

Australian Government

Australian Transport Safety Bureau

Safety Advisory Notice

AOC holders operating aircraft not greater than 5,700 kg

Number: AO-2016-078-SAN-009

Fuel policy requirements

The current legislation does not require commercial operators of aircraft not greater than 5,700 kg maximum take-off weight (MTOW) to provide instructions and procedures for crosschecking the quantity of fuel on board before and/or during flight. This increases the risk that operators in this category will not implement effective fuel policies and training to prevent fuel exhaustion events.

What happened

On 17 July 2016, at about 1039 Central Standard Time, a McDonnell Douglas Corporation 369D helicopter, registered VH-PLY, experienced fuel exhaustion and a collision with terrain while performing powerline inspections 36 km north-west of Hawker, South Australia. There were three crew on board the helicopter. One pilot in the front left seat, one line-worker in the front right seat and one line-worker in the rear left seat. The three crew members were seriously injured and the helicopter was substantially damaged.

Why did it happen

The ATSB found that the pilot was mistakenly told by ground staff that the aircraft had been refuelled and through distraction, omitted a crosscheck of the fuel quantity before flight. The pilot's monitoring of the fuel in-flight was based on anticipated endurance, which resulted in him not detecting a low fuel level. The ATSB also found the requirements for the development of fuel policy by operators were dispersed throughout the aviation legislation— 14 legislative and three guidance material requirements were found—but they did not require the operator to publish procedures for determining fuel on board before and during flight for commercial operators of aircraft not greater than 5,700 kg MTOW.

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From 2003 to 2017, the ATSB has received 26 reports of fuel exhaustion events from Air Operator Certificate holders operating aircraft not greater than 5,700 kg MTOW. Two key contributing factors from these reports are pilots not crosschecking the fuel on board before and/or during flight. Aircraft greater than 5,700 kg MTOW are not represented in the ATSB fuel exhaustion reports. In accordance with CAO 20.2, operators of these aircraft are required to publish instructions and procedures in their operations manuals for the pilot in command to verify the fuel on board before flight. Additionally, CAAP 215-1(2) Appendix B includes guidelines for publishing operations manual procedures for inflight fuel management.

CASA 29/18 – Civil Aviation (Fuel Requirements) Instrument 2018, which contains proposed changes to the current fuel regulations and guidance material is scheduled to commence 8 November 2018. The ATSB considers that the implementation of these changes should address this safety issue.

Until the proposed changes to the current fuel regulations and guidance material are implemented, the ATSB advises Air Operator Certificate holders for aircraft not greater than 5,700 kg MTOW, to consider this safety issue and take action where appropriate.

Read more about this ATSB investigation: A0-2016-078

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Australia's national transport safety investigator

