworthiness certificate (experimental) for a modified, kit built, amateur-built experimental aircraft provide as part of that application a comprehensive risk identification and mitigation analysis of the aircraft which demonstrates they have considered the likely influence of the modifications on the aircraft's behaviour in flight.

CASA instrument EX 180/12 sets out the obligations that apply to registered operators of amateur-built experimental aircraft for assessment and approval of repairs and modifications. The current requirements have been in force since October 2010. The instrument contains explicit instructions to assess aircraft alterations, including by reference to the manner in which the proposed repair or modification will affect the safety of the aircraft. As such CASA considers that the instructions set out in CASA EX 180/12 already meet or exceed the Coroner's recommendation in this regard.

Recommendation 5 - The Civil Aviation Safety Authority ensure the Annexures to special certificates of air worthiness (Experimental) prohibit landing and take-off from public non towered public regional aerodromes within the time periods that commercial passenger aircraft are scheduled to operate.

CASA does not consider that there is a sufficient safety or risk based justification for the implementation of this recommendation. A licensed pilot does not present an identifiable hazard to other airspace users, whether private, charter or regular public transport, when the pilot:

- holds a valid licence;
- is flying an amateur-built experimental aircraft in accordance with:
 - the rules of the air; and
 - any conditions that have been applied to the aircraft's special certificate of airworthiness after a comprehensive risk analysis conducted by CASA or an appropriately qualified authorised person.

CASA is not aware of any empirical data which suggests that experimental aircraft operating in accordance with the protocols set out above, present any greater hazard to other air space users than other similar aircraft types operating in accordance with see and avoid principles at public regional aerodromes.

The implementation of any such requirements would also be problematic from a practical perspective in that pilots of amateur built experimental aircraft would be required to have access to schedules of all commercial passenger carrying aircraft arrivals and departures at the relevant aerodrome in order to comply with such a condition. Such schedules would not necessarily be available in all cases, especially in relation to ad hoc charter flights.

Recommendation 6 - The Civil Aviation Safety Authority notify owners of aircraft subject to time limited Special Certificates of airworthiness (Experimental) when their Certificate of airworthiness is due to expire and remind them that they are not permitted to fly their aircraft without a current Special Certificate of Airworthiness (Experimental)

CASA does not have available to it, the administrative resources to dedicate to reminding owners of experimental aircraft, that the Special Certificate of Airworthiness for the aircraft is due to expire. CASA considers that the requirements of the aviation legislation in relation to the holding of current certificates of airworthiness for aircraft are well known and that those certificates are expressed sufficiently clearly to allow aircraft owners to know when the certificate does and does not authorise aircraft operations.

For these reasons, CASA does not propose to take any action in relation to this recommendation.

Recommendation 7 - The Civil Aviation Safety Authority ensure that time limited Certificates of Air worthiness (Experimental) do not have unlimited printed on the front page.

An authorised person with the power to issue a certificate of airworthiness for an experimental category aircraft, is required to do so in compliance with the requirements of the aviation legislation and any conditions which are applicable to the individual's appointment as an authorised person. In this regard, all instruments of appointment of authorised persons who are empowered to issue certificates of airworthiness for experimental category aircraft require those persons to comply with their written procedures manuals (which are reviewed by CASA prior to appointment) and with any applicable CASA Advisory Circulars (AC).

It is also a condition of the appointment of such people that they use certain CASA forms in undertaking the task of issuing certificate of airworthiness for experimental category aircraft. An authorised person who has the powers to issue an experimental certificate is required to use CASA Form 720 to authorise an aircraft for one of the experimental purposes permitted by the regulations.

Section 6 of CASA Form 720, states that the certificate remains in force until the expiry date specified or until the aircraft ceases to be registered on the Civil Aircraft Register of Australia. The expiry date for an experimental certificate issued to an aircraft operating under regulation 21,191(g) of CASR 1998 (to operate an amateur built aircraft) is detailed in CASA AC 21.4 clause 14.8.

This clause contemplates that such a certificate may be issued in perpetuity but subject to operational limitations relating to the testing of the aircraft. The standard operational limitations are set out in Attachment 3 to the AC. Those standard conditions do not indicate that there is to be any expiry date in relation to the certificate, they instead impose operational limitations which must be complied with as a condition of continued flight in the aircraft.

CASA does not consider that the use of operational limitations (in the form of conditions) in this manner on experimental certificates of airworthiness gives rise to any possibility of confusion amongst certificate holders as to the period during which the certificate remains in force, so long as authorised persons comply with the guidance issued by CASA in relation to the terms of the operational limitations which are to be imposed.

In this regard, since the hearing of the inquest into this matter, CASA has established a dedicated branch (Delegate Management Branch) to be responsible for oversight of the

activities of authorised persons – including those who issue certificates of airworthiness for amateur built experimental aircraft.

Delegate Management Branch regularly holds a Professional Development Program which is conducted over three days. This program is aimed at all airworthiness delegates and authorised persons and covers aspects of certification and continuing airworthiness in relation to issuing authorisations and permissions such as certificates of airworthiness. The course emphasises the importance of complying with the regulatory requirements for the issue of each authorisation as well as the need to ensure that conditions and limitations in each annex of a certificate of airworthiness are set out clearly in accordance with applicable CASA guidance material. Four professional development courses have been completed so far and a fifth course is scheduled on 17 September 2013. There are approximately 76 authorised persons who hold appointments to issues certificates of airworthiness (amongst other authorisations) and 48 of those people have attended the courses to date.

For these reasons CASA does not propose to implement this recommendation.

Recommendation 8 - The Civil Aviation Safety Authority actively target pilots of amateur built experimental pilots accessing public non towered regional aerodromes as a general or specific deterrence to pilots flying unregistered aircraft in and out of non-towered public regional aerodromes or breaching the conditions of pilot licences and/or Certificates of Airworthiness (Experimental).

CASA conducts ramp inspections from time to time at aerodromes, including non-towered regional aerodromes. These ramp inspections are carried out in conjunction with other surveillance activities; these may be scheduled or conducted in response to intelligence provided by the industry or the general public. During these ramp inspections, aircraft documentation, including applicable certificates of airworthiness, pilot's licences and medical certificates (amongst other documentation) are inspected to ensure that they are current. Ramp inspections are conducted on a random basis, of aircraft landing at the aerodrome under surveillance, these may include amateur built experimental aircraft.

CASA does not have sufficient specific intelligence indicating that there is an increased incidence of amateur built experimental aircraft being operated whilst unregistered or contrary to operational limitations imposed by certificates of airworthiness or pilot licences, to justify a targeted campaign singling out operators of these aircraft for special attention. There would also be significant practical difficulties in the conduct of any such targeted campaign since CASA has no way of knowing where individual aircraft will be on any given day unless it receives specific intelligence in that regard.

Recommendation 9 - The Government of Australia amend CAR 166 to require amateur – built experimental aircraft to carry radio equipment capable of receiving weather and other information transmitted on all radio frequencies used by other members of the aviation industry in their local area.

In June 2010, regulation 166 of the CAR was amended to require that all aircraft operating to or from a registered, certified or military aerodrome must carry a VHF radio. The primary reason for this amendment was to ensure that any aircraft that could conflict with, or be a collision risk to, a passenger transport aircraft would be able to communicate their position/intentions and receive traffic notifications.

Modern VHF radios can tune to all published VHF frequencies, allowing pilots to receive weather information and other information transmitted by other members of the aviation industry. The carriage and use of radio provides pilots with additional awareness of traffic to supplement their reliance on the 'see and avoid' procedure when in the vicinity of non-towered aerodromes.

SAMUEL HENDER

Recommendation 1 - The Commonwealth Parliament amend Part III of the CAA 1988 to prohibit all passengers under 17 years of age from travelling in amateur-built experimental aircraft.

Nil response required from CASA

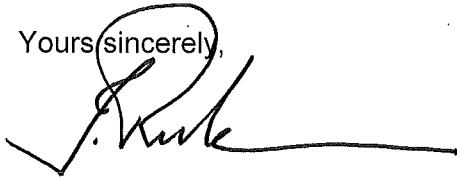
Recommendation 2 - The CASA prohibit carriage of all passengers under 17 years of age in aircraft which are issued with Certificates of Airworthiness (Experimental).

CASA does not consider that there is any basis in safety for it to enact such a prohibition. To put this position in some context, it is noted that the minimum age at which a person may apply for a student pilot licence is 16 (scheduled to drop to 15 in December 2013) and, in relation to ultra-light aircraft which are manufactured to similar or identical standards and operated under the auspices of Recreational Aviation Australia, the minimum age at which a person can obtain a pilot certificate to fly such an aircraft as pilot in command is 15.

Against this background, and in the absence of any compelling safety basis to justify the taking of such action, CASA considers that the question of whether passengers under the age of 17 should be allowed to travel on amateur built experimental aircraft is a matter best left to the exercise of parental discretion.

Please contact me if you require any further information in relation to this matter.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'J. Rule', with a long horizontal flourish extending to the right.

Joe Rule
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Legal Services Division
Civil Aviation Safety Authority

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