

MAINTENANCE CONTROL FOR PART 135 AND 125



The role of the maintenance controller in a certificated organisation is vital for the economic wellbeing of the organisation as well as for safety and compliance.

The term ‘maintenance controller’ doesn’t appear in the rules, but organisations certificated under Part 119 must have a “senior person responsible for the control and scheduling of maintenance”. That person is commonly called the maintenance controller.

So, what *is* the role?

The maintenance controller holds responsibility on behalf of the operator for airworthiness of their aircraft. This includes the equipment fitted to the aircraft. The maintenance controller should be fully involved in the day-to-day management of airworthiness.

That ranges from knowing the configuration and modification state of every aircraft to assessing service information and airworthiness directives (ADs), development and upkeep of maintenance programmes, and the scheduling and planning of maintenance.

Sean Coleman from Heli Assist says the most basic obligation of a maintenance controller is to ensure maintenance is carried out in accordance with the operator’s exposition.

“The operator relies on me to plan for upcoming maintenance to reduce unnecessary downtime, ensure availability of scheduled replacement parts,

and to ensure maintenance has been carried out and documented correctly – but also, all of this in accordance with the exposition.”

Brett Richmond from Fieldair Engineering says maintenance control is a niche and central position in an organisation, and needs time and good organisation.

“You’re providing forecasts to management, describing the impact of upcoming maintenance – both financial and in down time – how you can streamline that, and make it more efficient. You’re dealing with the operations manager and chief pilot, both of whom have their own timetables. You’re having regular planning meetings so everyone is on the same page.”

CAA Aviation Safety Advisor John Keyzer says technical knowledge is a must, as well as the time commitment.

“Apart from knowing the operator’s exposition backwards, a maintenance controller needs to understand the aircraft, their systems, their configuration and their modifications. They have to have a very good understanding of the manufacturer’s instructions for continued airworthiness. They need to have a working knowledge of the manufacturer’s technical data. They have to be completely familiar with the maintenance rules.”



Photo: istockphoto.com/Evgeny Shkolenko

// A positive relationship with the maintenance provider is key to success in the role.

Before any maintenance takes place, the maintenance controller must supply a detailed description of the work to be completed. This ensures that any work carried out is fully planned, including sourcing all requirements, such as parts and data.

It also ensures that any operator requirements for returning the aircraft to service – operational flight checks for example – can be managed.

// **If the maintenance controller gets it wrong, the ripple effects through the whole organisation are huge.** //

“You have to really want to do the job,” Brett Richmond says. “There’s no point press-ganging someone into the job. It’s a really important role and it needs to be done properly. If the maintenance controller gets it wrong, the ripple effects through the whole organisation are huge.”

A lack of time or commitment to the role, or forgetting which ‘hat’ is worn during which task, has led to one or more of the following:

- incomplete or inaccurate airworthiness and maintenance records;
- maintenance based on an aircraft’s latest review of airworthiness, with earlier airworthiness requirements being missed;
- no proper check on the validity of a previous maintenance programme as an aircraft is moved from that, to another programme;
- failure to properly review that requested maintenance has been carried out before a release-to-service;
- airworthiness directives being recorded at the time of the review of airworthiness, rather than at the time of their ‘effective dates’. »

Distinct roles

In many cases, an operator will contract out their maintenance. This is when the role of the maintenance controller is crucial, but it gets more complicated if the maintenance controller is remote from the operator's base.

The operator must realise they hold responsibility for ensuring the safe operation and continuing airworthiness of their aircraft.

There's a helpful list of responsibilities in AC119-1, see Appendix B – *Subcontracting Maintenance*.

This list is a useful reminder of your responsibilities even if you don't contract out.

Qualifications and experience

The qualifications and experience requirements for the senior person role are detailed in Part 119, Appendices A and B.

The level of experience required varies with the type and number of aircraft and bases operated.

Value beyond safety

The value to an operator of a competent maintenance controller can be measured, not just in safety, but also in reputation and profitability.

Sean Coleman says ineffective maintenance controllers have actually cost operators money because of incorrect records, incorrect service life limits, or overhaul intervals, which have resulted in parts having to be replaced.

"I've known a case where an aircraft has had to go back to the provider for maintenance a few weeks after being inspected, because there was no proper forward planning about inspections. All of that has cost the operator money and unnecessary down time."

John Keyzer says robust maintenance control is a really valuable business tool, even for the private operator.

"If you don't know what needs to be done, and you don't know how long it's going to take, and you don't know how much it's going to cost, you'll in no way be ready to pay for that maintenance."

A competent maintenance controller straddles safety and business accounting.

"Let's say an operator has an arrangement with their maintenance provider to supply their own parts, but, because they have no real oversight of the maintenance, they're not aware XYZ needs replacing," says John.

"So they don't order the part, and when they do, there's a 90-day wait, and the maintenance needs to be done in 30 days' time.

"So that's unscheduled, and expensive, downtime." 



Photo courtesy of Oceania Aviation.

// Behind every pilot, there's an engineer who's worked to make sure their aircraft is safe to fly. Behind both of them, there's a maintenance controller making sure the right maintenance on that aircraft was done at the right time, and according to the rules.