



# Performance Aviation - more than maintenance

*Wanaka based Performance Aviation Limited was formed by Matt Bailey in 2006 and in just two years has grown from one staff member to a very experienced team of eight. With an eye on the local market, the company chose to specialise in the two areas of Helicopter and Warbird Maintenance.*

## Helicopter Maintenance

Performance Aviation are now the largest Robinson maintenance base in the South Island, with 35 aircraft in their care. They also look after a number of Schweizer 300's and Bell 47's. Matt speaks of their goal to operate at a level above GA maintenance and a desire to set a standard for professionalism, extending from work packages and logbooks through to the finished product. A recently finished 600m2 hangar completes this picture.

An independent maintenance control service is offered and three Part 135 operators are currently under their wing. With an FAA A&P certificate holder and IA on staff, the company also regularly undertakes annual airworthiness review work for other local maintenance providers.

## Powerflow Exhaust Systems

Performance Aviation are agents for Powerflow exhaust systems and have become the preferred Powerflow dealer in the Pacific region, having fitted 15 systems during their short time in business. Powerflow are an extremely popular four cylinder Lycoming fitment with over 4000 now flying around the world.

## Mod's for Safety and Performance

An interest in operational aircraft modifications that can enhance safety and performance (as opposed to role equipment bolt-ons), combined with feedback from customer surveys, has lead to several developments that should be of interest to Robinson helicopter owners.

With the support of Powerflow, Performance Aviation are presently tuning an exhaust system for the R22 Beta. Their goal is to deliver the hot and high performance of a Beta II. Testing to date suggests they can achieve this as well as improved fuel consumption, noise reduction and more effective carb heat. With components ready for final testing and the STC process underway, Matt welcomes advanced orders for the targeted release date of April 2009.

A Robinson start up overspeed can cost over \$15000 to remedy. Performance Aviation have developed a local mod to

prevent this by limiting engine rpm to 85% on startup. The device can be fitted very easily for just \$500.

Further to this approach of "saving customers money with common sense", the company has also developed a local mod for fitting aluminium pulleys on alternators, replacing the much more expensive Robinson steel versions.



*The Performance Aviation Team (left to right); Michael, Lynette, Matt, Ken, Andy, Don, and Kaarl.*



*P51 Mustang maintenance in progress.*



*A stripped R22 awaits re-assembly on an overhaul jig.*

Another customer driven modification opportunity has been the development of an R44 Raven II muffler system, the standard ones being notoriously hungry on maintenance budgets. It will be sold as a bolt on item with separate muffler and tailpipe, so that only the muffler will need replacement (and at longer intervals than standard). Performance Aviation's version is also proving to be noticeably quieter than standard. Targeted availability is April 2009.

Matt notes that there is actually very little done in New Zealand in the way of operational improvement modifications and invites ideas from readers regarding anything that they would like to see developed in this regard.

## Robinson overhauls

Performance Aviation have now completed nine Robinson overhauls. Matt explains that they take a factory approach to the task, with specialist jigs and other equipment developed to afford their "product" a high degree of quality with no wasted effort. The company is proud of defining their only standard as being one that provides perfection. In Matt's words, "we don't forget the little things".

To ensure predictability for customers, the company offers to fix the labour content of a standard R22 overhaul at 225 hours, though obviously any unexpected repairs that arise must be charged separately. They are also happy to customise overhauls to customer requests.

Out of town customers are welcomed and complimentary return airfares can easily be arranged. Matt's goal is to provide a product that when combined with other mods including Powerflow, will allow customers to bring in a time expired Beta and fly home in an overhauled aircraft that will perform like a new Beta II.

## Warbirds Maintenance

Performance Aviation currently specialise in the P51 Mustang and L39 Albatros. They have recently assembled an L39 from South Africa that then flew the Tasman to Australia (the first to do so) and are now assisting with a Nelson based build. Matt notes that one appeal of warbird work is the interesting problem solving it offers. Recently a five port fuel selector that wouldn't shut off was found to have been previously assembled 180 degrees out of alignment. The result being that one port always remained partially open no matter what the valve selection.

## For more information

Matt speaks of his team having a passion for getting things right. Recently, 18 out of 18 returned customer surveys said they would recommend Performance Aviation to others. To find out more about becoming one of those new customers, call Matt on (03) 443 8989 or 021 744 588, email [matt@performanceaviation.co.nz](mailto:matt@performanceaviation.co.nz) or visit [www.performanceaviation.co.nz](http://www.performanceaviation.co.nz)