



Central Aero Engineering

Central Aero Engineering at Hamilton Airport have a reputation for providing a broad range of services to commercial, GA and recreational customers regardless of their size or what they fly. The company has a diverse range of aircraft on its books extending from balloons, gliders, microlights, autogyros, experimental and homebuilt aircraft, through to all manner of GA and commercial aircraft including turbine helicopters.

This eclectic mix of work has undoubtedly arisen thanks to the personable nature of owner Paul Waterhouse and his engineering team, who revel in taking on the challenges of 'something different' and delivering professional outcomes to customers no matter how big, small, or unusual the job may happen to be.

Recent work

The Central Aero hangar is always an interesting place to visit. When KiwiFlyer called in at the start of December, domiciled inside were a Cherokee 235 looking resplendent in a new coat of paint, a homebuilt Safari helicopter, and a hot air balloon, all with various work happening on them.

The Cherokee had been completely paint stripped and re-sprayed. Avionics had also been refurbished with various redundant systems removed and new systems installed, including an iPad. Next on the owner's list is an interior overhaul.

The Safari helicopter had arrived from the South Island with its owner who has moved north and needed a CoA re-issue and associated paperwork brought up to date. Paul says they are now looking after 5 Safaris (NZ distributor and builder Bruce Belfield lives in the Waikato himself), and have several R44s and a JetRanger on the books as well.

The balloon was in for a CoA. Central Aero have a growing number of balloons under their care (at least 6, says Paul), ballooning of course being a popular sport in the area. A balloon CoA involves partial inflation, then inspection of every seam on the entire envelope, standing the balloon up and operating all the various venting and turning systems, plus checking the baskets and burners for leaks, etc.

Also underway offsite was an annual/100hr check on a glider.

Central Aero have also completed several notable fabric projects this year, with a Pietenpol project currently well underway.

Paul says the previous deluge of Cessna SIDs work is tapering off but there are a lot of aircraft awaiting SIDs inspections still tucked away. "Call if you need advice," says Paul.

Services available

Central Aero's capability list is broad indeed, and a passion for all forms of aviation means that Paul and his team are more than willing to help out with engineering requirements or advice in areas that many other maintenance providers may well seek to avoid, or at least fail to show an interest in. Central Aero do of course also cover all of the traditional bases of GA maintenance for rotary and fixed wing (including Robinson 2200hr/12yr overhauls), as well as providing consultancy services for maintenance controlling, CoA issues, airworthiness reviews, pre-purchase inspections, importation "from anywhere", and more.

With new avionics equipment coming for testing Mode S transponders, all 24 month avionics checks can be carried out on site. Weight and balance services are also provided.

Central Aero have significant workshop resources for sheetmetal fabrication and repair, broadening the support the company can offer to those undertaking rebuilds or restorations, or to home-builders needing help with their project. Wood and fabric work is also well within the resources and experience of the company.

Vibration analysis equipment is on hand for propeller balancing services. Paul says many owners are astounded at the results of this relatively straight forward task – "it's some of the cheapest and best maintenance you can ever do".

A new Central Aero website has just been launched (www.centralaero.nz) and includes a full capability list as well as 'news' and 'for sale' pages. That capability list will continue to expand, driven by Paul's philosophy that something new should be achieved every month that "makes the place better and improves the services we offer to customers".

Central Aero Electrical Limited

Next door to Central Aero Engineering is Central Aero Electrical Ltd. Owner Martin Ross and a small team have a comprehensive range of diagnostic equipment to hand, and a large

test bench will handle up to 12 cylinder magnetos.

Capabilities cover a good range of piston engine starter/generator, control unit rectification and overhaul work along with the 500 hour requirement for magnetos. A growing amount of turbine electrical components are also passing through the shop. Actuator overhauls are also a common task.

Central Aero Electrical stocks and supplies various (new and hard-to-find) aircraft parts for re-sale including starters, batteries, alternators, strobe units, starter generators, GCU's, voltage regulators, ignition switches, and HT ignition harnesses. Various exchange items are also available.

A personal interest and a collection of elderly parts made serviceable, have made Martin the go-to person for all odd and unusual electrical requirements, especially for aircraft such as Tiger Moths and WWII varieties. Over the years he has acquired many service manuals for older aircraft, some requiring much negotiation and expense. And even if a manual is not available, there's a good chance that experience will win the day such that fault diagnosis and an appropriate procedure can be undertaken.

Central Aero Electrical also have a good supply of parts for B&C lightweight starters, for which there are now STCs available for fitment to all Lycoming engines. Martin says these are a lot better solution than replacing with original.

With CAR Part 145 certification behind him, Martin has also been building relationships directly with component suppliers, allowing him to easily purchase direct and bypass the aircraft manufacturer's mark-up. These are savings Martin says he is happy to pass on to customers.

For more information

Paul says that "If you're thinking maintenance, then think Central Aero. We're happy to help whether it's just advice you need, or to book a job in." Contact Paul on 07 843 1200 or 021 418 677, email: paul@centralaero.co.nz or visit www.centralaero.nz

Martin Ross at Central Aero Electrical can be contacted on 027 733 0208 or by email: centralaero@clear.net.nz



Clockwise from top left: 1. A balloon inspection underway. 2. A major wood and fabric project well underway is this Pietenpol. 3. Cherokee 235 refurbishment about to have new stripes applied.



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