



CAA position on 103.217 engine maintenance requirements

RAANZ sent the following email to CAA regarding this issue.

Hi Clayton/Jeanette/David-

You will no doubt be aware of the current issue re interpretation of 103.217, particularly where the aircraft/kit manufacturer is silent on engine maintenance requirements, but there exists an engine manufacturer's maintenance schedule. This is quite common with microlight aircraft where the airframe/kit manufacturer leaves engine choice up to the owner- GA engines, uncertified 4- and 2-strokes, auto conversions, etc.

In the past this has been interpreted as the engine manufacturer's schedule being recommended but not mandatory- this view held by both RAANZ/SAC and previous CAA staff.

Our recommendation to pilots has always been to follow an engine maintenance schedule, monitor critical parameters and wear limits, and continue to operate the engines while all components and performance remain within spec.

The new (unpublished) CAA interpretation is that if an engine manufacturer's schedule exists, it is mandatory and must be followed, including both TIS and calendar TBO limits.

This is of concern to us as we have many low hours older engines that are well maintained and operating reliably, but would need to be scrapped or overhauled for no reason other than 'time is up'.

This also creates a farcical situation where a time expired Part 103 engine can be bolted onto a Part 61 homebuilt/experimental and continue to fly.

We believe in this case CAA is losing sight of the philosophy and intent of uncertified Part 103 microlight aircraft operations.

We are currently seeking legal advice on a clear independent reading of 103.217.

If it supports our view then of course we will strongly argue our case with CAA.

If not- we will be putting forward a proposal for maintenance and monitoring regimes supporting 'on condition' operation beyond manufacturer's TIS and calendar TBO limits.

To get a clear picture of fleet statistics we conducted a survey of Rotax 4-stroke (912/914) owners- TIS, calendar life and reliability issues.

A copy of the survey report is attached.

These data support our view that these engines are reliable, their weak points are known and mitigated, and if maintained and monitored to manufacturer's specs can operate well beyond any published TBO or calendar life limits.

The data also shows an impending wave of low TIS engines reaching calendar life

over the next few years.

As a heads-up, we will soon be requesting a meeting with appropriate CAA staff to discuss and resolve this issue.

Meantime this survey report may help to put some clarity around fleet TIS, age, utilisation and reliability.

Regards,
Stuart Parker
RAANZ Admin

Since then we have had confirmation from CAA that they stand by their interpretation. We are awaiting an opinion from an independent aviation lawyer to advise on the best position and strategy to take. Whatever, we must together find a way to avoid the scenario of perfectly serviceable engines hitting TIS or calendar limits with no means of continuing in service. This would certainly result in seriously disadvantaged microlight aircraft owners, probable knee-capping of the growth of microlighting, and possible flouting of the rules. We don't want that.

Continuing Airworthiness – on condition maintenance

Colin Alexander/RAANZ TECH

It is most probably time that we revisit the subject of the “Continuing Airworthiness” of your aircraft.

Ongoing airworthiness is critical for us in our environment as many of us do not necessarily employ licensed engineers or specialists to carry out our maintenance each year.

It is most important to understand your responsibilities as the aircraft owner and operator and the documentation of this maintenance is the only record and evidence we have of the task being carried out.

Ongoing airworthiness affects so many parts of our aircraft. Not only the engine is affected which seems to attract most owner's attention. Some examples are brakes, flying wires and control cables, CO monitors, propellers, seat belt, tyres, avionics etc. The list is endless when it comes to engines, we often find that the private owner may not have either the expertise or the equipment to monitor the ongoing maintenance requirements of the more modern aircraft.

The avionics, GPS and database should be up to date and the equipment required for engines can be quite specialised or require specialist software or skills.

It is essential that we carry out these tasks.

When it comes to on-condition maintenance, it does not mean that you only inspect or repair something when it gives trouble, stops working or breaks.

It is a program where you record the checks and tests that you are doing to ensure airworthiness. It is therefore essential that these tasks are recorded in the log books to help us remember when we last checked or tested an item.

I know for sure that I cannot remember all these tasks and when they were last performed.

This process is also most useful if you plan to purchase or sell an aircraft. It is evidence of what maintenance has been carried out and by whom. It could add to the value of the aircraft and give confidence to the prospective owner.

Most of these on-condition tasks are detailed in the manufacturer's instructions or ICAs (Instructions for Continued Airworthiness).

If one carried out these tasks, it illustrates to the regulator that we are sensible owners and operators and should result with them not having a specific interest in our environment.

We would therefore encourage these suggestions to be taken on board which will enable us to show that we are compliant to the regulations and don't require any additional regulatory requirement to be imposed upon us.

Please request assistance if required as there are very well qualified people within our organisations to assist you.

Membership changes

Thomas Everth	Mercury Bay Aero Club	Senior Flight Instructor	Upgrade
Duncan Macdonald	Gyrate Flying Club	Novice	FRTO
Iain Anderson	Parakai Aviation Club	Advanced National	Upgrade
Craig Taylor	Geraldine Flying Group	Advanced National	BFR
Adam Travers-Bishop	Parakai Aviation Club	Novice	Joined
Peter Barton	Bay of Islands Aero Club	Novice	Joined
Martin Cole	Associate	non-flying	FRTO
Heike Wollenweber	Canterbury Recreational Aircraft Club	Novice	Joined
Dominic Feiler	Associate	non-flying	Joined
Trinadh Uppalapati	Canterbury Recreational Aircraft Club	Novice	Joined
Ryan Plowright	Waikato Microlight Club	Novice	Joined
Sam Tullett	Geraldine Flying Group	Novice	Joined
Neil McLauchlan	Geraldine Flying Group	Novice	Joined
William Hutton	Canterbury Recreational Aircraft Club	Novice	Joined