

During recent CAA routine Audits, operators of aircraft fitted with Lycoming Engines have been made aware of the recommendations of Lycoming Service Instruction 1009 by CAA Airworthiness Inspectors. This has caused some consternation for some operators, particularly helicopter operators who hold 119 certificates in addition to 137 and part 91 operations.

Lycoming SI 1009 paragraph 5 on page 1 (in relation to recommended TBO's) identifies that the applicable chart does not apply to engines engaged in crop dusting or chemical application. These engines should be overhauled at 1500 intervals or at recommended TBO, whichever is sooner.

Currently those operators who undertake Part 91 and 137 operations, which undertake "crop dusting or chemical application", can operate their engines over 1500 hours under the provisions for "On Condition Maintenance".

For operators who hold Part 119 certificates and which undertake "crop dusting or chemical application", they cannot operate their engines over 1500 hours because they will have an approved maintenance program in their exposition worded something like "*Engine overhauls to be carried out at the recommended TBO specified in the Lycoming SI 1009 (latest issue)*" or words to a similar effect.

It is important to note that here that the operator is responsible for maintenance and that will probably be CAA's stance to an issue such as this. Operators should expect that this will be picked up at routine audits. The CAA expect operators to comply with their Approved Maintenance Programs.

If a Lycoming engine that has been undertaking "crop dusting or chemical application" has exceeded the 1500 hr life and operating purely 137 ops, they can continue to operate "on condition" until the new 43/91 rules come into effect on 1/03/07. If they are operated on a combination of 137 and 119 the approved maintenance program in their Exposition requires them to comply with the manufacturers requirements in force, including SI 1009. Effectively they would need to cease 119 operations until they have a VAMP approved or the engine is overhauled.

Historically, the CAA has considered applications for a variation to approved maintenance programs (VAMPs) to a maximum of 10%. This remains an option. For any leeway beyond 10% of the o/haul life, operators have traditionally sought a "statement of no objection" from the OEM before consideration by the CAA.

On 1/03/07 amended Rule Parts 43 and 91 come into effect. Provision will exist for products and components to be operated beyond the manufacturers TBO if the operator complies with the TBO escalation procedures that are detailed in a maintenance program under Part 119 or approved under the new CAR 91.607. The Advisory Circular material on engine escalation procedures is in final draft stage and is expected to be published in the next few months. It appears that criteria could include such things as documented history of performance, strip reports and trend monitoring. It will be that the TBO is fixed at some point, determined by the operator and approved by CAA. Effectively this means that aircraft undertaking Air operations will be operated on Maintenance Escalation programs that take into account Part 91 and 137 operations.

CAA maintains that the Lycoming stance is that any engine undertaking any "crop dusting or chemical application" during the 1500 hours is subject to the recommendations of SI 1009 regardless of how much, or how little, "crop dusting or chemical application" the aircraft has undertaken.