

A busy year at Avcraft Engineering NZ Ltd.

2016 has been another year of growth for Avcraft Engineering NZ Ltd. The company has a policy of 'continual progress', and Engineering Manager Mat Bailey says that "further significant investment has been made in tooling, training and staff ensuring the Avcraft team is always ready to provide world-class support for your aircraft, regardless of make or model, or maintenance required."

Avcraft's list of services and accreditations is long. From Rotax powered microlights to jets, Mat says the Avcraft team has the experience, capability and tooling to support all your needs, covering all of the following and more:

- Scheduled Maintenance
- Maintenance Control and Tracking
- Sheetmetal repairs and rebuilds
- Composite repairs
- Insurance repairs
- Corrosion and paint repairs
- Full strip and repaint
- Fabric repairs from simple patches to complete recovering
- Pressurisation System testing, fault finding and repairs
- Battery Capacity Testing
- Scheduled Avionics Inspections
- Avionics installations
- Electrical Load Analysis
- GPS IFR Approvals
- RNP Approvals and documentation support
- ADS-B Out Approvals
- Electrical, Instrument and Avionics repairs
- Cirrus Aircraft Service Center
- Pilatus Aircraft Service Center

A year in review

This year has seen Avcraft perform a steady stream of Garmin and Bendix King installations into many different types of aircraft. The Garmin GTN650 and GTN750 have been big sellers combined with ADS-B out installations of Bendix King and Garmin Transponders

Avcraft have the new Garmin G5 Electronic Flight Instrument in stock now and ready for immediate installation. This unit is incredible and expected to be a very popular and cost effective solution to replace those old gyro horizons. An added bonus is the built in 4-hour backup battery. Anyone flying night VFR or IMC really needs to consider the safety benefits of the new Garmin G5 in addition to their vacuum gyro instruments or as a stand-alone installation.

The company has also seen a large increase in the modifications

side of the business with many LED Landing, Taxi and Strobe Light installations, Mid-Continent USB Power Outlets, GAMI Fuel Injectors, Electroair Electronic Ignition Systems, APM Strakes and STOL kits fitted.

Avcraft have recently upgraded their pressurisation rig to the latest Tronair Cabin Pressure Unit. This rig can perform full pressurisation tests, leak checks and fault finding on all small to medium pressurised aircraft saving considerable time and costs.

Avcraft are also New Zealand's only approved Pilatus and Cirrus Aircraft Service Centres. The company has the technical data, specialised tooling and factory training to ensure maintenance on these high-spec aircraft is performed correctly and with full factory support. As Mat says, "Why risk taking your aircraft anywhere else? We've got a tremendous amount of experience, capability and knowledge here at Avcraft. Anyone leaving an aircraft with us can be assured their asset is in good hands."

Central Location

Being located at Feilding Aerodrome where there are no landing fees makes Avcraft readily accessible from North and South Islands. Mat says a large number of regular customers fly down from Auckland or up from the South Island, adding, "We have a courtesy car available, and reduced rates at local motels if you want to overnight. We also offer a pickup and delivery service for your aircraft to keep it hassle free." A 24/7 Breakdown Service is also available New Zealand wide.

Foreign aircraft support

With CASA and FAA Licensed Engineers, Avcraft can also support US and Australian registered aircraft for Scheduled Maintenance, Repairs and Breakdown Support. US and Australian Certificates of Airworthiness and Export Certificates of Airworthiness can be issued locally. Avcraft have the experience and licence coverage to provide a full range of services to those operating foreign registered aircraft in New Zealand.

For more information

Call Mat or one of the team at Avcraft on 06 212 0920, email: mat@avcraft.co.nz or drop in to the hangar at Feilding Aerodrome and discuss your maintenance needs.



A typical day in the Avcraft hangar.



Cessna 402B full strip and repaint in progress.



Electroair Electronic Ignition System fitted to turbocharged Continental. The first fitted to a Cessna 402B worldwide!



Tronair Cabin Pressurisation Unit being used to fault find pressurisation system in a King Air 300LW.

Thinking about Avionics ?

NEW G5 with STCs covering 562 models !

G5

Replaces traditional attitude indicator or turn coordinator Fits std 3-1/8" mount 4 hr battery backup

\$2149* excluding installation



G500/600

Garmin's Integrated Flight Display with Optional SVT

Installed from \$19551*



GTN-750

Garmin's all in one GPS/Nav/Com Transceiver with internal Datacard

Installed from \$16893*



* Please note all prices are in USD at time of print, excluding GST, freight and Customs charges.

GTN-650

Garmin's all in one GPS/Nav/Com Transceiver with internal Datacard Installed from \$11743*



GTX-335/345

Garmin's ADS-B Out Transponder with optional inbuilt WAAS Receiver and ADS-B In from \$3295*



KT-74

Bendix-King's ADS-B Out Transponder from \$3749*



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Central Aero Engineering: "Here to Help"

THERE'S no question that Waikato based aircraft operators who have interesting aircraft and seek fair-value maintenance seem to gravitate towards Central Aero Engineering at Hamilton Airport. The company has a very wide range of aircraft on its books and aside from routine maintenance will inevitably have one or two 'projects' on the go in their hangar at any one time. Owner and licensed engineer Paul Waterhouse says that's because his small team derives a lot of satisfaction from taking on unusual or difficult jobs and delivering great results. Plus, he says that because overheads are comparatively low for the level of equipment and experience they can provide, costs can be maintained at an affordable level. That's an especially important consideration for their large number of private and recreational flying clients – and an added bonus for the numerous commercial operators whose aircraft Central Aero also care for.

What's been happening

Recent hangar diversity has included a Glasair III, Piel Emeraude, and GA8 Airvan - all for routine maintenance, a Cessna 172S which was damaged in the usual way at Raglan requiring repairs to the fuselage and some wing trauma, an RV7 that required extensive repairs after a ground altercation with a hidden obstacle, several hot air balloons for inspections and maintenance, and more. It's an eclectic mix and no wonder that Paul says "every day is interesting".

A regular visitor is a Piper Cherokee, which aside from routine inspections has been undergoing an ongoing refurbishment "a piece at a time" in order to keep costs manageable for its owner.

For those in the know about the difference it can make, prop balancing occurs from time to time, the most recent job being for a Pioneer 300 owner who went away very happy – the job successfully eliminating "that noise" there used to be.

All manner of rotorcraft are regularly through the hangar too. When KiwiFlyer visited, Heliworx's JetRanger was being test run

after a chip plug activation led the team to a turbine bearing failure. Central Aero removed and refitted the engine which was repaired by Airwork at Ardmore. Home-built Safari helicopters are also often seen for inspections and routine maintenance, Central Aero having developed a lot of familiarity with the type. At the other end of the scale, an AirCommand autogyro recently appeared with a seized Rotax engine – traced to having previously had incorrect pistons fitted by a prior owner.

Services and Capabilities

Central Aero Licensed Engineers Paul, Steve, Kanda and Hamish have a great deal of experience from which to tackle most jobs regardless of how unusual or difficult they might be.

Central Aero services cover everything from pre-purchase inspections worldwide, shipping container handling, CoA preparation and issue, airworthiness reviews, maintenance, repair and restoration of all flying machines, 24 month avionics checks (including mode S transponder testing), dynamic prop balancing, weight and balance services, maintenance control for private and air transport operators, accident and incident investigation, builder support, parts and materials supply, - and "good old-fashioned free advice".

Paul says; "If you own it, or fly it, no matter what it is, from hot air balloons, to twins and helicopters piston engines and turbines, give us a call, WE ARE HERE TO HELP".

Recently Paul has found himself in demand to provide

support for people sitting their oral LAME exams - from the point of view of covering legislation and how 'proper' logbook entries should be made. "We've helped several candidates now from a practical viewpoint to explain more about what is being achieved with correct logbook completion and what they should be looking for," says Paul.

Paul's contact details at Central Aero Engineering are: 07 843 1200, 021 743 033, paul@centralaero.nz or visit www.centralaero.nz



First run of Heliworx' JetRanger after a turbine refit following bearing replacement.



Central Aero have become specialists in balloon inspections and maintenance.



Clockwise from left: 1 Wood and fabric work are no obstacle. 2. Propeller balancing is another speciality. 3. Glasair III in the hangar, good for 250 kts.

Central Aero Electrical Limited

NEXT door to Central Aero Engineering is Central Aero Electrical Ltd. Owner Martin Ross and his team of two have a reputation which Martin modestly describes as being, "handy people – we're good at twisting our minds around unusual problems and designs". Evidence of this was on the workshop bench when KiwiFlyer visited. Among other repair and overhaul work was a fuel sender unit, a low rotor rpm unit, and an expensive GPU potentially rendered obsolete due to a problem on a circuit board. Martin says they can often help save a lot of money when replacement is the only other apparent option. One of his frustrations is the increasing number of modern parts which suppliers are engineering to be return-to-base for all maintenance – so they are working with a Design Organisation on STCs to enable much cheaper and faster local options for operators.

Central Aero Electrical has a comprehensive range of diagnostic equipment and a large test bench that 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. Mechanical actuator overhauls for various rotary and fixed wing types are a regular job as Martin's collection of manuals grows. Operators may find that other potential overhaul facilities can't undertake this work due to not having necessary documentation. They should contact Martin who might be able to help.

Turbine electrical components also frequently pass through the shop, including starter/generator overhaul work for Pacific Island companies.

Central Aero Electrical stocks a variety of parts for re-sale including starters, batteries, alternators, strobe units, starter generators, GCUs, voltage regulators, ignition switches, and HT ignition harnesses. Various exchange items are available. And Martin continues to build relationships directly with component suppliers, allowing him to purchase direct and bypass the aircraft manufacturer's mark-up. These are savings Martin says he is happy to pass on to customers. Contact Martin on 027 733 0208 or email: centralaero@clear.net.nz

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Aircraft Sales & Support



The Best Gear for Lifting

Hooks, Long Lines, Nets and more from Rotor and Wing

HELICOPTER lifting work needs equipment that is safe and efficient to use. Given that acceptable safety standards are not clearly designated however, the most an operator can do is choose well-designed equipment and have it tested at regular intervals. The other difficulty operators face in obtaining the best gear is that suppliers of related equipment are often commercially driven and not aviation focused.

Taupo based Rotor and Wing Maintenance Ltd may be able to help. The company has decades of experience in supplying a range of lifting gear that includes long lines, cargo nets, remote hooks and swivels. "Our products are supplied with safety, reliability and performance in mind," says John Hobday, Rotor and Wing's Chief Engineer.

Remote Hooks

John recommends the Onboard Systems remote hook. "They have a good range of

sizes and are an affordable option," says John. The Rotor and Wing Cargo Hook shop has no problems with service and spares and these hooks have a five-year overhaul interval.

Long Lines

Historically there has been a proliferation of different lifting lines in use. What is increasingly important is the standard of safety afforded by the different options. "We have decided to work with a safety ratio of 9:1," says John. "In the past, there have been problems with the inspection and testing of long lines which could not be easily disassembled for inspection." This problem has been resolved in the design of lines made by Rotor and Wing. While still made from Dymena rope and encased in a protective tube, the entire casing is easily removable allowing full access for inspection and testing without undoing the splicing.

Cargo Nets

High quality cargo nets are stable in flight. Having a cargo net made and designed for New Zealand conditions keeps things simple. "We are fortunate to have the skills in New Zealand to produce rugged nets," says John. "There is no need to rely on imported nets."

The point of difference with nets produced by Rotor and Wing Maintenance is they are made by hand using strong polyester rope. John explains; "Hand-made nets are rugged and will last. Many of the nets made by our net maker are still giving good service after 20 years. Imported products are mostly machine made and aren't easy to repair."

The Rotor and Wing nets are stable enough not to roll up when the helicopter lands and can also be thrown over ground objects waiting to be loaded.

Nets come in two sizes: 3m x 3m and 3.7m x 3.7m but other sizes can be custom made. They are supplied in a breathable carry bag that helps them stay dry.

Swivels

A swivel and its associated electrical connections are fitted above the remote hook to prevent damage to lifting equipment caused by rotating loads. Rotor and Wing manufacture these or can supply the Onboard Systems swivels.

Supply and more information

Rotor and Wing's Mike Bennett has nearly 10 years experience supplying long lines and other ropes. He has been responsible for the test and certification of many products for both the aviation and logging industries, and is very familiar with best practice. Mike recently attended Lift-It training on the use of synthetic slings which he found very informative. "I can see where aviation sits compared to the other industries I have supplied for," Mike says.

John is always looking for new ideas or ways of improving safety, performance and reliability of equipment for his customers. Next in the pipeline are three-aside bike racks for the Bell LongRanger and a hot refueling kit for the Robinson R44.

For more information contact John via john@rotorandwing.co.nz or Mike via stores@rotorandwing.co.nz

Exclusive KANNAD Part 145 Repair and Service Facility

Aviation Safety Supplies Ltd located in Tauranga is the only KANNAD approved Part 145 KANNAD repair station and warranty replacement facility in New Zealand. Lloyd Klee has been a distributor for Kannad product for well over 20 years.

Kannad ELTs do need to be returned to an approved facility for battery replacement as specialised software and testing equipment is needed to re-certify them. Thorough testing as per the Kannad CMM ensures that the ELT is fully functional when it leaves the facility. Aviation Safety Supplies Ltd has just renewed their CAA Part 145 approval and also holds ISO9001:2008 certification.

Lloyd is also an active participant in several RTCA working groups that are reviewing the next generation 406MHz ELT which will activate due to flight anomaly.

The company offers a prompt 24 hour service for most 406MHz service requirements and have Kannad & Artex exchange ELTs available for AOG situations and/or any repair requirements.

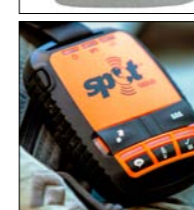
In addition, they carry good stocks of new and refurbished Kannad Compact

ELTs. They also stock the newer Kannad Integra models of both fixed wing and helicopter versions. A new promotion is now offering a TEN year warranty on all new Kannad Integra ELTs and a short term promo offers a free replacement battery for the Integra range. Aviation Safety also has a trade in (rebate) arrangement for those wishing to swap from Artex to Kannad.

The company also stock and service a range of Inflatable Lifejackets, Carbon Monoxide Monitors and most brands of 406MHz PLBs. Brands stocked include Baltic, GME, Kannad, McMurdo, Ocean Signal, Switlik inflatable TSO lifejackets (stowable ten year service and X-Back Helicopter series), the Switlik Single Person Liferaft, a new SWITLIK liferaft with a five year service life and WS Technologies 406MHz ELT Testers. Tracking

devices such as the SPOT 3 and the newer In-Reach SE are also stocked.

For all enquiries on any 406MHz ELT and PLB products, accessories, servicing and repairs contact Lloyd on 07 543 0075, email: sales@aviationsafety.co.nz or visit www.aviationsafety.co.nz



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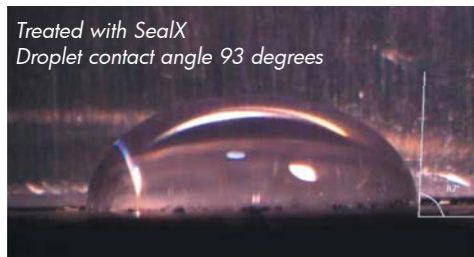
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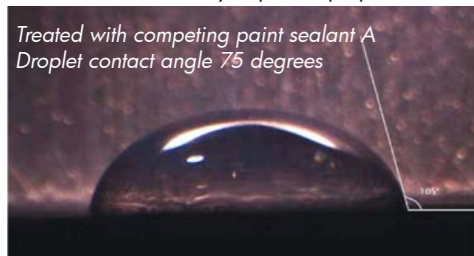


Serious Paint Protection with SEALX

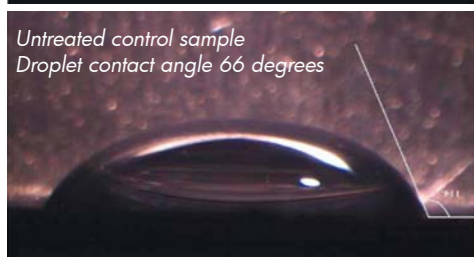


Treated with SealX
Droplet contact angle 93 degrees

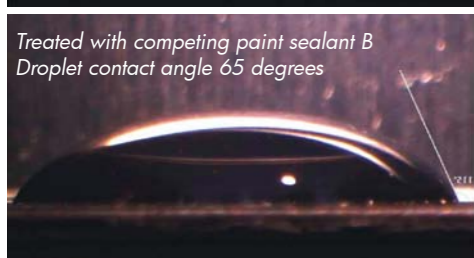
These are water droplet images on a painted surface exposed to 200 hours of QUV-B light, simulating more than six years in NZ sunlight. SealX (above) was the only treatment which maintained true hydrophobic properties.



Treated with competing paint sealant A
Droplet contact angle 75 degrees



Untreated control sample
Droplet contact angle 66 degrees



Treated with competing paint sealant B
Droplet contact angle 65 degrees



This recently SealX'ed King Air is almost glowing and isn't even outside in the sunlight.

A GREAT many of New Zealand's aircraft fleet have the misfortune to live outdoors. And even those that are hangared are of course still outside for much of their time where they are exposed to our fairly harsh (particularly in terms of UV) climate. Given that it costs at least \$10,000 for even an average repaint job on a small aircraft, and vastly more as they get larger or for quality work, it's prudent to do as much as you can to protect your aircraft's paint now, before nature and time can degrade it any further.

Anyone who cleans and polishes their car or aircraft using automotive products will know that if the vehicle lives outside, the polish is pretty much gone within six months – a lack of water beading telling the tale. Over the last couple of years, a variety of specialist-applied products have appeared in the market – often touting nano-particles or similar, and claiming to provide long term paint protection. Not all live up to their claims however and very few have been laboratory tested or approved for aviation use.

A product which has been laboratory tested and certified, can offer certified proof of claims made, and is approved for aviation use by Boeing and Airbus, is SealX – distributed in New Zealand by Tom Muller of International Yacht Services Limited based in Whangarei. KiwiFlyer readers might recognise Tom as also being the exclusive authorised distributor of CorrosionX in this market (via Corrosion Control NZ Limited).

SealX provides a very long lasting UV shield to almost any surface it is applied to, including paint, plastic, glass, Plexiglas, Lexan, Perspex, and more. Paint in poor condition will need to be cut first, but if in good existing condition then may be 'primed' using a SealX cleaning solution which is then wiped off before spraying on SealX itself. The surface is then buffed off with a clean microfiber cloth. Subsequent cleaning can be achieved with water alone or any PH-neutral cleaning product (SealX Drywash or SealX Wash diluted to 1:300 are ideal). SealX products are water-based and environmentally friendly. The products are also MPI approved in NZ for use in public areas and food processing plants.

Independent testing

Laboratory tests confirm that SealX lasts significantly longer than other products making similar claims (some of which are offered with 12 year guarantees). Independent ASTM testing by Dulux Laboratories proved that only SealX met criteria for maintaining true hydrophobic properties on treated surfaces (paint and fabric) after completion of 100 hours QUV-B exposure (simulating about six years in the New Zealand sun). Commentary regarding the test by Dulux comparing four products on four surfaces was as follows:

- After 24 hours QUV-B exposure, surface cracking was noted on the (untreated) fibreglass control specimen. (This clearly shows how harsh the test was.)
- SealX treated specimens were the only specimens to show advancing contact angle greater than 90 degrees after 100 hours of QUV-B exposure.

Application and Cost

A further advantage of SealX is that is quite suitable for DIY application. Product is available in 500 ml spray bottles or by bulk quantity for higher volume users. Tom says that a typical light aircraft might require \$200-\$300 of product. Application of the primer/cleaner and then SealX sealant will take no more than a few hours if the existing paintwork is in good condition – an incentive to therefore apply

the product to new or freshly detailed aircraft. Restoring older, faded paint by cutting can easily add half a day to the job, but in general if a SealX agent is engaged to complete the work, costs can usually be kept below \$1000+GST.

As Tom is quick to point out, it's an investment that really does deliver a return. Not only will the aircraft look better, it will be hugely easier to keep clean, it won't require expensive repainting or paintwork maintenance every 10 years, and it will maintain a higher resale value.

You can also apply SealX to your car of course. Assuming that no cutting is required, a SealX agent will do the job for a standard charge of \$500+GST per car (which includes the cost of materials), and in a clear demonstration of faith in the product, the job comes with a five year transferable guarantee.

A well-established existing SealX and CorrosionX applicator is Johan Pienaar of Streamline Protection in Hamilton. Johan has been applying SealX to all manner of vehicles and aircraft since 2014. Aviation applications have ranged from a Tecnam P2008 to a Falcon 900EX as well as helicopters from R22 to EC130 and at times included full restoration of very degraded paint surfaces. Johan says they can achieve outstanding results with the SealX product range, often to the astonishment of vehicle and aircraft owners. A recent very successful job has been the Garden City Helicopters King Air C90. Johan welcomes enquiries for SealX application in the greater Waikato area. Contact him on 021 0812 0614, email: info@streamlineprotection.co.nz or visit www.streamlineprotection.co.nz for testimonials and further information.

New Applicators sought

Several opportunities are available throughout NZ for persons interested in becoming an accredited SealX agent and applicator. Tom welcomes all enquiries, whether for solely an aviation focus, or an interest in covering the application spectrum of cars, boats, motorhomes, etc.

For more information

SealX aviation applicators are currently located near Auckland, Hamilton, Tauranga, Napier, Nelson, and Wellington airports. More information is at www.sealx.co.nz which also includes application instructions, video and test certificates. Tom Muller can be contacted on 021 469 972 or info@sealx.co.nz



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Engineering for Aviation

Fieldair have it covered

Fieldair Engineering Limited has a proud history that now spans more than 60 years, from the early days of topdressing by Tiger Moth to the present expansive operation with bases in Palmerston North, Auckland, Wellington and Christchurch. The company has a wide operational scope which covers all aspects of aircraft Maintenance, Engineering and Overhaul for a very broad range of customers from light GA through to heavy airline. Company approvals include NZCAA Parts 145 Maintenance, Part 148 Manufacturing, 19F Supply and BVQI AS/NZS ISO 9001. The company comprises two Divisions; Aircraft Maintenance and Engineering Support, both supported by Financial, Administrative and QA elements.

Aircraft Maintenance Division

With facilities at Auckland, Wellington, Palmerston North and Christchurch, Fieldair's experienced teams can service most aircraft makes and models flying in New Zealand today – from very small to very large.

Engineering Manager (Aircraft) Andrew Lynn says their aircraft maintenance personnel are committed to providing the highest level of service excellence. "Our quality workmanship is supported by stringent internal and external quality and regulatory controls (NZCAA and BVQI). We provide a 24-hour service with minimum down-time to get operators back in the air quickly, with a 'no compromise' attitude in terms of flight safety. Partnering with Fieldair for the maintenance of your aircraft means placing your investment into reliable, experienced hands with a long-standing reputation for attention to detail." If you have a technical problem or just need to bounce some thoughts around then call Andrew on 06 350 0959 or email: andrew@fieldair.co.nz

Engineering Support Division

Within the main Fieldair base at Palmerston North is the Engineering Support Division managed by Peter Lowen. There are four support sections; Avionics, Engine and electrical components, Supply and General Engineering. All sections are kept busy providing services to a wide range of aviation related operators and activities. From research and development within the Avionics section currently involved with commercial UAVs, providing niche engine repairs within the engine section, to worldwide logistics support within the Supply section, and finally design and manufacture of airline and transport related GSE within the general engineering section, Fieldair is a 'one stop shop' for all of your aviation related requirements. Engineering Support functions are further described in the following paragraphs or you can contact Peter on 06 350 1746 or email: peterlowen@fieldair.co.nz.

Engine Repair Section

Fieldair first began overhauling aircraft engines in 1969 and over the years has acquired the experience and ability to overhaul most engine types common used in New Zealand today. This includes radial engines, the company having a wealth of experience on types such as the Wasp Junior (P&W R985), the Wasp (P&W 1340), and the Double Wasp (P&W 1830). The company is certified by Lycoming as a service centre, and caters for a variety of other makes. Services available in the Engine Shop include cylinder repairs, exhaust system repairs, NDT, propeller balancing and aviation machining. Fieldair also has Lycoming IO-720 engines available.

The engine repair section also incorporates an electrical component workshop that offers repair and overhaul services for an extensive range of fixed wing and helicopter components, including generator control units, starter generators, alternators, actuators, switches, motors, starters, magnetos, fuel pumps, voltage regulators, ignition harnesses, reverse current relays and all ignition system components.

All enquiries for engine and electrical component support at Fieldair should be directed to Quentin Hughes on 06 350 0956 or email: quentin@fieldair.co.nz.

Avionics Section

Fieldair's Part 145 approved Instrument and Avionics department offers a wide range of instrument calibration and repairs. Services range from fast annual avionics checks through to the installation of full glass cockpits, and same-day turnaround on AOG instrument work including an exchange option (stock permitting).

Specialising in compass and gyro instruments, Fieldair is also an authorised Repair and Maintenance facility for ACR/ARTEX locator beacons, as well as a Programming and Battery Replacement facility for Kannad ELTs.

They are also a Service Centre of Excellence for Garmin products and are at the cutting edge of UAV developments in NZ. For all aspects of instrument and avionics support, contact Chris McLaughlin on 06 350 0957 or email: chrism@fieldair.co.nz.

Supply Section

Supply Manager at Fieldair, Pat Elliot says they operate what amounts to a (CAA Part 19F approved) "Supply Supermarket". This department provides parts, spares, advice and a research and locating ability in support of the wider Fieldair Group - as



Plenty of variety in the Fieldair hangar: Squirrel, Jetstream, Diamond, DC3...



Ops management, crew and maintenance are provided for Parcelair & others.

well as being available to assist external customers at any time. "We're a cost-effective and efficient way to source spares and equipment specific to the wide range of aircraft types operating in the region -including throughout the Pacific Islands," says Pat.

Fieldair customers may avail themselves of a free parts procurement service, as well as having access to search the Fieldair inventory on-line via their website. A same-day dispatch service is available for all stocked items. Pat Elliot can be contacted on 06 350 1743 or email: pat@fieldair.co.nz

General Engineering Section

Lead by Sean Henderson (06 359 0452 or sean@fieldair.co.nz), the General Engineering section at Fieldair undertakes the design, provision and repair of air and road cargo equipment.

Products include aircraft freight containers, collapsible freight pallet systems, road transport pallets, and more. The team has a wide range of technical skills including for design, fabrication and (aluminium and steel) welding services. The General Engineering Section, in cooperation with Flight GSE in Christchurch, manufactures a range of aviation Ground Support Equipment (GSE), including Air Stairs, Ramp Equipment, Nitrogen Bottle Carts and Engine Dollies. The company also designs and builds aircraft maintenance platforms and steps, aircraft potable water and lavatory carts, fuel drum carts, aviation work benches, and other ramp and airport products including aircraft wheel dollies and baggage trolleys to suit all airlines.

At Palmerston North airport, ground support also extends to aircraft ground handling and refueling services.

Expanding Operations

Fieldair Engineering is constantly looking at ways to expand their operations to cover all sectors of aviation engineering and general aviation operations.

As recent examples, Fieldair through its subsidiary Air Freight NZ, holds both NZCAA part 121 and 125 certificates, provides the Life Flight Trust with AOC and operations management, staffing of flight crew, and engineering maintenance services for its fixed wing operations. Life Flight Trust provides a 24/7 nationwide air ambulance service transporting critically ill patients who urgently require specialist medical care, often only available at one or

two hospitals in New Zealand.

Fieldair has recently expanded its capability in servicing, maintaining and modifying helicopters with Group 1 and 2 coverage for BK117, BO105, AS350/355 helicopters.

Fieldair, as part of the Freightways Group, also supports the recently introduced Parcelair overnight freight operation that operates three B737-400 aircraft which fly between Auckland, Palmerston North and Christchurch.

The Flying Squad

The cost of ferry flights as a non-revenue activity is something operators, especially in the South Pacific Islands, seek to avoid. Depending on the work required and regulatory authority certifications, the Fieldair team can carry out service in-house or in the field. This can often be a more cost effective solution than ferrying (especially larger) aircraft back to a base in New Zealand.

The Fieldair Way

A company doesn't grow from a single Tiger Moth spreading fertiliser, into the large organisation that Fieldair is today, without developing a 'corporate culture' along the way. General Manager of Fieldair Holdings Limited, Charles Giliam says that, "The 'Fieldair Way' embodies much about what it is to be a New Zealander. It reflects an ability to think outside the square and offer outstanding customer service. It shows up in innovative and effective products and the ability to assist operators from Stewart Island to Kiribati. Most of all it embodies the proud history and reliability one would expect from being an industry leader for the last 60 odd years. It's a great legacy to hold on to and one that we're all very proud of."

For more information

Find out more at www.fieldair.co.nz or contact the people listed in this article. Fieldair's main office number is 06 357 1149 or email: fieldair@fieldair.co.nz

Captions:

1. Andy Ridler ensuring the right components and paperwork are supplied.
2. Deep Maintenance – two experienced engineers inspect a belt frame.
3. Mat Lee putting the finishing touches to a freshly overhauled Lycoming O-720.
4. Ground Support Equipment manufactured by Fieldair.
5. Precision repairs on an avionics instrument being carried out by Scott Hawthorn.
6. The Life Flight Trust air ambulance, operated by Fieldair on behalf of the Life Flight Trust.





Hamilton Aero Maintenance

BASED at Hamilton Airport for over 30 years, Hamilton Aero Maintenance maintains a wide range of aircraft including recreational, charter, agricultural, air ambulances, corporate jets and even airliners.

Widely referred to as HAM Aero, the company has aircraft flying in from all over the North and South Islands and the South Pacific. Staff also regularly travel to carry out maintenance requirements for their customers which can be as far away as Africa, PNG, Asia and the USA.

HAM Aero have a high ratio of licensed engineers in the hangar as well as skilled tradesmen and trainees. Their engineers hold a multitude of ratings including piston engine, turbo-prop engine and jet engine as well as non-pressurised, fabric airframe, composite and pressurised ratings - ranging from Cessna 150 up to Airbus A340 and B777.

HAM Aero engineers have decades of combined experience and between them hold NZ CAA, US FAA, EASA, Australian CASA and PNG CASA Licences. HAM Aero also have a team of highly skilled contractors who can be called on when required - specialising in structural repairs and modifications. Everything from scheduled maintenance, damage repairs, refurbishment, modifications and STC installs are carried out by the team.

HAM Aero hold NZCAA Approvals up to A1 (aircraft over 13700kg) as well as Supply and Component approvals. HAM Aero also hold Civil Aviation Authority Philippines (CAAP) Part 145 and Department of Civil Aviation Malaysia (DCAM) Part 145 approvals to carry out airline line maintenance at Auckland Airport.

Hamilton Airport is also fortunate to have a number of other support services on the airfield and in the local area including: aircraft electrical, welding, machining, parts and raw material supply, upholstery and composite repair, and a Part 146 design facility nearby. There are also paint facilities available to paint items from individual components up to a complete aircraft. HAM Aero has a range of PT6 and Beech (B200/C90) tooling as well as a fuselage pressurisation rig for tracking down those pesky leaks.

Of course HAM Aero Maintenance sister company Hamilton Aero Avionics is a part of the service offered and the two companies work hand in hand to offer complete solutions.

Whether it's private or commercial, propeller or jet, a single or 300 seater, Hamilton Aero Maintenance's philosophy remains the same - to maintain a total commitment to Quality, Service and Safety for all clients.

For more information

For all Aircraft Maintenance requirements, give the team at Hamilton Aero Maintenance a call on 07 843 6063, email: hamaero@hamiltonaero.co.nz or visit www.hamiltonaero.co.nz

Hamilton Aero Avionics

Hamilton Aero Avionics has been a part of the landscape at Hamilton Airport since 1992 when the company was formed by Clive Law-Brown and Hamilton Aero Maintenance. Since then the company (known as HAM Aero Avionics) has provided quality avionics support for a large variety of aircraft. Whether, private, corporate, fixed-wing or helicopter, piston or turbine, the team at

HAM Aero Avionics do it all. Working in conjunction with HAM Aero Maintenance means a complete range of services can be supplied.

HAM Aero Avionics carry out aircraft avionics inspections, defect rectification and bench repairs as applicable. New installations of upgrades and modern 'glass cockpits' are specialties of the HAM Aero Avionics team, who are experts at "doing the (almost) impossible". This

team currently consists of three licenced avionics engineers with Electrical, Instrument and Radio ratings covering gliders and microlights up to B737/Beech 1900, plus two licenced avionics contractors (Beech 1900/Metro 227). Together they can account for over 150 years in accrued aviation experience.

The company represents the majority of GA Avionics manufacturers through its membership with the Aircraft Electronics Association (AEA), an international association connecting thousands of avionics facilities and hundreds of manufacturers.

Due to the micro-engineering of modern avionics many systems now require 'return to manufacturer' for warranty or repair and as approved agents for the leading avionics manufacturers, in the unlikely event of repair being required, HAM Aero Avionics can liaise directly with factories on the customer's behalf.

HAM Aero Avionics also specialise in EMS machines, both fixed and rotary wing for a number of Air Ambulance Trusts, and are currently performing upgrades for new PBN requirements (RNAV and RNP) for both private and air transport operators. This includes Software Configuration Management and Electrical Load Analysis requirements.

HAM Aero Avionics are proud to have recently completed the first private Part 91 RNP installation with CAA approval.

HAM Aero Avionics have already completed some ADS-B installations for the future surveillance systems proposed by Airways and CAA. They also carry out various special op's installation work on agricultural machines.

For more information

HAM Aero Avionics speciality is tailoring your avionics requirements to suit you and your operation. Contact them on 07 843 1106, email: avionics@hamiltonaero.co.nz or visit www.hamiltonaero.co.nz



Garmin G600 and GTN650 installations by HAM Aero on a BK117 helicopter.

Plane Torque Ltd. sets up maintenance services at Hastings Aerodrome

NEWLY established at Hastings Aerodrome, and with a fresh approach to maintenance provision, is Plane Torque Limited. Director and Licensed Engineer Nic Roberts has recently commenced operations in the old NZ Aerial Mapping hangars, in accordance with his CAR Parts 43 and 66 privileges.

Customer Focus

Nic is very enthusiastic about taking the opportunity to build up a new business and alongside a long list of existing capabilities, has formulated a strategy to provide a level of

customer-focused service that is sure to attract and retain aircraft into his care.

Nic says he recognises that for operators to be successful in their own business, they need cooperative aircraft maintenance. "In the past, aircraft maintenance provision was straightforward and compliance requirements on operators were not overly complicated. This is fast changing however, and operators are finding themselves inundated with complexity and compliance responsibilities," says Nic. It's Nic's goal to help take care of these requirements and to provide maintenance services in a manner that increases efficiency and minimises costs - whether for private, club, or commercial operators requiring careful availability management. Nic acknowledges that no two operators are the same and is happy to develop tailored customer support solutions with maintenance and pricing plans that suit individual needs.

Experience and Capability

Having travelled and worked extensively overseas during his seventeen years in the aircraft maintenance industry, Nic has returned home to Hawke's Bay where he grew up and went to school. His career began with six years of service in the RNZAF where he qualified as an Aircraft Tech while posted to 5 SQN. He subsequently gained his LAME qualification and worked throughout

Hawke's Bay maintaining aircraft operating under a variety of rule parts including Parts 91, 115, 135, and 137. These roles provided for a wide range of experience across different aircraft and systems including Cessna, Piper, Beechcraft, Pratt &

Whitney, Lycoming, Continental, and more. Nic has Inspection Authority approval and is licensed for Group 1 & 2 airframes and engines and the PT6A engine series. He has also attained a Massey University Graduate Diploma in Aviation Studies.

Nic's experience includes undertaking major modifications

such as turbine conversions on Fletcher aircraft, installations of High Floatation landing gear systems, aircraft conversions from parachute to ag. operation, engine conversions and engine upgrades within PT6A series engines.

Nic has extensive heavy maintenance experience on PT6A turbine engines within NZ and internationally including hot section inspections, escalation programme management and maintenance, MORE engine programme experience, and Engine Condition Trend Monitoring (ECTM).

Major structural projects such as rebuilds and/or restorations can also be undertaken.

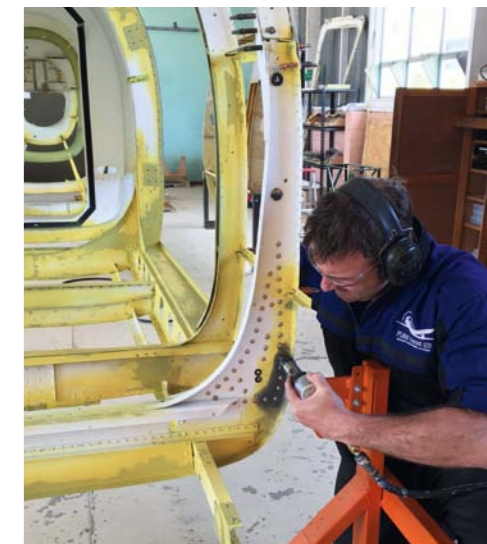
Nic's time spent overseas has involved consultation and maintenance oversight for international ZK registered aircraft, including major modifications and repairs. Nic has also designed and delivered training to international customers on behalf of New Zealand aircraft manufacturers.

Ready to Meet

Nic looks forward to meeting operators in the Hawke's Bay and wider regional area and invites anyone he hasn't already caught up with, to give him a call whether it be for advice on any issues they have, or to have a chat about the services and support Nic can provide them with. Contact Nic on 021 068 2271 or email: planetorque@gmail.com for more information.



Currently in the Plane Torque hangar is this PAL 08-600 Cresco being restored for Aerospread Ltd.



Nic riveting the Cresco's L/H rear wing attachments.

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Solo Wings expand again at Tauranga

IT'S now 17 years ago that Colin Alexander started a small business at Tauranga Airport, providing professional maintenance services for microlight aircraft. This was a time when most microlight flyers were still do-it-yourself types. Colin's sense of the future has been well proven in the years since, with huge growth in the recreational flying industry and Solo Wings alike. Jointly owned by Colin and Philip Churchill, Solo Wings (2010 Limited)' philosophy has remained much the same; Colin says they still take on the jobs that others are shy of, and indeed take pride in "going the extra mile on anything more difficult or obscure".

Aircraft under the Solo Wings umbrella of care include everything from early rag and tube microlights, vintage wood and fabric aircraft, through to carbon-fibre sport planes with glass cockpits, autogyros, and experimental category aircraft such as an Albatros L-39 jet. The company also looks after numerous amateur-built and GA aircraft.

Solo Wings are factory appointed as a Service Centre for many of the major recreational aviation brands, such as Tecnam, Pipistrel, Viper, Auto-gyro Europe, Rotax, Airmaster, and more. Colin says they enjoy direct access to the manufacturers' technical people, many of whom they have personally met on factory training courses and visits. In the case of Rotax, Solo Wings are the only New Zealand maintenance provider approved by the factory as a Rotax sales, maintenance and overhaul facility.

Import and Certification Processing

Being located close to the Port of Tauranga means that Solo Wings can provide very efficient import and export services and thus they handle dozens of such projects every year. As an MPI approved sea container transitional facility, Solo Wings staff are qualified to carry out all containerisation tasks for either direction of travel. Incoming aircraft can be assembled at Tauranga and then placed on the NZ register with Solo Wings attending to all certification and paperwork requirements.

A recent arrival of interest was the first Pipistrel Taurus Electro for NZ. This self-launching electric powered glider is based at Tauranga – alongside an almost complete set of other aircraft in the Pipistrel range, also under Solo Wings' care.

The Aviation Centre and Propeller Pad

The big news of 2016 from Solo Wings has been the development and opening of their brand new facilities; The Aviation Centre and The Propeller Pad. The latter offers pilot accommodation at the airport and the former provides flight training services across the spectrum of GA and microlight/sport fixed-wing aircraft including seaplanes, plus autogyros. Look out for more about this in the December issue of KiwiFlyer. Suffice to say Solo Wings can now not only acquire or import your aircraft for you, but also teach you to fly it. This is in fact the case with the current arrival of an Aviat Husky coming in from the USA.



Recently departing the Solo Wings hangar is this good-as-new Citabria, following a complete strip, rebuild, and repaint.

General Maintenance and SAMMS

Solo Wings have all of the standard facilities in place for professional aircraft maintenance including weight and balance equipment, and dynamic prop balancing tools. They can carry out all manner of composites work on fibreglass or carbon fibre, as well as undertake wood, fabric and metal work from minor repairs to major fabrication.

A separate clean-room contains an engine shop, kept busy in part via their approval as a Rotax overhaul facility. Colin says they have undertaken plenty of engine work over the last 12 months – across the spectrum of types including for radials.

Maintenance requirements for all aircraft under Solo Wings care are kept track of via SAMMS, an online software tool (developed in-house) dubbed the Safer Aircraft Maintenance Management System. Solo Wings engineers use permanently-online tablets for managing checks, time studies, stock maintenance, due list updating, tasks per plane, and more. SAMMS can also be loaded

with maintenance manuals and instructions for use on the job; for example Cessna SID's programme details. The system is fully automated to create Loose-Leaf-Log-Entries on job completion and is also available online to customers to assist with their maintenance control and to eliminate due date or work scope surprises.

Rebuilds and Insurance work

Solo Wings offer a complete service for recovery, assessment and rebuild of damaged aircraft and receives a steady amount of work from insurance companies and private owners who have had a bad day and need someone to put everything right again. The company also becomes involved in accident investigation when required.

In the Aviation Community

From the beginning, one of the Solo Wings principles has been to participate in and support the aviation community, particularly in regards to safety and education. To this end, they are maintenance providers at the Walsh Memorial Scout Flying School and make regular presentations to Young Eagles groups. In support of their apprenticeship programme, Solo Wings is NZQA registered as a Training Work Place and has two in-house registered Assessors.

Colin also undertakes an annual Solo Wings roadshow (via RANZ organised gatherings) presenting maintenance courses throughout the North and South Islands. He is also very involved in writing other national maintenance and safety education material, as well as being active in the New Southern Skies programme.

For more information

If you need advice for recreational or other aircraft maintenance, aircraft importing, or support with an aviation project, give one of the team at Solo Wings a call on 07 574 7973, email: info@solowings.co.nz or visit www.solowings.co.nz

From Concept to Creation

High Demand for Flight Structures' Design and Build Services

HAMILTON Airport has been a hive of activity in 2016 with local companies collaborating to develop first-class role conversions and equipment for operators across New Zealand. In their busiest year yet, Flight Structures Ltd. has undertaken projects covering the spectrum of major airframe repairs, through to bespoke airframe modifications, and role equipment development across aero-medical, agricultural and the general aviation sectors.

The company has grown steadily since inception in 2003, recently expanding again to meet demand - relocating to a larger facility and taking on three additional staff. Their workshop now includes a range of metal and composite manufacturing processes, and the company also has numerous accredited sub-contractors available on call to produce componentry when required.

Flight Structures holds CAA Part 146 (Design) and Part 148 (Manufacturing) certificates. CEO Jon Kerr says that the company started its manufacturing division with two goals; "To provide complete solutions for our clients and work on in-house projects. Our competitive advantage lies with design-build prototypes and short run projects where we can leverage off our expertise in design and certification. Our strength is being able to move quickly on our feet to provide entrepreneurial customised products."

Contact Flight Structures on 07 843 1128 or by email via info@flightstructures.co.nz For examples of STCs, recent projects and much more information, see www.flightstructures.co.nz

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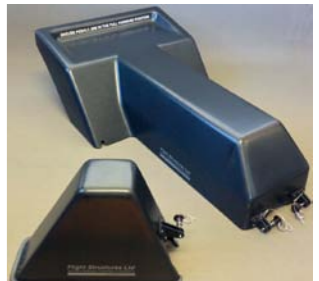
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Inhibit corrosion by washing with Zi-400 University Laboratory Tests Prove the Benefits

CORROSION is very expensive. Ask anyone who has taken their aircraft through a Cessna SIDs programme or a 12 year inspection. Thus it makes a lot of sense to do everything you can to prevent it happening (either at all, or at least so fast) in the first place. We all do our best to keep our aircraft clean, but many owners treat that task as exactly that – a cleaning process. They choose whatever cleaning product looks best from their local automotive store without realising that such products are generally designed only for shine – and that nearly all, by the nature of their chemistry actually cause corrosion in aluminium. All too often, corrosion protection is treated as something you spray on particularly sensitive parts that aren't protected by paint or other coatings.

There's merit in doing that, but the less obvious corrosion can also cost big dollars at overhaul time when almost microscopic pitting on important components puts them out of tolerance for re-use, or when structural skins have to be replaced due to hidden corrosion taking place in crevices and around rivets which has spread to places not obvious on casual inspection.

The best thing you can do for your aircraft and your wallet is to combine the two tasks of washing and corrosion inhibition, by washing with a product that is designed to achieve both, even when the corrosion has already started. One such product, which has undergone extensive

laboratory testing to prove the claims made, is ECO2000's Zi-400 Certified Airframe Cleaner, distributed in NZ by Avclean.

The only products that can safely be used on aircraft are ones that have been tested and conform to aircraft standards. Product data will show if they have aeronautical certification. The basic standards that need to be met are: Boeing D6-17487 REVISION P & D6-7127 REVISION M as well as AMS 1526B & AMS 1550B. Meeting these specifications does not mean that the product is non-corroding. It simply means that the product corrodes the sample at a rate less than what is stated in the specification. The Australian regulator CASA has acknowledged that there are issues with using non-certified cleaning products, as AWB 02-019 states: "The use of non-approved cleaning agents should cease. These agents can damage seals, rubber components and surfaces, leading to corrosion and possible component failures."

University Laboratory Tested

In July of this year, at the Aircraft Airworthiness and Sustainment Australian Conference, Professor Bruce Hinton of Deakin University in Victoria, Australia, a recognised world figure in corrosion studies, gave a plenary presentation on Corrosion Prevention with Aircraft Washing Detergents. He reported on research the University had undertaken

to compare the corrosion prevention properties of Zi-400 and Zi-400HD airframe cleaners, compared to an untreated sample and another treated with a commonly used detergent promoted as an "Aircraft and Precision Cleaner" which incidentally, passes aeronautical certification. The tests were designed to determine the products' effectiveness as inhibitors of corrosion on aluminium alloys AA 7075-T651 and AA 2024-T351 and SAE 4140 steel in a 0.1 M Sodium Chloride solution.

Tests under constant immersion provided corrosion rate data, and corrosion pit depths. Galvanic couples between the aluminium alloys and copper were used to assess the effectiveness of these detergents in reducing the rate of galvanic corrosion when present at the start of the corrosion process. In another series of galvanic tests, the detergents were added after the corrosion processes were well established. This was done to determine how effective the detergent would be in retarding the growth, if applied, of existing corrosion.

The results were compelling and showed that both Zi-400 and Zi-400HD were very effective corrosion inhibitors under both constant immersion conditions and with the galvanic tests (aluminium alloys). They also significantly reduced the rate of galvanic corrosion when added to an existing corrosion process.

In contrast, the other detergent tested provided some levels of inhibition in the constant immersion corrosion tests, but its effectiveness was very dependent on the alloy type and on concentration. In some cases the presence of this other detergent produced faster corrosion rates than the control solution of 0.1 M NaCl.

With the galvanic tests, the Zi products reduced the corrosion rates by at least a factor of 3, while the other product tested was not as effective. Both Zi products reduced the galvanic corrosion rate for both alloys when added to an existing corrosion process. In comparison the other product tested had no such effect.

For more information

Visit www.eco2000.com to find out more about Zi-400 and other products. Contact ECO2000 on +61 7 4095 2928 or by email to: cleaning@eco2000.com.au

Decades of Experience and a Full Range of Engineering Services at Southair

LOCATED at Otago's Taieri Airport, Southair has been maintaining, rebuilding and restoring aircraft since 1964. More than 50 years of history and growth have resulted in an aircraft maintenance organisation that not only embraces latest technologies but also retains traditional aircraft engineering skills.

The company is steeped with history. In the beginning, customers flew fabric covered Piper crop dusters. Nowadays Southair maintains numerous turbine-powered agricultural and passenger planes, as well as a wide range of GA aircraft. An extensive catalogue of fixed and rotary wing services are offered from fabric work through to engine overhaul.

Southair's team of nine engineering/admin staff count more than 170 years of aircraft maintenance experience between them. With such loyalty, they are capable of achieving a wide variety of tasks in regards to all aviation issues.

Southair Services and Capabilities

Southair's extensive capability list covers ratings for Airframe Group 1, 2, 3, 4 and 7; Rotorcraft Group 1 and 2; Powerplant Group 1, 2, 3 (Allison A250, Pratt & Whitney PT6, Walter/GE M601), and Group 7 (Fixed Pitch Propeller). The Engine Shop staff are specialists in Lycoming, Continental, Gipsy, and Rotax engines and components.

As well as covering nearly everything to do with General Aviation, services include vintage aircraft restoration, full repaints (in a purpose built, heated, 13x13m paint shop), aircraft salvage and repair, engine and components overhaul, NDT, corrosion work, propeller dynamic balancing, pre-purchase inspections, ARAs and more. They have also purchased an Olympus Iplex 2 Borescope for inspecting those hard to get places. Everything from minor repairs, to support for amateur builders, to complex restorations of antique aircraft can be accommodated.

Southair became an approved Robinson Helicopter Company Service Centre many years ago and continues to maintain and overhaul Robinsons and other types.

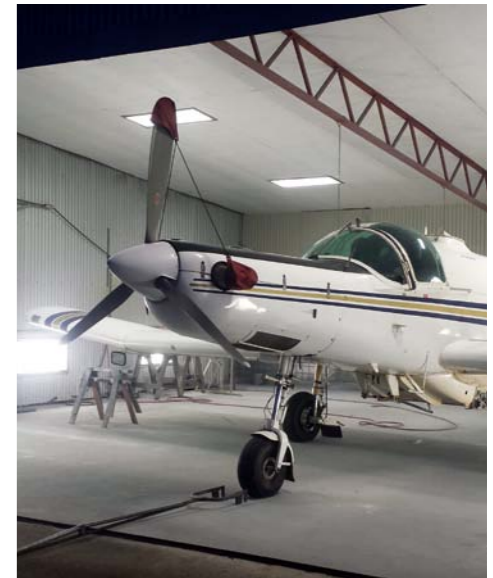
A large stock of parts are maintained, including legacy Cessna and Piper stock.

Pre-purchase inspections by licensed engineers can be arranged, and a full maintenance control service is available.

For more information

General Manager Graeme Daniell says that whatever work you need done, Southair can do it and to the highest of standards. Whether you fly a Tiger or a Turbine, Southair would welcome the privilege of looking after your aircraft and undertake to treat it as if it were their own.

Contact Graeme on 027 307 5850, or email: graeme@southair.co.nz



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EASA Certification Extends International Capability for Oceania Aviation

ON September 25th 2016 Oceania Aviation celebrated 24 years of operation which is no small achievement in the papyrus thin margins of General Aviation. Throughout those 24 years Oceania Aviation has embraced all facets of GA; initially selling and distributing parts for rotorcraft before venturing into aircraft sales, aircraft maintenance, and even flying as operators during the early 2000s.

The company has always been driven by the entrepreneurial motivations of its Directors, Josh Camp, Jonathan Bowen, Gordon Luke and company CEO, Don McCracken, together

seeking new opportunities to expand capability and improve viability in the competitive General Aviation industry.

Oceania Aviation currently employs more than 160 staff across six New Zealand locations and delivers comprehensive sales and support services to customers all around the globe. It is with a view towards international markets that Oceania Aviation now foresees its future opportunities. Company CEO Don McCracken says that "As one of the largest players in the domestic market, we have a responsibility to New Zealand GA to grow Oceania Aviation's presence in the Asia-Pacific region and bring international business back to New Zealand. We have always had some presence with our aircraft sales capabilities, but it is now time to expand beyond aircraft sales and establish our world class MRO facilities within that market space."

First evidence of this strategic shift towards Asia Pacific is the expansion of EASA Part 145 capability through Oceania Aviation's Composite Structures, Turbine and Component Overhaul shops. The EASA Certification process involves an extensive audit of applicants, requiring investment from all relevant departments and was overseen by the company's Quality Assurance team. Oceania Aviation's Safety Manager, Armin Sadafi managed Oceania's application, which included the EASA Part 145 application along with the company's Maintenance Organisation Exposition which ensures full compliance with the applicable requirements and the relevant EASA instructions. This was an arduous process which included a number of compliance audits to ensure facilities, documentation, tooling, equipment, material, components and personnel were reviewed and audited - and complied with all applicable EASA Part-145 and EASA Part-M requirements.

Being awarded EASA certification enables Oceania Aviation's Blade, Component and Turbine divisions to issue EASA Part 145 Authorised Release Certificates (Form Ones) after the completion of maintenance services, which are recognised internationally and accepted by many Civil Aviation Authorities and regulators

around the world. The addition of these capabilities to Oceania Aviation's existing EASA certified Piston Engine Overhaul services enhances their international reputation as a maintenance provider and endorses their processes and facilities as world class. Don

McCracken emphasises the achievement as a significant team effort, saying that "Extension of the EASA Capability was a goal we set ourselves as a company in 2014 and to have achieved it is a reflection of the quality of our team and the processes we have developed to ensure Oceania Aviation is globally competitive."



For more information

To find out more about Oceania Aviation's extensive maintenance services throughout NZ, phone 09 296 2644, email: oceania@ohl.co.nz or visit www.oceania-aviation.com

Oceania Aviation's EASA Certified Capabilities

Turbine Overhaul

- Complete RR250 Engine Support
- C18 Module through to C47 and B17

Blade and Composite Structures

- Schweizer, MD, Bell and Eurocopter Blade Refurbishment
- Composite Repair

Component Overhaul

- Repair and Overhaul of dynamic components for all MD Helicopter models
- Repair and Overhaul of all dynamic 206B and L series components
- AS350 6 year and 12 year mast inspections
- Sikorsky 300 transmission, gearboxes, and dampers repaired and overhauled

Piston Engine Overhaul

- Lycoming and Continental Approved Service Centre
- Three Engine Shops across New Zealand

Propeller Overhaul

- Hartzell,
- McCauley
- Sensenich
- Hamilton Standard

Non Destructive testing

Parts, Product and Materials supply

Whole Aircraft Parachute

Servicing and Sales from Leading Edge Aviation at Parakai



DO YOU have or are you interested in fitting a Whole Aircraft Parachute? When might you activate? - Loss of control in unintended IMC - Failure of a critical component - Engine failure over hostile terrain - Pilot disorientation or a medical event?

It's great to have a 'Plan C' up your sleeve. The driving factor to have a chute installed is often that the pilot's family wants an insurance policy that can save their family members' lives, rather than just delivering a cheque after the event. A chute offers peace-of-mind for family and pilot alike. "It's not about the plane..."

Servicing Requirements

As you would expect, there are some servicing requirements that need to be taken care of. Bryn Lockie of WAP specialists Leading Edge Aviation explains that all brands have a six year repack requirement. However 'repack' is a bit of a misnomer as there is more to it than that. The chute is pulled out, inspected, updated with any applicable revisions, refolded and packed. Most are pressed in special packing shells with up to ten tonnes of force applied to get them to conform to the container and minimise the space taken by the unit.

All European brands have a six year rocket life and BRS has a 12 year rocket life.

BRS STC'd units for certified aircraft have a 5 year line cutter replacement and a 10 year repack/revision/rocket life.

Leading Edge handles repacks/revisions for most units with

sport BRS units done in house. Galaxy/GRS, Magnum/Stratos07/Junkers are handled for repack/revision in Europe and imported back as explosive items. They can also offer exchange repacked/revised units for certain models. Bryn says that BRS units have the lowest ongoing maintenance costs.

Importing and handling

When the parachute system including rocket is installed in an aircraft, the rocket is exempt from explosive regulation. However when a repacked item is imported it no longer has that exemption and is subject to the full requirements of the Explosives Regulations.

Leading Edge has the necessary classes of explosive importation, handling, storage and supply licences, and the specific approvals required for each explosive 'article' (rocket).

For more information

Based at West Auckland Airport Parakai, Bryn Lockie at Leading Edge can handle all your Whole Aircraft Parachute System needs, whether a casual query, attending to servicing, or a full new installation. Contact Bryn on 09 973 5119, info@LEAV8.com or visit www.WestAucklandAirport.co.nz

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SUPERIOR



TEMPEST



We keep flying time up and down time down

A grounded plane is no excuse for a grounded passenger















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