Fuel requirements for Australian aircraft

Learn more about the rules covering minimum fuel requirements in effect from 8 November 2018. A transition period will apply for some air operators certificate (AOC) and Part 141 certificate holders.

Who do the new rules apply to?
› Pilots of Australian aircraft
› Operators of Australian aircraft

Why change the rules?
› Enhance aviation safety
› Remove uncertainty between rules and guidance material
› Better reflect industry views and international standards for fuel requirements

When do the rules change?
› For private operators – from 8 November 2018
› For AOC and Part 141 certificate holders with an existing certificate on 7 November 2018 – from 28 February 2019. Otherwise, from 8 November 2018.

What are the main changes?
› Re-introduces a fixed fuel reserve requirement
› Reduces reserve requirements for day visual flight rules (VFR) for piston or turboprop small aeroplanes
› Requires pilots to conduct in-flight fuel management with regular fuel quantity checks and, if required, declare Mayday Fuel
› Introduces ‘additional fuel’ which simplifies the planning requirements for fuel contingencies
› More closely aligns Australia’s fuel rules with the International Civil Aviation Organization standards and recommended practices.

Many pilots and operators are already complying with the new rules as they have been included in CASA guidelines for some time. These changes remove uncertainty by clarifying what you must legally do.
What is in-flight fuel management?

When conducting these checks, you may discover that you would be landing at your original planned destination without sufficient fuel, that is, your fixed fuel reserve remaining.

If this occurs, make an alternate plan to land safely with sufficient fuel at a different location than you had originally planned. Your new safe landing location will depend on your aircraft capabilities and the conditions.

However, if a safe landing location is not an option and you are landing with less than your fixed fuel reserve, then you must declare Mayday Fuel.

Preserving fixed fuel reserve is the foundation for in-flight fuel decision making which leads to safer operations.

That doesn’t mean that in all instances preserving your fixed fuel reserve is the highest priority. There may be occasions where it is more important to exercise your judgement to determine the safest outcome, which may include landing with less than fixed fuel reserve.

Why declare Mayday Fuel?

The Mayday Fuel declaration aims to increase safety. It alerts other airspace users to a potential fuel problem facing an aircraft in their vicinity and ensures priority is given to that aircraft to reduce the chances of an accident.

The declaration is an internationally recognised standard aligning Australia with the standards of the International Civil Aviation Organization that are designed to assist in the management of aviation safety risks.

Mayday Fuel is not aimed at setting conditions to prosecute pilots or operators and a declaration does not automatically mean that emergency services will be mobilised.

What is the VFR fixed fuel reserve for piston or turboprop small aeroplanes?

Under the new rules, the fixed fuel reserve for day visual flight rules (VFR) for piston or turboprop small aeroplanes is 30 minutes.

CASA had recommended a 45-minute reserve, but having considered feedback from the aviation community, this has been reduced.

The reduction to 30 minutes fixed fuel reserve is supported by the introduction of in-flight fuel management requirements and enhanced guidance material to help improve safety.
What is the additional fuel calculation?

Prior to the rule change, pilots and operators had to calculate fuel to accommodate two contingencies; engine failure and depressurisation, each with different reserve requirements.

The new rules make this calculation simpler. Now the ‘additional fuel’ calculation is based on whichever of the contingencies requires the greater amount of fuel plus a reserve fuel of 15 minutes plus an approach and landing allowance.

What does this mean for AOC and Part 141 certificate holders?

To comply with the new rules, you’ll need to ensure that the following changes are included in your operations manuals:

› fuel reserve values that meet or exceed the minimums set in legislation (apart from specific values which may have an operational variation)
› a requirement to conduct in-flight fuel management
› matters related to aircraft specific fuel consumption data, operating conditions and potential for deviations from planned flights.
Many operations manuals already contain these requirements.

The new rules allow AOC holders and Part 141 certificate holders to possibly reduce unnecessary fuel carriage through operational variations to specified fuel values. This may mean savings to both operators and the environment. Guidance and advisory material (CAAP 215-1(3)) includes descriptions of the elements of fuel policy to which an operational variation can be applied. It is available on the CASA website.

If your existing fuel policy has a provision that equates to an operational variation, the time you have to incorporate these new requirements into your operations manuals will depend on the date of your AOC / certificate renewal. For operational variations, see Section 8 of CASA Instrument 29/18.

If your AOC / certificate renewal occurs between 8 November 2018 and 28 February 2019, you will have until the end of 28 February 2019.

If your AOC / certificate renewal occurs between 28 February 2019 and 8 November 2019, you will have until the date of your renewal.

Otherwise, you will have until 8 November 2019.

CASA will waive any charges and fees associated with the update of operations manuals—if the changes are only made to comply with the new fuel rules.

Want to know more?

On the CASA website you will also find guidance material:
- A draft of the fuel pages that will appear in the revised Visual Flight Rules Guide
- Civil Aviation Advisory Publication (CAAP) 234-1(2) – Guidelines for aircraft fuel requirements
- CAAP 234-1(2) Annex B – Sample Fuel Calculations – Multi-Engine Turboprop Aeroplane (Beechcraft B200)
- Guidance for preparing or amending operations manuals – revised pages of the advisory material as CAAP 215-1(3):

Please note: This material is in ‘advanced copy (not yet in force)’ form until 8 November 2018. It is anticipated the amendment as CAAP 215-1(3) will be issued on 8 November 2018, incorporating the fuel related changes.

View the full rules:
legislation.gov.au/Details/F2018L00644

View the exemption for AOC and Part 141 certificate holders:
legislation.gov.au/Details/F2018L01317

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