On schedule

Owners of piston engine aircraft are directed under the civil aviation regulation CAR 41 to maintain their aircraft to an elected maintenance schedule. Les Lyons outlines the options.

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AIRCRAFT MAINTENANCE schedules are similar to the schedules followed by new car owners to keep the manufacturer's warranty valid. They detail what maintenance has to be done and when.

Owners have three options for maintenance. You could follow the CASA schedule (schedule 5), the manufacturer's schedule, or seek approval from CASA for your own system of maintenance.

CAR 42A, aircraft manufacturer's schedule When you buy a new car, the service schedule specifies maintenance requirements to be done after a certain number of kilometres or months. If the schedule is not followed, a claim against the warranty may not be accepted by the manufacturer.

An aircraft manufacturer's maintenance schedule is similar. It sets out, either in flying hours or days, when certain maintenance work should be performed. The schedule is normally in the aircraft's maintenance manual or service manual.

CAR 42B, CASA schedule The CASA schedule, known as schedule 5, dates back to the time when the former Department of Civil Aviation set the rules.

DCA published a generic schedule for general aviation aeroplanes that didn't have a manufacturer's schedule. The DCA schedule was detailed in Appendix 4 of ANO 100.5.1 and was similar to that now detailed in schedule 5 of the *Civil Aviation Regulations* (1988).

The original list of applicable aeroplanes reads today like an entry list for a vintage aeroplane fly-in. Later, n response to requests from the owners of more modern aeroplane types, the DCA amended Appendix 4 to include all piston-engined and non pressurised aeroplanes under 2,750 kg maximum take-off weight.

These schedules were written specifically for aeroplanes, not for helicopters (by definition a helicopter is not an aeroplane – CAR 2A refers). A simple, generic maintenance schedule is not suitable for helicopters because of their many critical life-limited components. Similarly, as a maintenance schedule must cover both the aeroplane and its components, if an aeroplane has complex components, like an IFR panel, retractable undercarriage, or a fuel-injected engine, then schedule 5 is not appropriate.

CAR 42C approved system of maintenance An approved system of maintenance delivers economic benefits to aircraft operators by allowing them to design tailored schedules that suit their operations.

Operators must get the system approved by CASA (or an industry delegate). However, approval is a lengthy and sometimes complex process that may not be practical for many private aircraft operators.

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