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Issue 5

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Aviation Industry Conference Week Guide

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From the Editor

Welcome to issue five of KiwiFlyer Magazine. We received some great feedback on our last issue from readers and advertisers so we hope you all enjoy this one as much. In particular, Rachel Donald at spidertracks informed us of a "great and measurable response" to our feature article on subsidised aircraft tracking. Thanks to Rachel and others for their comments. We appreciate all feedback and suggestions for the magazine as we endeavour to deliver a publication of value to the aviation community in New Zealand.

This issue features a comprehensive guide to the Aviation Industry Conference Week in Blenheim at the end of July. This annual series of events is organised by the Aviation Industry Association (AIA) and includes presentations from over 60 speakers, covering all of the issues faced by the industry now and into the future. As well as conferences for the AIA, aviation education and research, and the Agricultural Aviation Association, there are also the launches of an industry-wide safety committee, the NZ Helicopter Association and the Aircraft Engineering Association of NZ. A trade exhibition is running concurrently with the conferences. This exhibition is nearly fully subscribed, with final planning in full swing as KiwiFlyer goes to print. We have deliberately delayed this issue so as to include as much of the conference information as possible, in order that readers (particularly those within the industry) can be made aware of the events and give due consideration to attending. We'll see you there.

One of the events that has a particularly broad appeal to all pilots is Bob Feerst's day-long seminar "Flying in the Wire Environment". This internationally acclaimed programme should be a 'must' for all helicopter pilots and low-level fixed wing operators. It also comes with a recommendation from your Editor who attended the same seminar two years ago on one of Bob's previous visits to NZ.

Continuing a helicopter theme in this issue are articles on Performance Aviation's new R22 exhaust system, Rotor and Wing Maintenance's helicopter hook overhaul services, and a profile on the Bell 407 operations of Gisborne Helicopters. This very helicopter will in fact be on display in one of the conference halls at Blenheim during Conference Week.

Another feature of this issue of KiwiFlyer is the refurbishment of the Beaver Preservation Trust's DHC-2 Beaver based at Ardmore. Our cover picture was taken just a few days prior to printing during the aircraft's first flight after almost exactly a year on the ground. Frank Parker has written us a short history of the Beaver and we have articles on both the re-painting by Airspray Ardmore and the specialist signwriting by Reflect Icon Signs.

Though it is winter, we do get some wonderful dense clear air to fly in at times. I hope readers are enjoying as much of it as they can.

Michael Norton
Editor, KiwiFlyer Magazine

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In this issue

4. **The Beaver's New Clothes**
After a 12 month refurbishment, the Beaver Preservation Trust's DHC-2 Beaver has returned to the sky above Ardmore.
9. **More Performance from R22 Beta**
Obtain Beta II performance without the cost using a new R22 tuned exhaust system developed by Performance Aviation.
10. **Hangar Design and Construction**
We profile Thompson Engineering, specialist hangar engineers and builders.
12. **Hook overhauls by Rotor and Wing**
An explanation of the helicopter hook overhaul process at Rotor and Wing.
13. **Jet-Go Ground Power and Battery Carts**
A new brand of ground power units and battery carts are now available in NZ.
15. **Personalised Electrical Care and Repair**
We profile Central Aero Electrical Engineering at Hamilton Airport.
17. **The Aviation Industry Conference Week Event Guide**
Everything you need to know about this major annual event organised by the Aviation Industry Association.
24. **The very capable Bell 407**
We speak to Peter Moore at Gisborne Helicopters about operating their Bell 407.
35. **Avionics at Aeromotive**
A profile of the Avionics Shop at Aeromotive in Hamilton.
36. **Understanding Insurance Liability**
Bill Beard from Avsure continues his informative series on insurance issues.
39. **Building a basic gyro from a kit**
Oskar Stielau writes about his project that was ready to fly within 40 hours.
40. **Basics of Aero Model Building**
Janice Angus continues her aero modelling series, this time on building a simple kit.
44. **Aircraft Engineering Association**
Don McCracken uses our Guest Comment page to explain the thinking behind this new association.
13. **Event Guide**
36. **Accidents and Incidents**
42. **ZK Register Review**



Front Cover: The Beaver Preservation Trust's DHC-2 Beaver over the coast East of Ardmore on its first flight after a 12 month refurbishment. Thanks to Liz Needham for flying the camera plane. Michael Norton photograph.

The Beaver's New Clothes

A fresh coat of paint has recently been applied by Airspray at Ardmore to the Beaver Preservation Trust's DHC-2 Beaver. KiwiFlyer spoke to Paul McSweeney at Airspray about this project and their other capabilities.

THE BEAVER repaint had been on the cards for a couple of years when Paul McSweeney of Airspray Ardmore was recently asked to update an earlier quote to complete the work. This was duly done along with the standard advice to allow for a good amount of engineering work within the budget – no matter how optimistic the owner is, repainting old aircraft invariably uncovers a variety of hidden maintenance issues. The Trust accepted Paul's quotation and Airspray were commissioned to bring a fairly tired looking aircraft back to the appearance of a new one.

Because of the age and history of the aircraft, a repaint process involves far more than simply stripping and painting. The owners wanted to maintain the existing scheme and as that was a one-off, the first step was to capture a detailed record of all the aircraft markings. This includes locations, dimensions, fonts, colours, etc. Many photographs and measurements were taken.

Ensuring authenticity

At the same time, questions need to be asked as to whether the current scheme is actually completely accurate for the aircraft as there is every chance that touch ups have been undertaken over time that have perhaps been close but not the same as the original. Even though there may be some emotional attachment to the present appearance, most owners want their historic aircraft to be authentic to its history and a repaint is the time to ensure this is the case. It is here that Airspray's relationship with next door neighbour Pioneer Aero Restorations becomes particularly useful.

Paul acquired an old photo of the Trans Antarctic Beaver (believed to be taken at Ardmore in the 1950's) and noticed that some of the livery fonts in the photo didn't match those on the aircraft he was about to strip the paint from. A call to Nathan Boshier from the Air Force Museum at

Wigram resulted in Paul being supplied with details of the (modified RAF) fonts that the RNZAF was using at the time.

Further to the fonts issue was the aircraft colour. According to the logbook, the aircraft was last painted in Scarlet Chrome, a colour that Paul thought was a Harvard colour and therefore probably

any temptation to use computer cut vinyl graphics, even though good hand painted signwriting skills such as Neil's are becoming scarce.

The preparation process

Having uncovered the correct livery and received the owners approval to reinstate it, the next phase involves removing all control surfaces and fairings from the aircraft. In fact, anything that can be removed without preventing mobility of the remaining airframe, is removed for separate preparation and painting. In the case of the Beaver this included the wings.

Paint stripping at Airspray involves masking areas to protect and then applying stripping solution. Airspray use a non hazardous product that is alcohol based and washes off in water. It is designed to break the chemical bonds in paint rather than 'burn' it off as some products will. Further, once the alcohol has evaporated, the compound is inert. After applying the stripper, parts are "gladwrapped" to keep the compound working for longer. The gladwrap is then later removed (carrying much of the stripped with it) and the parts are water blasted ready for further manual preparation work.

It is here that extra engineering requirements usually become evident. For the Beaver project, most of the flight controls needed re-skinning or other major work. This was not altogether unexpected but still an unpleasant discovery given that one always hopes that such additional costs will be minimal.

A lot of corrosion was found on the left hand aft side of the fuselage and in Paul's words "the skin on that side had taken a bit of a beating too". This is probably due to a short period of topdressing in the aircraft's history. On the positive side, the wings were found to be in very good condition, perhaps because the high wing configuration has been less prone to damage.

A new coat of paint

Once all manual preparation work is completed, painting can begin. Airspray use deBeer paints (unless requested otherwise)



The original scheme and aircraft, believed to be at Ardmore in the 1950's.



Repainting this DHC-2 Beaver to match the livery of the aircraft used for Sir Edmund Hillary's Trans Antarctic Expedition involved much research into the use of correct fonts and colours. All markings were hand painted.

incorrect. Nathan again came to the rescue with a history lesson on the Air Force's use of "International Orange" which was a Dulux colour. Nathan reasoned that when the switch was made from Dulux acrylic lacquers to two pack paints (and from British standards to Federal standards) somebody probably decided that the closest match to International Orange was Scarlet Chrome. As it happened, Nathan still had a few tins of the original International Orange in the store and offered to paint a sample swatch and send it up to Paul.

Another touch of authenticity came in the form of Neil Richardson of Reflect Icon Signs, who hand painted the roundels and fonts. See the separate article within this feature on Neil's business. When so much effort is undertaken to rebuild historic aircraft to original condition, it is a shame to subvert this goal with



There was plenty of wear and tear on the existing paint scheme



Locations and dimensions of all markings were recorded with photographs and drawings.



The process of detailing began with preparation for stripe painting on the fuselage.



All letters and roundels were marked out and then hand painted for authenticity.



Airspray can also paint or touch-up microlights, helicopters, and in this case a 737 rudder.

as not only is this a high quality product suitable for most aircraft, but Paul says "the rep's are experienced painters themselves who can get in the booth and work with us if necessary".

The process used involves starting with an etch primer (including corrosion inhibitor), followed by two coats of two-pack 2K topcoat.

Airspray stock a complete colour mixing system for deBeer paints and can call up any current automotive colour formula if required. Many aircraft colours have been chosen on the basis of "I saw a red Ferrari / silver Porsche / blue Mercedes / etc and that's the colour I want." Paul can mix any quantity down to as little as 200ml which helps keep grooming and touch-up work costs low.

Reassembly and Corrosion Prevention

Reassembly is largely the reverse of disassembly. Occasionally there can be small delays on outwork or even further maintenance discoveries. Such was the case on the Beaver, with decisions made to overhaul the hydraulic pump for flaps actuation and the brake master cylinders.

Airspray use ACF50 for corrosion prevention and offer this as a free service for all aircraft that they strip and repaint. Paul notes that corrosion prevention treatment is something that all aircraft owners should consider as part of their normal maintenance programme as it is quite likely to provide a 10 for 1 dollar saving over the longer term. The process generally involves less than half a day for light aircraft. ACF50 is preferred due to its ability to attack existing corrosion rather than just inhibit it.

The final task post test flight and any resulting adjustments, is to complete a touch up and polish of the aircraft ready for handover to the owners. Paul describes the Beaver project as a very successful one. "We're happy, the owners are happy, and there is plenty of good feedback from others who have seen the aircraft."

More than Warbirds

Airspray can paint all types of aircraft. In fact most of their day to day work involves partial and full repaints of light aircraft and helicopters. That said, their spraybooth has also accommodated a Beech 18, and on one recent occasion the rudder from a Boeing 737. Touch up work is also easily undertaken on anything from microlights to corporate jets.

With their close relationship with Pioneer Aero Restorations and also with

upholstery and composites companies, engineering work can easily be arranged as required during a repaint process. This means that owners can leave such work up to the team at Airspray if they wish and won't have to be on call themselves to come and sort out problems as they are discovered. From that point of view, Airspray aim to operate as a one stop shop for aircraft refinishing.

For more information

Contact Paul McSweeney at Airspray Ardmore on 09 296 8913 or 021 074 4876, email paul@pioneerero.co.nz

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A Canadian Gem

contributed by Frank Parker

WHEN considering the deHavilland Beaver it is useful to start with its country of origin, Canada. While not wishing to upset any Canucks in the audience, after years of long haul flying from Los Angeles to Europe, my impression of Canada is one of wilderness. Forget the postcards, 150 kilometers north of the USA border lies a land of lakes, bogs and tundra. Hudson Bay, blue in the atlas is actually white for at least nine months of the year - it's frozen solid.

My brief experience of travel in this land during the summer, is of mosquitoes that could give a small helicopter a run for its money.

The Beaver is born

No surprise then that after WW II when deHavilland considered a project aircraft to develop, they arrived at the rugged utilitarian transport aircraft we know as the Beaver. The aircraft's genesis was twofold; a replacement for the pre-war aircraft serving the utility role and to fill the capacity of the winding-down wartime production juggernaut. Design requirements called for an aircraft able to operate in remote areas on wheels, floats and skis, and able to carry a good payload and outsize cargo.

These requirements drove the design to the boxy fuselage, large doors, including one each side for the crew, large wing with extensive flaps and solid construction. The original design concept was to use an English engine (deHavilland Canada was under the control of the 'mother company', deHavilland England) however, the availability of more powerful war surplus Pratt and Whitney R985 Wasp Junior engines proved the icing on the cake to achieve the aircrafts excellent STOL (short take off and landing) performance.

While these STOL features make it slow

by some contemporary standards, it was remarked at the time that it only needed to 'beat a dogsled' to win the race.

The Company designation is DHC-2. All DHC aircraft of the era were named



ZK-CKH at Ardmore, awaiting its first flight with a new coat of paint.

after indigenous animals and the Beaver's 'stable' mates include the Chipmunk, Otter, Caribou and Buffalo. After a slow start to sales the 'Beaver' became a stalwart of the GA scene throughout the western world and was well represented in New Zealand in the agricultural and utility roles. Indeed the subject of these articles was imported to New Zealand for use as a top dresser.

The Story of ZK-CKH

ZK-CKH began life in 1948 - its history a story in its own right. It is marked as

C/N 25 (container number 25?). As an early, if not the first export of its type, it was delivered to South Africa as ZS-DCG for Tank Aircraft Pty Ltd on 17 November 1948 - that's over 60 years ago! In the 1960's it was on the English register as G-ARTR operating in Libya in the petroleum industry. Subsequently in 1964 the aircraft was brought to New Zealand as a rebuild project, becoming ZK-CKH.

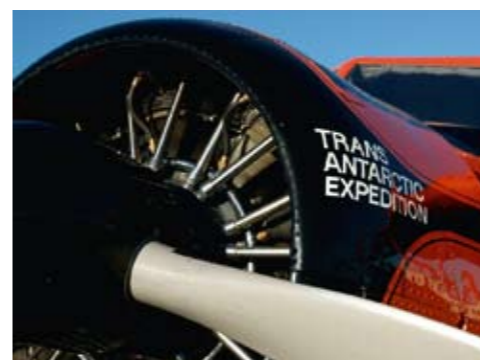
In New Zealand the aircraft was operated in top-dressing roles by; Air Services Wairarapa, J.D. Menary (ASTA Co-Op, Kaikohe), and James Aviation.

In 1986 CKH was acquired by a NZ Warbirds group (Ed Doherty, B. Coulter, I. Reynolds) and painted in the livery of NZ 6001, the aircraft that supported Sir Edmund Hillary's trans Antarctic Expedition in 1957.

The original NZ 6001 aircraft was purchased by the citizens of Auckland and presented to the Ross Sea Committee in 1956 for use during the 1957-58 International Geophysical Year which saw the establishment of Scott Base, and the Trans Antarctic Expedition of Dr. Vivian Fuchs and Sir Edmund Hillary.

The aircraft was used for the transportation of personnel, dog teams, and supplies to establish depots for the tractor train traversing parties, and for reconnaissance flights. In his book 'View from the Summit' Sir Edmund Hillary speaks of investigating the Skelton Glacier to find a route onto the Polar Plateau; "I did a marvelous flight with John Claydon across the Ross Ice Shelf, up the great trench of the lower Skelton Glacier, over the broad crevassed snowfields at the glacier head, and out onto the wide snowy desert of the plateau itself..." The Beaver later operated around the clock in temperatures of -35c stocking the Plateau

temperatures of -35c stocking the Plateau



All markings were hand painted for authenticity.

Depot for the journey.

Following a 'season' at the 'Ice' NZ 6001 returned to New Zealand for major maintenance before a further mission to Antarctica. On this occasion the registration had changed to NZ 6010 after discovering that 6001 had been allocated to the RNZAF's sole Gloster Meteor aircraft a decade earlier.

This season was not to be so productive and following a crash while 'descending through cloud in the Mt Hope area' the aircraft was written off. The crew, Squadron Leader Jeffs and Flight Lieutenant Rule were forced to 'camp' in the wreckage for six days awaiting rescue.

And so back to CKH. After 20 plus years of Syndicate operation she was showing her age. Over the past ten months the aircraft has had a complete strip and repaint. As with any 60 year old, remove the make-up and there is sure to be a few blemishes requiring attention. So it was with CKH and syndicate member Graeme Woods has put in many hours attending to corrosion and other maintenance issues.

With ZK-CKH refurbished to prime condition including superb new paint and detailing work, the Syndicate members are looking forward to showing her on the Airshow Circuit throughout the coming summer months.

The author gratefully acknowledges NZWA Archives in preparing this article.

Reflecting the Past

When Paul McSweeney at Airspray Ardmore needed the markings on ZK-CKH to be hand painted, he called Neil Richardson at Reflect Icon Signs. Neil has more than 20 years experience in the sign industry and is one of only a few around who still has the skill to undertake traditional hand painted aircraft signage work.

Hand Painted Signs

Neil, who has worked with some of the top sign writing companies in New Zealand and in the UK, got involved in the Beaver project in December 2008. Prior

to its repaint, adhesive transfers had been used for the existing scheme and while that looked the part from a distance, it unnecessarily compromised the authenticity of the work at any close inspection.

The first step was to work with Paul to establish the correct sizes, colours and locations of all the aircraft markings. Neil says; "I have done a lot of sign writing where I had to reproduce something but this was the first traditional hand-painted sign writing on an aircraft that I have been asked to complete. Back in the days when I learned my trade all signs were done by brush. Now here was someone wanting the signs on a plane hand painted to look original and I thought that was really neat."

History is something Neil thinks is very special and to contribute to restoring a piece of history for people to enjoy gives

him a great sense of pride.

Paul says he is also very pleased with the result. "To me it adds a degree of authenticity that you don't get from vinyl or from spraying which is what it was all about with this aircraft. Some people look at it

and say 'you can see the brush marks' but to me that's the whole idea of it," Paul says. "We have been able to work together with Neil, explain what we want, and come up with solutions which have been great for us and our customers."



More examples of Neil's work can be found on this recently completed Kittyhawk.

Other Capabilities

Reflect Icon Signs don't only undertake traditional sign writing work on aircraft. They can also produce computer-generated graphics for plane markings, registration numbers and certification labels. If the markings need to be sprayed, Reflect Icon Signs can construct adhesive masks.

Building signage is another area of their work and the Warbirds hangar and Airspray Ardmore are examples of this. 3D and illuminated signs, vehicle graphics and imaging, honours boards with gold leaf, event signage and more are all within their capability. A nationwide service is available.



Capabilities also extend to illuminated building signs.

For more information

Neil's motto is: "Reflecting the brilliance of your brand". Contact Neil on 021 905 102, 09 296 0221. E: neil@reflecticon.co.nz

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Performance Aviation Boosts R22 Beta Performance

One of the reasons for trading an R22 Beta up to a newer Beta II model is the improved hot and high performance. Matt Bailey of Performance Aviation in Wanaka proposes that fitting one of their exhaust systems will achieve the same gains and more at a fraction of the cost. KiwiFlyer spoke to Matt about his association with PowerFlow and the development of this new product.

What to expect

Matt explains testing of the new Performance Aviation system suggests that owners should save about 5 litres of fuel per hour if they operate at the performance levels they would be accustomed to. Or they can trade that fuel saving for the noticeably increased performance that is available, particularly in hot and high conditions. Carb and cabin heat are also significantly improved thanks to a more efficient collector and shroud design.

Another expectation is not to have to replace the system at 2200 hours as is the case with standard systems. PowerFlow systems in fixed wing aircraft have a life that regularly exceeds 5000 hours. Customers can also expect a 60 day money back guarantee and 1 year 500 hour warranty with their purchase.

PowerFlow and Performance Aviation

Alongside of their helicopter and fixed wing maintenance operations, one of Performance Aviation's goals is to save operators money by introducing better solutions for known problems. This philosophy led to an early partnership with PowerFlow Systems Inc. Several thousand PowerFlow aftermarket exhaust systems are in use around the world including many OEM fitments - for example the new Diamond DA40's arriving for Massey University. There are a great many very satisfied PowerFlow customers - check www.powerflowsystems.com for testimonials and open forum comments.

Since becoming agents for PowerFlow Systems, Performance Aviation have attained Preferred Dealer status in the Pacific Region in a relationship that has progressed to their own development of the R22 system with full support and backing of PowerFlow Systems Inc. The result of this has been a very good system for which a CAA STC is imminent (expected by the end of June). PowerFlow are now themselves entering the FAA STC process using Performance Aviation's data. Performance Aviation will be the sole dealers of the system in Australasia.

Development and Testing

The system started out as the same PowerFlow system used on the Cherokee 140. Performance Aviation then obtained a blank of the heater shroud, fabricating an R22 system that would use the same inlet and outlet hoses already on the aircraft. A much more effective system than standard draws heat from multiple pipes instead of just one and provides for more than 5 deg C greater carb heat from any given setting.



The tidy PowerFlow installation utilises existing hoses.



Matt Bailey at PilotExpo delivering a system to Rod Miller from Rodney Aero Club for their Cessna 172.

During muffler design and carbon monoxide testing, the team found that the location of the tailpipe was quite critical. With forward airspeed there is an area of negative pressure behind the engine which potentially draws exhaust gases back into the cooling fan and air intake. Moving the tailpipe as little as 3" resulted in a CO reading drop from 120 to 12ppm. The standard system operates at 30ppm.

All of the test flying was conducted by Jerry Rowley who operates his own R22 Beta and has logged 1250 hours on type since 2003. Jerry has documented the use of noticeably less power for any given flight configuration, with wider power margins available as well as more economical running. Jerry also says that, "During the test flight programme, which included a lot

of hovering, fuel consumption was 31.4 litres per hour. This is a saving of around 5 litres per hour. Cruising at 22" gave a greater airspeed than with the standard exhaust making it easier to comply with maximum recommended cruise power."

Matt notes that during flight testing on one occasion they got to 8200 feet with -1 degree C outside air temperature and were still climbing at 500fpm with 1" of manifold pressure to spare.

Certification assistance was via Flight Structures Limited in Christchurch and Matt credits Jaap Authier there as being "fantastic to deal with".

Installation and Maintenance

Installation can easily be accomplished in under an hour. With systems delivering 5000 trouble free hours on fixed wing aircraft, maintenance is minimal with only a 300hr/annual lube of the slip joints. In addition, the muffler is ceramic coated which will see it maintain its attractive appearance without changing colour.

Robinson Overhauls and More

Matt suggests making a Performance Aviation System a standard part of any R22 Alpha or Beta overhaul as the small additional cost over a standard system is easily repaid in fuel and replacement savings. Performance Aviation can undertake the entire overhaul process if required and offer a return airfare to Wanaka or free delivery of your helicopter. They have a variety of other improvements they can make to your aircraft as well, including a recently developed mod for engine overspeed prevention on startup.

Performance Aviation are also underway on long term testing of a local mod for R44 exhaust systems. In significant contrast to the standard systems, Matt's version offers even muffler inlet temperatures and a temperature reduction at outlet of 100 deg C. This is expected to dramatically improve the systems longevity and reliability.

For more information

Once the CAA STC is issued for the Performance Aviation R22 system, Matt is planning to host open days in Auckland, Taupo, Christchurch and Wanaka. In an obligation free offer, R22 Alpha and Beta owners are invited to come along and have a system fitted to their own machine. They can then go off flying and assess the benefits for themselves. See advertisement at left for Matt's contact details.



Hangar Design and Construction Made Easy

With 30 years of experience and a team of aviation enthusiasts, it is fair to suggest that Thompson Engineering know a thing or two about good hangar design and construction. KiwiFlyer recently spoke with Michelle Thompson who explained the company's capabilities as well as the main factors to consider when building a home for your aircraft.

storage. An option of combining this with a paint system over the top will create an ideal surface for engineering workshops. For high precision areas there are self leveling compounds available, but to date all of Thompson Engineering's customers have been satisfied with the steel polished and/or paint finish combination.

slotting in behind the legs and butting into the concrete floor. There are also other cheaper options available and Thompson's understand and are experienced in all of the different systems available for firewalls. This is experience that can easily save time and money.

Hangar Style

Hangars come in several styles, however for strength and versatility Thompson Engineering recommend choosing heavy steel portal frames. These offer extra durability in high wind zones and under heavy snow loading, while not compromising the wide clear span required for aircraft. Both gable and lean-to options can easily be accommodated. The gable style when constructed with a heavy steel portal truss frame gives wide span and excellent overhead clearance as there are no rafters to clutter the roof space. The lean-to is often ideal in smaller situations such as for microlights.

Versatility of design and future proofing are readily provided for in these styles. The heavy steel portal has structural strength to allow the addition of a gantry crane in the workshop area or a mezzanine floor in the apex (great for storage or living quarters) without the requirement to add in a subframe to take the weight. Extensions in the future are also made easy, whether by adding on additional bays or attaching a lean-to.



Recent hangar projects in different styles by Thompson Engineering that are based on steel portal frames with a variety of door options.



Cladding Options

Colour steel is the usual preference for buildings at an airport or in the flight approach path, as it does not reflect the sunlight like Zinalume. Thompson Engineering offer both a corrugated and 5 rib dek profile option depending on customer preference. Translucent sections can be added to the roof to allow in natural light, however although these are UV protected, they still allow UV into the building and may not be suitable for fabric covered aircraft.

Fire Ratings may need to be considered, especially at an airport if space is tight or walls are located near a boundary. Tilt panels can be one solution to achieve this and these fit well with steel portal frames,

Door Options

Typically there are three styles of doors that suit the wide opening required for hangars. These are the outrigger where the door opens beyond the footprint of the building to give maximum opening, the stacker style sliding door where the doors slide past each other and stack to one side, and the bifold door which folds neatly up towards the roof. Each door has advantages and disadvantages depending on wall space, building budget and section space. Personnel doors are strongly recommended to allow quick access to the building and are ideal for fire exits or when you just want to nip in and out. A final and most important consideration is bird proofing. Thompson's recommend this be given a high priority as there is nothing worse than the mess of a birds nest inside your cowling, or bird droppings all over your paintwork.

DIY or Complete Service

Thompson Engineering are able to assist customers on site as much or as little as may be required, offering competitive labour rates and very experienced construction teams. Hangars are available as kitsets for the do-it-yourself builder.

Thompson Engineering hangars have been constructed throughout the South Island for many well known commercial operators and the company has plenty of experience at creating freight friendly designs to avoid the use of pilot vehicles or other additional costs. All of Thompson's buildings are designed in-house providing a one-stop option for hassle free construction. Michelle Thompson notes that the idea of purpose-built is to ensure the design is right for you. Contact Thompson Engineering on 0800 688716, email: admin@thompsonengineering.co.nz or visit www.thompsonengineering.co.nz

Regulatory Compliance

Compliance costs on a poorly designed project can be a moving target, so it is important to consider fire ratings, the building code, drainage, resource consents and local authority requirements in order to ensure that the consent process is a smooth one. Thompson Engineering has a team on hand who handle regulatory issues on a daily basis and can offer as much assistance toward this as may be required.

Flooring Options

Concrete floor finishes should be chosen depending on the end use. Generally a steel polished finish is suitable for most aircraft

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Hook Overhauls by Rotor and Wing

Helicopters and lifting hooks are synonymous with New Zealand aviation and an inspection of a new helicopter will often include the question "Where does the hook go and how much will it lift?"

KIWI PILOTS do love to lift objects with their helicopters. There comes a time though when the hook reaches its service interval and that is where Taupo based Rotor and Wing Maintenance Limited come into the picture.

John Hobday's business has been servicing hooks as a part of their wider platform of general helicopter overhaul work for some years now. Their experience has provided them with a very comprehensive grasp on the hook requirements of operators and through their interaction with hook manufacturers, Rotor and Wing can offer some very attractive hook support and overhaul packages.

Currently the process usually revolves around the client returning their existing hook for inspection and overhaul. Depending on the type and requirements this process can take up to a month and more often than not, a loan or exchange hook is arranged.

Concentrating on the products of two common hook manufacturers, Breeze Eastern and On Board Systems, has seen Rotor and Wing work with a modest stock of models suiting the lower and mid range order of capacity. This market is broad and Rotor and Wing have their sights set on providing hook supply and services to the wider Australasia Pacific region.

Breeze Eastern Overhauls

John explains; "Breeze Eastern hooks have only limited support from the manufacturer and as there are a lot of these units still in service in New Zealand and Australia we have resolved to manufacture our own overhaul kit to keep these hooks in service. Flight Structures Limited have been instrumental in drafting the necessary regulatory proposals and to date we have established a small pool of exchange hooks. Our intention is to widen this and have off-

the-shelf stock and to take customer hooks back as reusable cores."

Some operators are attached to their hooks, figuratively speaking, and do not want an exchange hook. They would prefer to have 'their' hook returned following overhaul. In the case of the Breeze Eastern hooks Rotor and Wing offer a number of repair schemes for A25LT, 2A20B and 2A15E hooks including locally manufactured side plates, fillers, keepers and pivots. Collectively these hooks cover the range in the Light Series which are those most commonly found in New Zealand and Australia.



Above: a stripped Breeze Eastern 2A20B hook.
At right: On Board Systems Big Mouth, Keeperless and Talon LC hooks ready for despatch



For those machines operating on an approved maintenance programme and not undertaking continuous heavy lifting the company offers an alternative to the Breeze Eastern three year overhaul in the form of a detailed inspection carried out within the Rotor and Wing facility. This programme cannot be certified as a 'stand alone' document and is required to be incorporated into the operator's exposition. A copy of that programme must be submitted with the hook and technical directive in order for Rotor and Wing to carry out the certification.

On Board Systems Overhauls

On Board Systems hooks have a five year inspection period and John Hobday is very complimentary of the support the manufacturer provides for their product. On Board Systems manufacture overhaul kits for their hooks and Rotor and Wing has the capability to overhaul Talon LC,

Keeperless and Big Mouth hooks and their attachment fittings. The company store holds a wide range of parts and overhaul kits that enable them to provide an average turnaround time of two weeks. Exchange hooks are also available if requested, such that an overhauled hook may be despatched as soon as the request is made.

What's in it for the operator?

On the face of it the transaction is simple and involves one fee. This assumes of course that the returned hook is reusable. A benefit for Rotor and Wing customers is that all hook overhauls include a strip report which can provide useful knowledge for minimising problems and cost next time around. Efforts are being made to bring down the level of rejected parts with Rotor and Wing identifying techniques on how to minimise corrosion related defects which are commonly observed on hooks presented.

A pool of in-service and out of time hooks exists within the region and for John Hobday the next step is to create an on-line register for hooks where the operator and overhauler can see when a particular hook is due for overhaul so that a replacement unit can be then guaranteed to be

available. Sudden surges in replacement hooks or requests to overhaul can put pressure on the pool of existing hooks. "We just want to streamline the whole process," says John Hobday. "In an ideal situation the client will call and request an overhauled hook from our shelf stock which is sealed and certified, ready to go. It is sent off in its box with a courier pack to return the existing unit. It's all really quite simple and that's all it needs to be."

For more information

Contact John Hobday at Rotor and Wing Maintenance Limited on 07 378 8688, email: rotorandwing@xtra.co.nz or visit www.rotorandwing.co.nz

JetGo Ground Power Units and Battery Carts

THE JetGo range of portable ground power units and battery carts is now available in New Zealand from Hawker Pacific at Ardmore. The product range includes three models capable of providing power for on-ground systems operation and engine starting.

Static Battery Carts

JetGo's first model is a static battery cart which was also the Australian based company's launch product when it began operations in 2007. This product has become increasingly popular across a broad customer base.

Containing sealed lead acid batteries with a capacity of 255 Amp Hours, the unit is capable of delivering 3000A peak and 500A continuous loads for aircraft starting. Up to 8 starts of a TP-331 turbine can be made between recharging. It is also suited to ground operations of aircraft systems up to an 80A continuous load.

The battery cart is fitted with a heavy duty 28V NATO plug and has a built-in 240V 60A 3 stage smart charger. The unit is robustly constructed and can easily be handled by one person.

Diesel Ground Power Units

Following the success of their battery cart, Jet-Go developed a diesel self generating power unit. The smaller of two models, the M-200 is designed for a 200A continuous supply and 2400A peak starting load. Suited to aircraft up to light jets such as the Beechcraft Premier or Cessna CJ3, it consumes less than 4 litres per hour of diesel or Jet-A1 at full output. Of similar construction to the battery cart it can also easily be handled by one person.

A second generation model, the 550M was specifically designed to meet the needs of operators following a comprehensive survey. It has a 2310A start capability and a continuous output of 550A.

Both GPUs contain their own battery set and can provide ground power for systems or engine starting without the diesel motor running.

For More information

Hawker Pacific have recently been appointed distributors for JetGo in New Zealand, Australia, Asia and the Middle East. Contact Steve Siddall on 09 295 1630 or email: steve.siddall@hawkerpacific.com

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Diesel powered M-200 generator shown

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Kiwi Flyer Event Guide

July 27th-31st

Aviation Industry Conference Week

A series of industry conferences hosted by the Aviation Industry Association. At Blenheim. See the guide in this issue.

October 24th-26th

Tiger Moth Club 40th Anniversary Fly-in

Taumarunui, where the club was formed in October 1969. Contact John King 027 482 3584 email king.jdm@xtra.co.nz www.tigermothclub.co.nz

November 21st

Matamata Aero Club Fly-in

For more information contact Anton Meier 07 829 5940

February 5th-7th 2010

SportAvex Tauranga

Sport Aircraft Association Fly-in and Airshow. Contact Bruce Bowen, email bbowen@xtra.co.nz www.saa.org.nz

June 4th-7th 2010

NZ Women in Aviation

(known formally as NZ Airwomen's 50th Anniversary) At Tauranga. A long weekend of flying and friendship to celebrate our 50 years. All former members please contact Judy Costello. Ph 09 292 4712, email raynjudy@actrix.co.nz

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New gas turbine test capability at Asia Pacific Aerospace

Asia Pacific Aerospace has recently completed the OEM correlation of its Rolls-Royce Series 250 Engine Test Cell. It is the only such correlated cell in Australasia and accepts all Model 250 including Series IV FADEC engines. This multipurpose Gas Turbine Test Cell is the first of its type to also accept the Honeywell LTS 101 Series engines. For all engine repair, overhaul and test requirements, contact Maurice Gordon at Asia Pacific Aerospace. See details below.

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- APA - Approved Maintenance Organisation (AMO) supporting the Australian Defence Force.

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Asia Pacific Aerospace has two computer controlled correlated engine test cells which support a range of engines including:

- Rolls-Royce Model 250 Series Engine
- Honeywell LTS 101 Series Engine
- General Electric T700 Series Engine

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Hamilton based Central Aero Electrical Limited overhauls and maintains many types of electrical aircraft equipment for a range of operators and maintenance organisations.

FORMED IN July 2008 and gaining a Part 145 certification in December 2008, the company aims to provide a cost effective servicing and supply facility for aircraft electrical and ignition components. On the eve of its first anniversary, KiwiFlyer spoke with founder Martin Ross on the achievements to date and where the company is headed in concert with its neighbour and partner, Central Aero Engineering Limited.



Martin Ross at work on the Central Aero Electrical test bench.

The jewels in the crown for Central Aero Electrical is that it holds CAA Part 145 certification and can draw on many years of expertise in general aviation electrical components. Martin would be one of very few sole traders with this level of certification and skill base. Martin isn't entirely on his own though, with the team at Central Aero Engineering able to assist when circumstances dictate. Experienced aircraft avionics engineer Mike Smith is also on call and specialises in electronic components such as voltage regulators and strobes.

Quality assurance is key to the operation with Martin noting that "We are building our reputation on the production of quality overhauled components that can often be turned around in a very tight timeframe. Central Aero Electrical values its customers and endeavours to satisfy, retain, and encourage other companies and individuals to use our services."

Available facilities

The comprehensive yet compact workshop has a large component test bench. This test bench has in fact served many years at other locations in New Zealand and with four three phase motors within its belly, a 14600 rpm and 500 amp loading is within its capabilities.

Allied to the test bench is a magneto rig. Designed for dual magnetos it will handle up to a 12 cylinder magneto although 4 and

6 cylinder versions are more common fare.

A late model capacity tester brings the ability to test current leakage with an increasing range of minor diagnostic and hand tooling completing the set up.

For Martin the opportunity to start out on his own was largely possibly through the test bench becoming available. This plus the factor of offering a personalised service appealed to Martin, particularly because he could bring personal interest to any problem or overhaul that was presented.

Service capabilities

Martin explains that; "A factor with the operation of a small business is that anything is likely to roll up to the door and this means that not only does expertise need to be maintained for the traditional GA range of products, but also the latest solid state systems found in todays light sport aircraft need to be addressed. Central Aero Engineering is becoming something of

a magnet in attracting the next generation of light aircraft so interesting challenges abound."

While the usual fare of piston engine starter/ generator, control unit rectification and overhaul work along with the 500 hour requirement for magnetos makes up a fair proportion of daily work, a steadily growing amount of turbine electrical components are also passing through the shop. This is confirmed by recent rectification of generator control units fitted to the Pratt & Whitney PT6 series found in PAC Cresco and XL750 aircraft along with those common to the Walter turbine engine and RR250 power-plants within the Bell 206 series of helicopters.

Other areas of expertise include the installation, servicing and repair of the range of Whelen strobe lights plus the bedding in of brushes on starter/generator units by 'motoring in' at 12v 40amp in 'starter' mode. This procedure enables a one day turnaround whereas a similar process in 'generator' mode can take up to three days. Central Aero Electrical also stocks and supplies other aircraft parts for re-sale including starters, batteries, alternators, strobe units, starter generators, GCU's, voltage regulators, ignition switches, and HT ignition harnesses.

As with any certified maintenance organisation, having the correct manual for the job required is paramount. There are times however when a manual is not available. The best information in these cases is invariably a circuit diagram and parts list. It is times like this when specialised knowledge and experience coupled with accurate fault diagnosis is required. Then a procedure is developed, documented and followed. Many an Eastern European sourced component has been rescued in this way by Martin.

Central Aero Electrical may be a small repair organisations but it has dedicated service coupled with allied organisations under the same roof that enable it to participate far beyond its perceived size.

For more information

Contact Martin Ross at Central Aero Electrical on 07 843 2936, email: centralaero@clear.net.nz or visit www.centralaero.co.nz

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Aviation Industry Conference Week
 Blenheim · 27th to 31st July 2009



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event guide

Welcome Message

WELCOME TO OUR week-long series of events celebrating the contribution that New Zealand's commercial aviation industry makes to our country. We are delighted to be presenting our second annual conference week following on from the very successful Tauranga event.

This year's conference week incorporates the 59th annual AIA conference – 27 to 29 July, the 16th annual NZAAA conference 30-31 July and five new events – the launch of the industry-wide Safety Committee 28 July and the New Zealand Helicopter Association (NZHA) 29 July; the Aircraft Engineering Association of NZ (AEANZ); the Aviation Education and Research Conference 29-30 July, and demonstration day for key stakeholders in the agricultural aviation industry on 29 July.

I would like to acknowledge the leadership and contribution of **Petroleum Logistics** to the success of this year's conference. Not only has Rob Bolton and his team put in a fantastic effort but we understand they will have an even more "interesting" presence at conference week.

In all there will be over 60 speakers for the week-long series of events which this year focuses on the theme of the conference – "Breaking down the barriers - seizing the challenge".

AIA's focus has shifted to a very heavy emphasis on advancing aviation safety in this country. Whether it be from understanding what is happening on the global front with international commentator and safety guru Bill Voss, to our own first ever safety advisory committee meeting and incident reviews of events within the New Zealand industry. Bob Feerst will present his internationally recognised programme "Flying in the wire environment". This year participants will receive individual certificates in recognition of their participation.

We will also be recognising the very best in the industry, particularly helicopter operators who are making applications

for their safety recognition awards. These awards, which are now open to all in the New Zealand commercial industry whether you be an operator, individual engineer or pilot, were first made available to New Zealand's helicopter operators earlier in the year. Applications for these awards are now being received and we will be honouring our very best operators/pilots and engineers in the helicopter industry at our first meeting of the NZHA.

The Honourable Steven Joyce, Minister of Transport has agreed to speak on Tuesday morning – a late change, but we are looking forward as an Industry to hearing his vision for aviation safety in this country.

Our conference week is about establishing new networks and friendships, and doing good business. Hawker Pacific are contributing significantly this year with a Bell 407 located in the Pelorus Conference Room all week. They will be accompanied by around 25 other trade stands covering all aspects of our industry.

Even if you only come to socialise and enjoy, Aviation Week in Blenheim will be memorable – it's a chance to visit the Omaka Aviation Heritage Centre, to enjoy the best of what Marlborough has to offer and to meet interesting personalities from the stage and screen in some of our more liberating events.

Last year Tauranga attracted well over 300 participants and supporters. Aviation Industry Conference Week is becoming 'the' event on the calendar for those who are serious about their engagement in commercial aviation and we very much look forward to seeing as many from our industry who can make it to the conference this year. Take care and stay risk aware.

Irene King
 Chief Executive
 Aviation Industry Association

PS: Thanks to KiwiFlyer – this is a great magazine for those engaged across the spectrum of our aviation industry.

5 reasons to book your place at this event today

Meet all the key decision makers who will impact on your business in the year ahead. This ranges from government agencies to safety regulators, aviation lawyers, policy makers, the IRD and more.

Safety is our focus. Learn about the latest safety trends whether it be commercial air transport, engineering, helicopters or our industry-wide safety committee - critical to the smooth introduction of safety management systems.

Come and talk about your experiences and learn from each other. A first is our incident review meeting at which topics of significance to the industry will be addressed in a closed and confidential manner.

Find out about changes in technology and its application in engineering and the cockpit.

Discover new market opportunities as the involvement of civil and military aviation come closer together.

Plus the launch of

The industry-wide Safety Advisory Committee

The New Zealand Helicopter Association

The Aviation Engineers Association of New Zealand

Speaker Profiles: Plenary Day, Monday 27 July

William Voss

President and CEO of the Flight Safety Foundation

William Voss became president and CEO of the Flight Safety Foundation in 2006. He has been a Director of the Air Navigation Bureau at the International Civil Aviation Organization (ICAO) and prior to this spent 23 years at the U.S. Federal Aviation Administration (FAA), ultimately becoming Director of Air Traffic Systems Development, a position he held from 1999 to 2001.

At ICAO and the FAA, Voss has developed global safety plans and led reform plans to expedite the process in which critical needs are identified and addressed.

He is a certified air transport pilot, a certified flight and ground instructor, a licensed airframe and power plant mechanic, and a qualified FAA control tower operator. He holds a Bachelor of Science degree in aviation maintenance and management and a Masters in public administration.

David Connor LL.M (First Class)

Barrister

David practises as a Barrister, Arbitrator and Mediator. His practice is focused on effective dispute resolution through negotiation, mediation, arbitration and litigation.

David has wide experience in commercial matters including claims or lawsuits concerning breach of contract; company and shareholder disputes; company, agri-business, and personal insolvency, copyright infringement; directors' duties; building and construction; insurance; intellectual property; judicial review; relationship property; estates and trusts, tax administration, and trade practices.

He is also the primary legal advisor for selected clients. To those clients he is a trusted advisor and manages the appointment of other specialist lawyers for particular transactions and assignments.

Ashley Smout

Chief Executive Airways Corporation

Ashley Smout was appointed CEO at Airways New Zealand in 2002. Prior to this, Ashley held the position of Chief Operating Officer from 1999-2002. In this role he was responsible for all the domestic operations of Airways including business planning and strategy development. Ashley has also held various marketing and management positions with NZ and international companies.

In 2005 Ashley was elected Chairman of CANSO (Civil Air Navigation Services Organisation), the international body representing air navigation services providers. CANSO's members control 60% of the world's airspace and 80% of the air traffic.

Ashley has a Bachelor of Business Studies from Massey University and an MBA from Auckland University. He has also attended the Stanford Executive Programme at Stanford University.

Paul Kelway

Treasurer, Air New Zealand

Paul has been managing the fuel, forex and interest rate risk at Air New Zealand for 15 years. He is also the fuel buyer for the Group. Paul is Chairman of the Star Alliance Fuel Hedging Committee and was recently awarded the ABN AMRO / NBR Excellence in Treasury Award for 2006.

He has a MPhil in Economics and a MSc in Mathematics.

The Hon. W.P. (Bill) Jeffries, LLB

Chairman, Transport Accident Investigation Commission

A former Cabinet Minister whose portfolios have included Justice and Transport, Bill practices as a Barrister in Wellington. He currently holds the position of Chief Commissioner of the Transport Accident Investigations Commission and is also the Honorary Consul-General for Sweden. In July 2007 Bill was also appointed as Chairman of the Real Estate Agents Licensing Board.

Steve Douglas

Director of the Civil Aviation Authority of New Zealand

Steve Douglas took up the position of Director of Civil Aviation in June 2007. A former aircraft design engineer, Steve's career has been devoted entirely to aviation. He has extensive technical and regulatory experience at the CAA, including 12 years in senior management roles. Immediately prior to being appointed Director he was General Manager Government Relations, with primary responsibilities for aviation rules, policy development and international relations. From 1995 – 2000 Steve was Assistant Director Safety Certification, responsible for the CAA's certification and safety monitoring functions. Steve was also CAA's Manager Aircraft Certification from 1988 – 1995.

Previous industry experience includes five years in a technical services role at Air New Zealand and a similar period spent in commercial satellite design at British Aerospace.

Steve has a degree in mechanical engineering from Canterbury University and an MSc in Aircraft Design from the Cranfield Institute of Technology in England.

Air Vice-Marshal Graham Lintott

Chief of Royal New Zealand Air Force

Air Vice-Marshal Graham Lintott joined the RNZAF in 1973. He trained and served as a helicopter pilot, became a flying instructor, and later commanded Pilot Training Squadron in 1985. During this period, he also flew as a member of the RNZAF "Red Checkers" formation aerobatics team.

In 1990 he was promoted to Wing Commander and posted to Wigram as Commanding Officer Flying Training Wing. In 1995 he was promoted to Group Captain and was posted to RNZAF Air Command Headquarters as the Assistant Air Commander (Support), and took up the appointment of Assistant Chief of Air Staff Programmes and Projects in January 1997.

Air Vice-Marshal Lintott commanded RNZAF Base Ohakea from November 1998 until November 2000, following which he was posted to London to attend the Royal College of Defence Studies from which he graduated in 2001.

Promoted to Air Commodore in 2002, then following a short period as Commander Joint Forces NZ in late 2004, he was appointed Assistant Chief Strategic Commitments and Intelligence, HQ NZ Defence Force in November 2004.

In May 2006, Air Vice-Marshal Lintott was promoted to his current rank and appointed the Chief of Air Force. He was made an Officer of the New Zealand Order of Merit (ONZM) in the January 2008 New Year's Honours List.

Peter Wakefield

Director New Zealand Safety Management Systems

Peter is an experienced safety and risk manager with a background in aviation (airline operations) and electronics industries as well as extensive experience in quality management systems implementation and certification as a Quality Systems Lead Auditor. Recent experience has been with Zeal 320 Ltd (the AIRBUS A320 airline division of Air New Zealand) as Audit and Compliance Manager involved with the planning and conducting of audits, risk reviews and Airline Operator Certificate (AOC) compliance. Peter has been instrumental in the introduction of a dynamic risk management programme within Zeal 320 and across airline operations.

Neil Airey

Director Safety Management Systems

Neil is a former Manager SMS (Senior Person for Internal Quality Assurance and for Pt 12 Occurrence Reporting) for the AOC holder Zeal 320 Ltd (AIRBUS A320 division of Air NZ).

This came after several years in engineering and maintenance planning and quality systems roles, culminating as Deputy QA Manager. Of recent times Neil is a partner in a consultancy specialising in safety management systems.

Hon Steven Joyce

Keynote speaker - Tuesday July 29

Minister of Transport

Minister for Communications and Information Technology

Associate Minister of Finance

Associate Minister for Infrastructure

After completing a zoology degree at Massey University, Steven started his first radio station, Energy FM, in his home town of New Plymouth, at age 21. Along with two business partners, he built up The RadioWorks both organically and by acquisition over 17 years until, as a listed public company, it consisted of 22 local radio stations and four national radio networks with 650 staff in twenty branches around New Zealand. Along the way he launched nationwide music stations The Edge, and Solid Gold FM, and developed The Rock network.

In 2000/2001 RadioWorks was purchased by Canadian company Canwest. Steven retired as Managing Director in April 2001 on his 38th birthday.

He chaired the National Party's Campaign Review after the 2002 election, and later took on the role of being the Party's first General Manager, leading it through to the 2005 election. He managed the 2005 election campaign for the Party.

In August 2006, Steven was appointed Chief Executive of NZAX-listed Jasons Travel Media Limited, a tourism marketing company based in Auckland. Two years later he left that role to enter politics.

Steven chaired the National Party's successful 2008 national election campaign and was successfully elected as a list MP at the same election. Subsequently he has been appointed as a Minister in the new Cabinet.

Programme: Monday 27 July

- 1030 **Welcome to Conference Week**
Councillor Gerald Hope, Chairman, Community and Financial Planning Committee.
Marlborough District Council
- 1040 **President's Address covering AIA strategic and business plan 2009/10**
John Sinclair
- 1055 **Key note speaker address on Aviation Safety – The Challenges and Opportunities**
Bill Voss
CEO and President of the Flight Safety Foundation
- 1130 **Good Law and Bad Law**
David Connor, Barrister
- 1200 **Airways Vision 2015**
Ashley Smout, Chief Executive Airways
- 1230 **LUNCH**
- 1330 **State of the Aviation Industry**
Paul Kelway, Treasurer, Air New Zealand
- 1400 **Safety analysis and investigation**
Bill Jeffries, Chief Commissioner TAIC
- 1430 **CAA**
Steve Douglas, Director Civil Aviation Authority
- 1500 **Development of NZ Military Aviation Capability**
Air Vice Marshal Graham Lintott
Chief of Air Force
- 1530 **AFTERNOON TEA**
- 1600 **Safety Management Systems - The Challenges and Opportunities for NZ**
Neil Airey/Peter Wakefield
NZ Safety Management Systems
- 1630 **Aviation Security - Looking ahead at developments**
Mark Everitt, GM Aviation Security (TBC)
- 1700 **Air Transport AGM**
Supply and Services AGM
Engineering AGM
- 1815 *Assemble in the pre-function lobby prior to boarding buses*
- 1830 *Buses depart to the Omaka Aviation Heritage Centre*
- 1900 *Pre-dinner drinks and Welcome Social dinner – drinks served until 2130 after which a cash bar will operate*
- 2130 *First bus will depart back to the Convention Centre*

Programme: Tuesday 28th July (current at time of print, 29th June)

| 0900 Address by The Honourable Steven Joyce, Minister of Transport | | | | |
|--|--|--|--|---|
| Stream | Air Rescue/Air Ambulance | Commercial Air Transport | Engineering | Airports/Supply & Services |
| Venue Chair | Pelorus Room Rea Wikaira | Awatere Room John Jones | Wairau Room Mike Chubb | Boardroom Rob Bolton |
| 0930 | Keynote Speaker Learnings from the US EMS environment Kimberley Turner Aerosafe Risk Management CEO | Safety Investigation and Enforcement CAA John Kay GM Safety Information NZ CAA (TBC) | AEANZ Launch | Emerging Opportunities and Markets John Nicholson CEO, Aviation New Zealand |
| 0945 | | | Sounds Air Software maintenance monitoring programme Craig Anderson | |
| 1000 | Air Rescue/Air Ambulance AGM Overview of new AR/AA Standard | Safety Investigation New Zealand Police (TBC) | ATTO An update on the Aviation Gateway Programme – bringing young people into the industry. | Proposal to develop "one stop" collaborative shops to market and sell aviation products within New Zealand Alan Peacock Flight Signs Ltd |
| 1015 | | | | |
| 1030 Morning Tea | | | | |
| 1100 | The Bell 412 and 429 EMS delivery options Peter Crook Sales Manager Rotary Hawker Pacific | Health and Safety in Employment Pilots and Flight Crew Development of the new guidelines. One license - two standards; the New Zealand and Australian medical certification issue. (TBC) | The emerging MRO environment and New Zealand's capabilities John Nicholson CEO, Aviation New Zealand | The Security of Fuel Supply New Zealand and the Pacific |
| 1130 | The application of Section 13A and the CAA's review of Rule Parts 91.127 and 139.309 John Fogden Manager Rotary, NZ CAA | SMS workshop Development of an AC, contents, industry/CAA collaboration | Spidertracks Rachel Donald will outline the latest innovations in aircraft tracking technology that will change the way the world thinks about flight following | Working with the New Zealand Defence Forces Des Ashton Deputy Secretary Acquisitions Ministry of Defence |
| 1200 | Demonstration of Hoist Operations Greg Brownson | SMS Consultation on development of AC and industry leadership | Working with the New Zealand Defence Forces Des Ashton Deputy Secretary Acquisitions Ministry of Defence | |
| 1230 Lunch | | | | |
| 1330 Launch, Formation and Meeting of the Industry-wide Safety Committee | | | | |
| 1400 | An agenda will be distributed prior to the event. The proceedings will include a case study on the power of data and information in crafting a new wildlife hazard management regime for New Zealand airports Michael Gee, Senior Policy Analyst DoC. | | | |
| 1430 | Commencement of IRM | | | |
| 1530 | Afternoon Tea | | | |
| 1600 | Continuation of IRM | | | |
| 1800 | AIA Annual General Meeting | | | |
| 1930 | Pre dinner drinks - Marlborough Convention Centre | | | |
| 2000 | Awards Dinner - drinks served until 2300 | | | |

Programme: Wednesday 29th July (current at time of print, 29th June)

| Stream | Flight Training | NZHA Inaugral Meeting | Commercial Air Transport | Engineering |
|--|---|--|--|--|
| Venue Chair | Wairau Room Kevin England | Pelorus Room Peter Garden | Awatere Room John Jones | Green Room Mike Chubb |
| 0900 | Flight Training AGM | New Zealand Helicopter Association launch Inaugral AGM and ratification of constitution and rules. Development of work programme for the year ahead | Procurement opportunity working with the New Zealand Defence Forces Des Ashton Deputy Secretary Acquisitions Ministry of Defence | Common errors found during audits and inspections. Plus AC update. John Bushell CAA |
| 0930 | TEC/MOE Setting the agenda (TBC) | New Zealand Helicopter Association's inaugural safety awards presentation | FlightWorks Safety database and software AQD revisited and made relevant for application to smaller companies | Lycoming Electronic engines and other topics |
| 0945 | | | | |
| 1000 | MetService The next 10 years | Bell Helicopter overview Update on the 407 and 429 as specific types suited to varied NZ operations Peter Crook Sales Manager Rotary Hawker Pacific Ltd | Contestable provision in the ATS environment Barry Malloch Managing Director ATCANZ | |
| 1030 Morning Tea | | | | |
| 1100 | Airways Mode S Transponders Peter Crook Deputy ANS Requirements Manager | Keynote address: The work of the Helicopter International Safety Team Kimberley Turner CEO, Aerosafe Risk Management | IRD: New tax changes for aircraft maintenance and overhaul Jim Gordon Tax Policy Unit IRD | Safety Investigation NZ Police (TBC) |
| 1130 | NZSkills Connect + HIS Careers Web Portal Brigid Thornes Projects International | IRD: New tax changes for aircraft maintenance and overhaul Jim Gordon Tax Policy Unit IRD | MetService The next 10 years | FlightWorks Safety database and software AQD revisited and made relevant for application to smaller companies |
| 1200 | ATTO An update on the Aviation Gateway Programme bringing young people into the industry. | GPS technical and operational advances (TBC) | ASPEQ New software and its application to exam delivery in New Zealand Mike Lynskey CEO, ASPEQ | NZSkills Connect + HIS Careers Web Portal Brigid Thornes Projects International |
| 1230 Lunch | | | | |
| 1330 | FlightWorks Safety database and software AQD revisited and made relevant for application to smaller companies | Discussion on rule making options for the helicopter industry in New Zealand What is the best way ahead to achieve change. | Tourist Flight Operators TFO AGM Chair Richard Keyward Revitalising the TFO - what will make the difference. | Programme under development with Massey University at time of print. Conference continues through to lunch on Thursday 30th July. |
| 1400 | Aviation New Zealand John Nicholson Aviation New Zealand and Export Opportunities | The Environmental Challenge (TBC) | Tourism Exchange Tourism Exchange is the real-time, central marketplace for NZ tourism suppliers and distributors. | |
| 1430 | Mountain Flying - Is there a need for additional training What TAIC have found, the CAA view and what the Industry really thinks – discussion panel | Developments at DoC HQ The next 12-18 months understanding likely directions and constraints | NZSkills Connect + HIS Careers Web Portal Brigid Thornes Projects International | |
| 1500 | Pilot Training in NZ The challenges ahead – too many too few. What the airlines think about the issues. | The new code for professional guided hunting in NZ Roger Duxfield Experience NZ Limited | TracPlus Using tracking and messaging tools to thrive during the downturn. | |
| 1530 Afternoon Tea | | | | |
| 1600 | Improved predictive screening of pilot applicants Bryan Wyness, GAPAN | Professionalism and the Pilot | Developments at DoC HQ Understanding likely directions and constraints | |
| 1800 Pre dinner drinks | | | | |
| 1830 Aviation Week Dinner - drinks served until 2130 | | | | |

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Comprehensive Trade Exhibition

THE EFFECTS of the recession are being felt worldwide but if current numbers are anything to go by then this year's trade exhibition at the AIA conference will be better than ever.

"This is a perfect opportunity, especially in the current economic climate, for companies to showcase their products to aviation decision makers." Says Irene King, CEO AIA, "and with the amount of interest this year's conference has generated it looks like we might have to increase the number of trade stands to accommodate everyone."

A number of exhibitors at this year's AIA Conference are pulling out all the stops to ensure their presence is felt. Several of these are taking more than one stand in order to show off their full range of existing products as well as new products they are bringing to the market.

Petroleum Logistics Pacific Ltd, the principal sponsors of this year's conference, will have a large presence, both within the exhibition hall as well as in other areas of the conference centre. They have also promised some surprises for conference

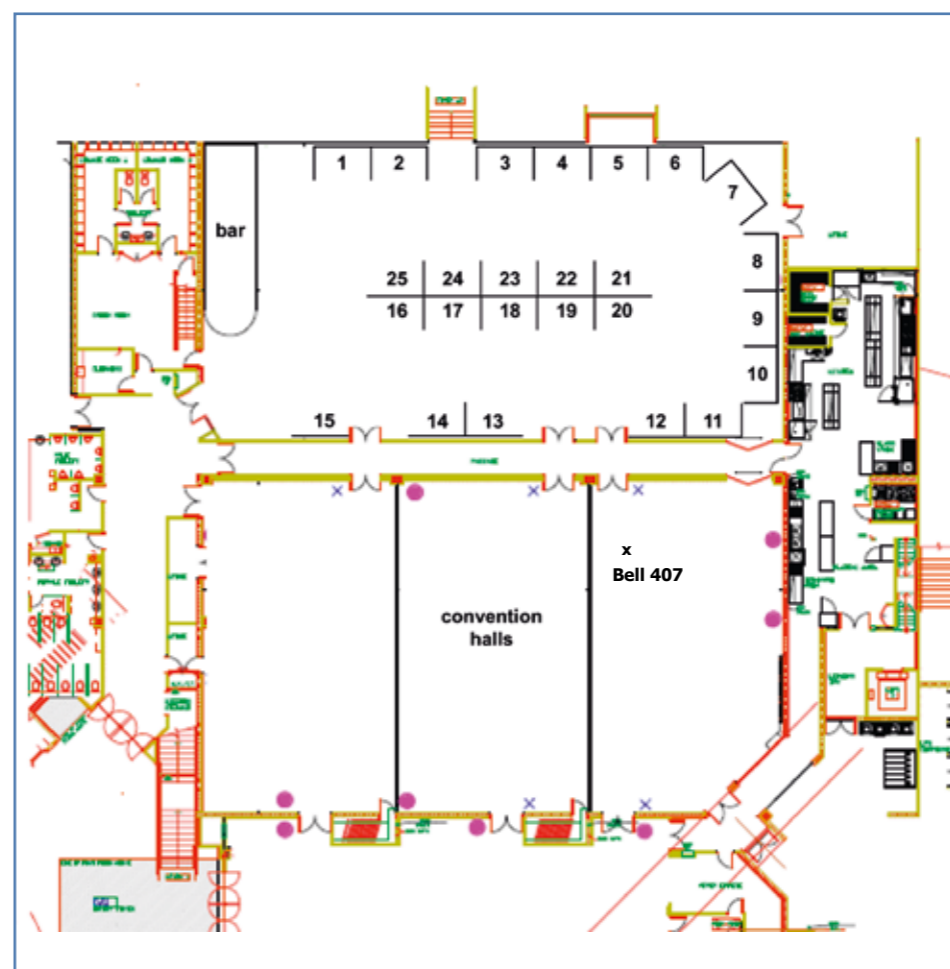
delegates throughout the week.

Conference delegates will also have the opportunity to check out the latest Bell 407 helicopter, with Hawker Pacific positioning one inside the conference centre. This will be a feature at all rotary group meetings.

Morning and afternoon teas, as well as lunches are being served within the exhibition hall throughout the week, ensuring that exhibitors have maximum exposure to the conference delegates. There will be AIA's usual trade show awards for the best displays.

"We are doing everything we can to ensure that trade exhibitors get maximum benefit from being at the conference," says Irene. "It is a major financial commitment on their behalf and we want to do everything we can to make sure it is successful for them."

With over 80% of trade stands already fully confirmed the interest level is very high. Any company wishing to exhibit at this year's conference should contact David Watson by email at david.watson@aia.org.nz or call 04 472 2707 for further information.



Exhibitor Directory

| | Conference Stand |
|--------------------------------------|------------------|
| | AIA AAA |
| Ag-NAV Canada | • 19 |
| Aquamax | • 9 |
| ATTTO | • 22 |
| Asia Pacific Aerospace | • • 12 |
| Austin Stone Ltd | • 4 |
| Aviation Labour Group | • |
| Aviation New Zealand | • 5 |
| Avinet | • • 3 |
| Ballance Agri-Nutrients | • 24 |
| Fieldair Engineering Ltd | • 10 |
| Field Air Sales Pty Ltd | • 18 |
| Flightcell | • • 13 |
| Flight Safety Foundation | • 2 |
| Hawker Pacific NZ Ltd | • • 6 |
| Hawker Pacific NZ Ltd | • • 7 |
| Hawker Pacific NZ Ltd | • • 8 |
| KiwiFlyer Magazine | • 4 |
| Lycoming | • • 15 |
| NMIT | • 23 |
| Olympus | • 20 |
| Olympus | • 21 |
| OmniSTAR | • 5 |
| Pacific Turbine Brisbane | • • 1 |
| Petroleum Logistics | • • 16 |
| Petroleum Logistics | • • 25 |
| Pratt & Whitney Canada | • 17 |
| Product Development Solutions | • 17 |
| RDS Systems | • |
| Rotor and Wing | • • 14 |
| Southern Ocean Safety | • 18 |
| Spidertracks | • 19 |
| Standard Aero | • 2 |
| TracMap Aviation | • 21 |

Please note this list and stand allocations are current at the time of print. Several more Exhibitors are expected to confirm their participation in the coming weeks. Stand allocations may be subject to change.

The very capable Bell 407

Hawker Pacific will be exhibiting Gisborne Helicopter's Bell 407 at the Aviation Week Conferences in July. KiwiFlyer recently spoke to owner Peter Moore about the work he does with the aircraft and his opinions of it after three months of operation. It is more than fair to say that Peter is delighted with his purchase.

FORMED IN 2001 by pilot Peter Moore, Gisborne Helicopters provides helicopter services for clients primarily in the East Coast and Hawkes Bay areas. Currently operating MD500, Robinson R44, and the Bell 407, they have also in the past operated AS350BA and Lama helicopters. Peter readily declares the 407 to be his favourite, claiming "it does everything better with ease". The company's range of services includes spraying, heavy precision lifting, frost control, fire control, passenger transport and more, all tasks for which the 407 has proved very capable.

Acquiring HNY

Peter purchased his 407, ZK-HNY, in March 2009, using it to replace both the AS350BA and Lama that he previously had on line. The 407 had originally been imported into New Zealand and operated by Nokomai Helicopters in Southland. Prior to that the aircraft had been used for corporate transport in South Africa and then in Australia as a Westpac Rescue machine.

Equipped with a hook, wire cutters, Simplex spray gear, TracMap GPS, a sliding door, removable corporate interior, and an Aeronautical Accessories floor, the 407 provides the versatility required for all of Gisborne Helicopters varied operations. It also has its own fire bucket, a specially enlarged version of one the company already had. A FADEC system is standard and offers the added security of knowing what pilots before you have done to the aircraft.

Flying and Operating a 407

Gisborne Helicopters undertake a lot of hook work and Peter comments that he really knows it's been a big day lifting on the occasions he has been in the AS350. Not so in the 407 which he says has been

a lot less fatiguing; "You can sit there with your shoulder harnesses on long-lining all day without getting tired." A regular job for Gisborne Helicopters has been to place poles between wires spaced just 1m apart, work that the 407 is ideal for. In Peter's words; "It sits there like a Lama and has very smooth hover stability which makes precision lifting a much easier task."



Gisborne Helicopter's Bell 407 on a pole replacement task. This helicopter will be on display at Aviation Industry Conference Week.



The 407 office. Extras include additional radios and a TracMap GPS system.

Gisborne Helicopters pilots have found the 407 "does everything it says on paper with ease". Peter considers the 1200kg hook load to be a very genuine capability; "With a little bit of wind on the nose, we can lift max all up weight and cruise with 80% torque easily. It also copes very well in poor conditions and higher winds. One of our recent pole replacement jobs in the

407 would have been postponed previously. The 407 just kept on going and our crews were very happy to work underneath it."

"We've also used it to lift some timber off a walkway which was essentially the same job as we did a year ago in the Lama. With just a tiny bit of wind on the nose,

the 407 lifted more, with higher reserves, quicker than the Lama managed." Peter adds that; "We reckon that if we were operating them side by side, the 407 would probably give the Lama a good curry up."

"Another recent job involved lifting a 1.15 tonne hut for DOC up above 4000 feet on a warm day. We had 10kts on the nose and only needed 75% power. We've also placed a 700kg bridge down in bush and had to hold it still while bolts were fitted. Because you can see the whole site picture under the machine very easily, jobs like this are no problem at all."

With a corporate leather interior that can easily be swapped in or out, the 407 also gets its fair share of passenger transport work. Peter had

wondered whether passengers would be comfortable in the rear facing seats but has found that they don't mind at all. He says that anyone who thinks this might be an issue would be mistaken, as passenger feedback has been excellent.

With only a few months of operation, it is too early for Peter to comment on 407 maintenance, however if the maintenance experience is anything like the flying experience, he will be more than happy.

For more information

Peter Moore declares the 407 to be the best helicopter he has ever flown. To talk to him about his experiences or any of the services Gisborne Helicopters offer, phone 027 444 8964 or email: enquiries@gisbornehelicopters.co.nz.

For enquiries about Bell Helicopter sales in NZ contact Peter Crook on 0800 447 614 or email: peter.crook@hawkerpacific.com. Bell maintenance enquiries should be directed to Steve Siddall on 09 295 1630, 021 405 061, or email steve.siddall@hawkerpacific.com.



NZ Helicopter Association Takes Flight

FOR NEARLY 60 years the Aviation Industry Association of New Zealand (AIA) has represented the interests of commercial helicopter operators in New Zealand however, no group has been formed to represent the entire helicopter community.

At the AGM of the AIA Helicopter Division, members will be asked to vote regarding changing their rules to create the New Zealand Helicopter Association (NZHA). Operating on similar lines to the New Zealand Agricultural Aviation Association, the NZHA will, with support from the industry, have its own executive officer who will be tasked with addressing the many issues challenging the helicopter community. Membership will be open to all those associated with the helicopter community, including for the first time, private pilots and owners.

"The helicopter community needs a voice that can speak authoritatively on any matter relating to its part of the aviation industry", says Irene King, CEO AIA. "NZHA will now take on this role. This is an extremely important step forward as the CAA has acknowledged that the existence of a strong representative voice would improve the focus on helicopter issues."

On the table for the NZHA are discussions regarding the existing Part 135 rule and its application to helicopters; industry accreditation, enhancing the safety record; addressing environmental concerns and generally promoting helicopters as an efficient means of undertaking many different roles in the New Zealand community

"This is an important industry driven initiative," explains John Sinclair, President AIA "and I would recommend that all those involved in the helicopter industry join the NZHA in order to make it a strong, vibrant and effective representative body. Already we are seeing some regional councils restricting or limiting helicopter access. The helicopter community needs a united voice if we are to keep enjoying the privileges we mostly take for granted."

The NZHA will also launch its Safety Performance Awards at the conference and is anticipating being able to make the first in a series of very public announcements. To be eligible for an award a company must be a member of the NZHA. The awards have three levels; Gold, Silver and Bronze, dependent on the number of years an organisation has been free from

accidents resulting in serious injury. AIA will independently verify the information provided by an applicant for an award and then again annually as part of the renewal process. A number of organisations have already applied for this award and their applications are currently being reviewed. "We see this as a major and significant marketing tool – it will provide some immediate and public recognition of the 'best'", says Irene.

For further information on how to join the AIA/NZHA or to apply for a Safety Award visit the AIA website www.aia.org.nz or email Bob Feasey at: bob.feasey@aia.org.nz.



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New Zealand Agricultural Aviation Association Conference and Events

Theme: The Marketplace - an Industry in Crisis ?

TWO INTERESTING and timely events are planned for the latter part of Aviation Week this year. First, on July 29 at Omaka airfield a "Demonstration Day" will be run with a theme of "Policy and the Pilot". Pilots and aerial operators are the people who must put into practice the rules and regulations around the discharge of agrichemicals, fertilisers and VTA (poison bait) into the environment. The activities planned are designed for the policy maker, rule writer or regulator. We see the day as an opportunity to show the technology and systems adopted and being developed by the industry to achieve the required outcomes. Weather permitting there will be some flying to demonstrate fertiliser, spray and poison bait application followed by a look at the results and a discussion on the standards achieved in the industry.

The second event is the 16th NZAAA Annual Conference which runs on July 30/31 in Blenheim. The theme of this year's Conference is - An industry in crisis? We ask the question then explore some possible answers and remedies in a range of presentations, beginning with a presentation by Dr James Lockhart from Massey University. He will discuss some symptoms of an industry in crisis that are or may be evident in agricultural aviation. These include:

- Lack of investment
- Poor profitability and cash flow.
- Competition on price (internally).
- Increasing compliance costs.
- A poor (but improving) safety record.
- Changing fertiliser application practices.

What strategies are available to address these symptoms? What are the features of the industry that most influence future prospects? Are some parts of the industry more vulnerable than others and if so what are they and why? What significant market changes are likely to affect the industry's future? These are some of the questions discussed in this

presentation. Graeme Martin from Super Air takes on the challenge to give his view of the business of agricultural aviation and current market conditions and some specific recommendations on strategies for survival – and prosperity. Will there be an industry in 10 years time and if so



what will it look like? The changes come thick and fast – fertiliser prices, fuel prices, environmental pressures, aircraft and equipment replacement – options and costs, operating capacity (seasonal), and on it goes. Amalgamation of operators – are we headed for fewer bigger operators and if so what affect does that have (eg. fewer NZAAA members?).

Rounding off the morning session, Graeme Brown from South Canterbury Finance talks about where the money comes from, what it costs and why the people who have the money lend it to an aerial operator.

The first day of Conference, July 30 2009, has breakout sessions for helicopter and fixed wing operators where topics specific to each aircraft category are discussed. The helicopter session will include a briefing on the recently formed Helicopter Association. In addition to matters raised on the day, other topics likely to be discussed include pilot remuneration policies and the recent fixed wing safety review (FW).

Day Two of the Conference will begin with a review of the economic data by Rob Davison from the Meat and Wool sector with predictions on prospects for the coming year - in particular the impact of drought in various parts of the country and

the changes in the meat industry as a result of dairy expansion.

The Climate Change Response (Emissions Trading) Amendment Act 2008 came into force in September 2008 so the Emissions Trading Scheme (ETS) is now in operation. The ETS is the price-based mechanism for greenhouse gases and is a key part of overall climate change policy. It involves all significant greenhouse gases and all sectors. How many of us truly understand what the ETS is and what effect it will have on the NZ economy and in particular on agriculture? Dr JP Praat will explain what we need to know, and where we can get the information needed.

The concluding set of presentations deal with one Regional Councils approach to environmental management when Greg Carlyon from Horizons talks about the "Green Rig". This is followed by a discussion on fertiliser quality, which in this context means product physical properties and flowability. What are the costs of consistently achieving product standards that ensure good flowability? What are the costs of avoiding situations where product is sold in a "green" condition because of heavy demand and insufficient storage capacity? A related issue on the agenda is the Fertmark and Spreadmark programmes, which are, or at least should be, client driven, but do they deliver what the client wants. Who are the clients? Is a Regional Council a client? What do these brands stand for and what do they mean? Why should you as an operator be bothered with them? How do we market these brands, where is the added value to the client or the aerial operator?

1080 has received much public attention and the demands to ban it continue despite the recent assessment by ERMA and the controls that are attached to the possession and use of the substance. The role of the aerial operator in the application of 1080 is to place bait at the specified rate in the designated areas and nowhere else. The nature of the hazards associated with the substance dictate the specification to which the aircraft is required to operate. Graham Nugent from Landcare Research discusses some work which may change the operational specification for the aircraft with a move away from the need to distribute the bait in a wide swath. Specification of the relevant 1080 bait characteristics is an essential component which will also be discussed.

J Maber
Executive Officer, NZAAA

NZAAA Programme:

Thursday 30th July

- 0900 **Opening Address**
- 0915 **NZAAA Chair address**
Graeme Martin
- 0930 **Surviving in today's market**
James Lockhart, Massey University
- 1015 **MORNING TEA**
- 1045 **Crisis or prosperity**
Graeme Martin / Rick Harding
- 1130 **What drives the finance industry?**
South Canterbury Finance
- 1200 **LUNCH**
- 1330 **Concurrent sessions for fixed wing and helicopter operators**
An industry in crisis ?
Chaired by Gavin Mudford / Graeme Martin / Rick Harding
- 1530 **AFTERNOON TEA**
- 1600 **TRADE DISPLAYS**
- 1830 *Bus to Omaka Aviation Heritage Centre*
- 1900 *Pre-dinner drinks and Welcome Social*
- 2130 *First bus back to Convention Centre*

NZAAA Programme:

Friday 31st July

- 0900 **Market Outlook**
Rob Davison
- 0945 **Climate change and the Emissions Trading Scheme**
Dr J P Praat
- 1015 **MORNING TEA**
- 1045 **Fertiliser Application and the Green Rig** **Horizons**
- 1110 **Fertiliser quality**
DoC/AHB/ERMA
- 1130 **Aerial VTA application**
FQC/Fe
- 1200 **LUNCH**
- 1300 **CAA Safety Session**
Steve Douglas
AC for re-certification, Ops manual for 137, Capacity of spray tanks on helicopters, An AC for Training.
- 1500 **AFTERNOON TEA**
- 1545 **Conference Roundup**
- 1600 **NZAAA AGM**
- 1630 *Best Trade Display Award*
- 1830 *Pre-dinner drinks in pre-function lobby*
- 1900 *NZAAA Awards Dinner*

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The Safety Advisory Committee and Incident Review Meeting

THE FIRST meeting of the Industry-wide Safety Advisory Committee (SAC) is scheduled to be held during the AIA annual conference in Blenheim this year.

“With the introduction of safety management systems (SMS) worldwide, there is a change in focus which requires aviation organisations to be more proactive in the way they identify and deal with potential risk situations,” says Irene King, CEO AIA. “From the Association’s perspective establishing an industry-wide safety committee is the next logical step after our very successful SMS symposium in Auckland in March.”

Participation in the SAC is open to all AIA members and by invitation, groups and organisations that do not hold membership of the Association. The SAC provides a platform for issues to be raised, discussed and determined with the focus on proactive, efficient and economical solutions to issues related to aviation safety. One matter already on the agenda for this first meeting is to work on identifying solutions for introducing and implementing SMS for its members at a reasonable cost.

“The implementation of SMS could, unless undertaken appropriately, have serious financial implications for many operators,” explains Irene. “We are looking at how to limit those costs through an industry-wide approach rather than everyone doing their own thing. In speaking to industry participants most have good proactive safety systems within their own company. The real problem starts to emerge when there is interaction with other companies or other suppliers of services - we just don’t seem to have the same focus. The SAC will highlight and address those issues among others.”

The SAC has a steering committee made up of one member from each of the AIA divisions. The SAC will also take on an international flavour with the steering committee having advisory status to the Asia Pacific Advisory Committee of the Flight Safety Foundation. This is a significant step forward as New Zealand’s aviation community is part of an international aviation safety network dedicated to sharing and communicating information, practices, data and tools. We will be able to contribute and learn from others – all aviation safety professionals recognise that this “sharing of information” is one of the fundamentals

that underpins the next step forward in the aviation industry, delivering increased levels of safety and assurance for passengers and participants.

On the agenda for this first meeting and expected to generate hot debate, is the criminalisation of aviation. At a recent industry meeting it was reported that the authorities view every accident as a crime scene. We had some indication of this late last year, but this is the first occasion we have heard it expressed this way in an industry forum.

What do we want you to do?

1. Member organisations of the AIA are being asked to nominate a delegate for this committee and an alternate. These delegates will exercise voting rights
2. Participate in and submit an incident for the Incident Review Meeting (IRM). It is a forum for the confidential exchange of information among safety professionals from the AIA.

Formal accident / incident reports often do not provide the “story behind the story”. The IRM is designed to facilitate a just culture environment where valuable information can be exchanged without jeopardy. It is a venue that will enable aviation professionals to discuss experiences, openly and freely, with the sole objective of enhancing safety. The key is confidentiality, which is strictly maintained at the IRM through control of the attendees. At any time the forum can go into closed session at which time those non-members will be asked to leave, including regulators.

Any occurrence, incident, accident or event that could be of interest, or could provide value, to the aviation industry should be presented at the IRM. This includes, but is not limited to:

- Follow up and “lessons learned” from accidents where the formal accident investigation report has been released,
 - Occurrences or incidents that may not have been formally reported, but have value in safety risk management,
 - Any initiative, project or procedure that has proved successful in mitigating risk.
- All members of the SAC are invited to present at the IRM and should express their interest in so doing by contacting Bob Feasey at bob.feasey@aia.org.nz or by phone on 04 472 2707.

“The days of waiting for something to

happen and then putting in measures to ensure it doesn’t happen again are gone,” says Irene. “It is now our responsibility to identify those risks before they happen and to put safeguards in place to stop any serious incidents occurring. The safety committee and IRM will provide a valuable forum to assist industry in meeting these requirements.”

NZ AIA Presents First Safety Performance Awards

THE New Zealand Aviation Industry Association will present its first Industry Safety Performance Awards at the NZ Aviation Conference Week. “The presentation of these awards is yet another milestone in our goal to continually improve and enhance the safety, performance and reputation of the aviation industry within New Zealand”, says Irene King, CEO AIA.

John Sinclair, President AIA, adds, “The public are much more aware of aviation safety than ever before and they want to know that the aircraft they are going to fly in is operated by an organisation that has high safety standards. These awards do just that, they provide them with transparent information on the safety and performance of these operators.”

To be eligible for a Safety Performance Award a company or individual must be a member of the AIA.

The awards have three levels; Gold, Silver and Bronze, dependent on the number of years an organisation has been free from accidents resulting in serious injury. The AIA independently verifies the information provided by an applicant for an award and then annually, as part of the renewal process. Those organisations who will receive their safety performance awards at the conference are currently undergoing this process.

For further information on how to apply for a safety performance award visit the AIA website www.aia.org.nz or email Bob Feasey at bob.feasey@aia.org.nz.

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Wire Survivor supports programme

KEN MACKENZIE found out all about wire-strikes at 10 am on Tuesday October 15th, 1974 when the aircraft he was flying struck a wire. Ken is one of the lucky ones, surviving to tell the tale. Others are not so lucky and over the last 18 months there have been 14 reported wire-strikes. These are frightening statistics and ones which could easily be reduced with the necessary training and information.

Faced with an upward trend in wire strike incidents/ accidents, the Aviation Industry Association, NZ CAA and ACC in conjunction with Bob Feerst, an internationally recognised expert in the area of "flying in the wire environment", began providing seminars for pilots operating in this environment. To date over two hundred pilots have attended these annual seminars in New Zealand.

This year the seminar will again be facilitated by Bob Feerst of Utilities/Aviation Specialists Inc. Bob has 36 years experience in aviation, with 32 years of operating in a joint gas-and-electric utility. He is a commercial pilot, rated in both fixed wing aircraft and helicopters, and a former pilot/manager for a large Midwestern gas-and-electric utility. He has a bachelor's degree from Purdue University and master's degrees in aviation business management and aviation/aerospace operations from Embry-Riddle Aeronautical University.

This essential seminar has been specifically designed for professional pilots

and crews whose missions require them to operate in wire infested environments. Its acclaimed methods for early detection of wires are taught world wide to professional flight crews and it fills a definite void in most low-level flight training programs. Aviation professionals learn about the specialised skills needed to fly in the wire environment.

"Wire strikes continue to be one of the most devastating accidents for professional pilots and crews", says Bob, "perhaps the greatest tragedy is that the vast majority of these accidents are entirely preventable. The root cause of most wire strikes is usually the crew's lack of understanding of the specialised skill needed to operate an aircraft in the vicinity of wires."

Ken Mackenzie survived his wire strike and in 2006 attended Bob's seminar.

"This course is excellent and a real must for all fixed wing and helicopter pilots. It teaches skills that you don't learn as part of your pilot's course" says Ken, "If this course had been available back then it would have been a different story, I would have recognised the signs and known what to do." Ken was fortunate to survive his encounter with wires, others have not been so lucky. **"The skills learned on this course may save your life one day."**

Registration is now open for this one day course being held in Blenheim on July 28th. For more information and to register visit www.aia.org.nz or call the Aviation Industry Association (AIA) on 04 472 2707.



Attending a wire strike avoidance seminar could prevent this from happening to you.

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Crew Resource Management in the Wire Environment

Tuesday July 28th

Don't miss this acclaimed seminar by Bob Feerst

The seminar programme will include:

- **The "Basic Awareness"** low-level flight crews must have and maintain while operating in the wire and obstruction environment.
- **How** to identify the hazards associated with wire & obstruction accidents.
- **Understanding** your exposure to the wire and obstruction environment.
- **Crew Resource Management:** What the pilot and crewmembers need to do in order to act as a team in the wire and obstruction environment.
- **Why** the crewmember is so important regarding safety during low-level operations.
- **Responsibilities** of each crewmember.
- **In-flight communications** about wire and obstructions.
- **Where** the wire and obstruction environment really is.
- **Dynamics** of the wire environment.
- **Traps** waiting for untrained low-level flight crews.
- **Visibility Engineering.** What you can and can't see and why.
- **How** flight crews can forecast the presence of wire long before they can actually see it.
- **Illusions** while operating in the wire environment. What causes them and how to manage them.
- **The high wire reconnaissance:** How is it different from the normal recon?
- **Additional dangers** during low-level operations.
- **How useful** are today's obstruction marking schemes?

For more information and to register visit www.aia.org.nz or call the Aviation Industry Association (AIA) on 04 472 2707.

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Inaugural NZ Aviation Education and Research Conference

Contemporary issues in aviation education and research

'CONTEMPORARY ISSUES in aviation education and research' is the theme for the inaugural Aviation Education and Research Conference to be held in Blenheim on 29-30 July as part of the New Zealand Aviation Conference Week.

The conference is being organised by Massey University School of Aviation in conjunction with the Aviation Industry Association.

"This event is intended as a forum for disseminating research and discussing current issues in aviation, with an emphasis on bridging theory and practice," says Ashok Poduval, General Manager of the Massey University School of Aviation. "It will also present an opportunity for 'a meeting of the minds' for academics and practitioners in the aviation industry."

The two day conference has generated a lot of interest within New Zealand as well as in Australia and the wider international aviation academic and industry communities, with many attendees and presenters crossing the Tasman to be part of this event.

"We are very pleased with the response," adds Dr. Robert Yaansah, Post Graduate Programmes and Research Coordinator of Massey School of Aviation. "The papers accepted for presentation address critical issues of safety and business challenges in our industry. A wide range of papers were submitted representing a good cross section of universities within the Australasia region. Additionally, a number of our PhD Aviation students are presenting papers related to their research. This conference should establish that the region has an academic community with a strong focus on aviation education and research, as good as elsewhere in the world."

Some of the papers accepted for presentation include:

The further development of the bachelor of technology in aviation degree program at the Australian Defence Force Academy

Dr. Raymond Lewis, Senior Lecturer, University College, Australian Defence Force Academy.

Memos in Aviation

John Murray, Lecturer, Edith Cowan University, Australia.

Aviation Organisation Knowledge Management and Aviation Safety

John Duske.

Patterns of Threat and Error in Regional Airlines

A/Prof Patrick Murray, Griffith University Aerospace Safety Centre, Australia.

Threat and Error Management: An Analysis of Air Incidents in New Zealand from 1992 to 2008

Tim Graham.

The Externalisation of Air Transport Reform in Europe: a Selective Analysis of the Developing Role of the European Commission

Prof Alan Williams, Massey University.

Airline Strategic Alliances: The Past, Present and the Future

Bo Link.

Confirmation bias in general aviation lost procedures

Dr. Andrew Gilbey & Dr. Stephen Hill, Lecturers, Massey University.

A flight test laboratory for Aviation Education

Dr Michael Harrap & Dr. Raymond Lewis, University College, Australian Defence Force Academy .

Public/Private Risk Sharing in Air Service Provision

Associate Professor David Duval, University of Otago, New Zealand.

For more information

For further information regarding this conference please visit the Massey University, School of Aviation website, contact the conference coordinator on 04 472 2707 or email: info@aia.org.nz

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New avionics upgrade available for Bell 206 owners

HAWKER PACIFIC have announced their development of a new avionics upgrade package for Bell 206 helicopter owners. An STC has been obtained for the system which includes an electronic primary navigation display, TSO146 GPS as well as other components from Garmin, Sandel and Mid-Continent Instruments.

The system is being marketed to aircraft operators who want to make use of the latest avionics technology to add enhanced situational awareness to their cockpit.

Steve Siddall, General Manager of Hawker Pacific NZ at Ardmore comments that the system also provides a good demonstration of Hawker Pacific's Part 146 design capability. Partial fitouts of this new system are available, as are other customised avionics solutions to suit the needs of operators.

Hawker Pacific welcome enquiries for this system or for any other avionics requirements. For more information contact Steve Siddall on 09 295 1630 or email: steve.siddall@hawkerpacific.com

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Avionics at Aeromotive

Offering a complete aircraft service experience is a key commitment from Aeromotive Limited. The Hamilton based maintenance and repair workshop has recently added an avionics capability with two dedicated staff to its already extensive aircraft maintenance business.

ENGINEERING Manager Brett Puddle says that significant advantages are now to be had in completing inspection work in house where previously such work as 24 month radio inspections had to be outsourced. An advantage particularly with regular inspection items, is that work doesn't get out of phase with other inspections and therefore there is less downtime to the operator.

Outfitted with a dedicated air controlled environment, the Aeromotive avionics bay is located off the main workshop floor. This facility also handles all tool calibration for the Aeromotive operation and is also able to calibrate tooling for other clients.

Experienced People

While the Aeromotive avionics capability is relatively new it has some specific expertise. As well as satisfying nearby CTC Flight Training requirements it also has capability to cover RNZAF maintenance contracts which are carried out at Ohakea, primarily on the PAC CT4E fleet.

Currently staffing the avionics bay are Adam Seumanutafa (Sammy), who has returned to aviation following a sojourn in the UK commissioning electrical modifications for a rail transport company. From initial training with the RNZAF, he has extensive experience on P3 Orion systems. Sammy is a licenced Avionics engineer having achieved his licence and ratings within 18 months.

Joining Sammy is Philip Hutchings. He has recent extensive experience in narrow bodied airliners but his real expertise comes with more than 10 years of test flight development in South Africa. This work was primarily associated with prototype and telemetry installations. Philip is South African Air Force trained and is currently converting his South African LAME status to the New Zealand requirements.

Services Offered

Phil's experience in wiring loom modifications compliments Sammy's systems background and with a combined ability to research any problems arising, the pair are well able to find solutions and implement them. The bay is moving towards more installation work to make best use of this experience and is currently seeking a number of distributorships for systems and allied components.



Phil discusses a Cessna 172 radio installation characteristic with Sammy. A full panel rebuild for this aircraft was undertaken in the Aeromotive workshop.

While aircraft operating under regular transport certification rules are well catered for, there are services which GA and recreational aircraft owners tend to overlook. Aeromotive can undertake

mandatory 24 month radio inspections, ELT and transponder inspections, along with associated minor defect rectification. A 406 MHz ELT is available on loan while customer units are being repaired.

Phil has upped the ante on inspection within the static system and particularly in chasing down leaks. "A little attention here to this simplest of systems has benefits for all concerned. Not only does the aircraft have a better service history, but the chances of a premature instrument overhaul diminish without foreign bodies entering the system and causing erroneous readings. While any rules governing such systems state the minimum requirement, having confidence in your system benefits not only the aircraft but also means there are no surprises for the owner/operator."

Avionics on larger aircraft are readily catered for when booked for service and inspection under Aeromotive's Part 145 certification. Currently the coverage extends from the Warbirds DC3 through to Beech B200 King Airs. Aeromotive has avionics engineers in Ohakea looking after CT4s and B200s. Offsite work is also possible throughout the wider region including Bay of Plenty, north of Auckland and south beyond Waitomo.

For more information

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Building a basic Gyro from a kit

Traditionally microlights in NZ were "tube and rag" aircraft, often homebuilt at low cost. Autogyros are no different and as with their fixed wing counterparts, low cost basic options still exist for those on a budget. Parakai based pilot, Oskar Stielau built and flies such an aircraft. He wrote this article about his GyroBee for KiwiFlyer.

ULTRALIGHT single-seat gyros were made popular by Igor Bensen who designed the Bensen gyro in the 1950's. This gyro was available either in kit form or could be homebuilt from plans. Thousands of Bensen kits and plans were sold, some of which ended up in NZ. The temperamental McCulloch drone engine was its weakness and when Rotax arrived on the scene many new designs were developed using Rotax two stroke engines. One of these is the GyroBee, available in kitset from StarBee gyros in the USA.

The GyroBee was originally designed by Ralph Taggart and used a Rotax 447 engine. It performed well with light pilots but struggled with heavy pilots. Most GyroBees now fly with Rotax 503 (52hp) or MZ202 (65hp) engines, which gives the aircraft a very good power to weight ratio.

Cost of a GyroBee

A pre cut and drilled GyroBee kit from StarBee costs less than US\$15000 and comes with everything needed to fly including a pre-rotator. The only thing that needs to be added to fly legally in New Zealand is a compass.

For those on a low budget, all the material can be bought and then cut and drilled as per the plans which can be downloaded for free on the internet. The cost saving is not large though as about 50% of the cost of a gyro is typically in the engine and rotor blades. Odds and ends such as rotor head, prerotator, prop and

instruments make up a large proportion of the remaining 50%.

Building a GyroBee

About 2 years ago I ordered an UltraBee kit from StarBee gyros. The kit arrived with an MZ202 engine, Sportcopter rotor blades, and nearly all the parts for the airframe pre-cut and drilled. The airframe bits (mostly aircraft grade 6061) came in their bare state, and I decided to have everything powder coated bright yellow. Powder coating is a quick and easy way to get a good finish and it has proven to be very good for corrosion resistance. Other options would have been to leave the metal as it is, polishing, painting or anodising.

Once the cosmetics had been worked out building the kit is a bit like building a big Meccano set. All bits are simply bolted together with aircraft grade bolts which are provided. The documentation is very good, but was hardly necessary as the kit comes with a set of photos which are easy to follow.

Firstly three pieces of 2x2 alloy (the mast, keel and tail boom) are bolted together. To this is bolted the main gear consisting of two triangles with springs for suspension. The nose wheel and pedals are bolted to the front of the keel, while the tail and rudder are bolted to the back of the tail boom. Cables run along the keel from the pedals to the rudder. After about 10 hours of assembly I had a rolling airframe complete with tail.

One issue with the powder coating was that the holes lined up perfectly before coating, but after the powder coating there were a few holes that were out by the thickness of the powder coating. This was easily solved by scraping off the coating at a few strategic spots, but just showed how accurately the various parts had been cut and drilled.

The finer details always tend to take a lot

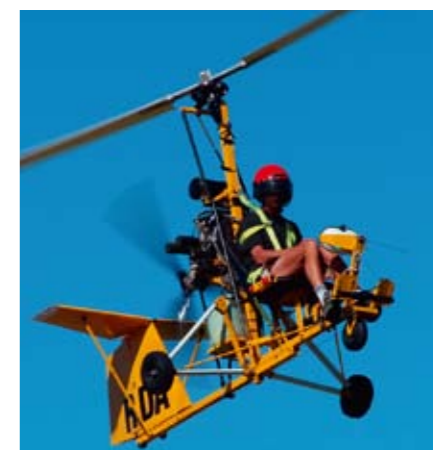
longer than anticipated and added roughly another 20 hours to the build. Here some cutting and drilling is involved as the seat position and controls are custom fitted to suit the pilot. Fortunately everything is open and accessible. There is no need to get your hands into small confined spaces as is the case with enclosed aircraft.

Probably the trickiest part of building the

GyroBee is getting the weight and balance correct. Since pilot weight is often nearly as much as aircraft weight, the aircraft has to be built for a certain pilot weight range. A hang test needs to be done with the pilot sitting in the seat so that the position of the rotor hang point relative to the airframe can be correctly determined.

The Finish

After everything was bolted together the gyro was registered, letters stuck on the vertical stabiliser (there's no room anywhere else) and the annual condition inspection done. Then it was simply a case of flying it and there has been a great amount of fun obtained from that!



Oskar Stielau imported this minimalist gyro kit from the USA and assembled it in a week.

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Basics of Aero Model Building

In this article, KiwiFlyer Correspondent Janice Angus continues her aero modelling series with a personal take on model building for beginners.

I'm in a fortunate position in that I don't have to build the models I have the pleasure of flying. My long suffering husband, Pete, is my resident model builder and chief repairer. There are probably not many women who are happy to give up a corner of the lounge as a model construction zone but a warm, comfortable work environment means more construction can be done during the winter months as opposed to in a cold garage or workshop.

For first time builders, the best option is a good quality Almost Ready To Fly (ARF) model. These models come partially built and generally only require gluing together the wings, tail planes, and fitting the servos and electronics.

In the last three or four years many Chinese manufactured model aircraft have become available in the NZ market. Generally, these are great models in that they are reasonably inexpensive to purchase, they fly well and there are a variety of different plane types available.

Depending on your budget and model selection, you might find that your Chinese plane needs a few extra steps to help make things fit together properly or to strengthen parts of the structure to ensure safe and reliable flying. Getting this right is a mixture of common sense and experience and usually only involves a bit of time and extra fiddling about during the build process. The beauty of these budget models is that they are airplanes you can thrash about, push to

the limit, crash and bash.

Generally, American or European made models are of a higher quality and this is reflected in the price. In addition there is a strengthened desire not to let your model come to any harm.

No matter what type of model you choose to build the following fundamentals apply:

1) Correct C of G

The instructions will show the precise point where the centre of gravity for the model is (with empty fuel). When balanced on this point the aircraft should sit level. In many cases, increments of grams of weight can make all the difference.

2) Straight and True Construction

It is important to make sure that the wings, ailerons and tail plane are glued into position straight and level in relation to the fuselage and parallel to the respective leading edges. A slight warp or incorrectly seated control surface can cause erratic and challenging flying behavior and ultimately lead to a short lifespan for your aircraft.

3) Onboard Electronics

ARFs normally have a servo tray with cut out slots for the positioning of the servos. The area behind the fire wall can become quite full once the fuel tank,

battery and insulation, receiver, leads and servos are in position. Before securing all the components in place, make sure there is no potential for the control push wires to become entangled or obstructed in any manner.

4) Control Surface Throws

The building instructions will state how much movement to set for the aileron, elevator and rudder travel. In most cases, two sets of measurements will be given – smaller movement settings for gentler, less extreme manoeuvres and larger movement settings for aerobatic and more extreme flying manoeuvres. If you

are a novice flyer, the smaller movement settings are recommended.

I have only barely scratched the surface with what is involved with putting an ARF model together but hopefully these tips will prove helpful.

Model aircraft retailers are able to provide the kits and building advice so make sure you ask for help if you need it. It is recommended that those new to the hobby join a model aero club as this will give you access to people with many years of aircraft building experience and there is no better resource than those who have "been there, done that".



A Long Ezy kit in the box and a partially completed model in the corner of the lounge.

WARNING: OVERDOSE RECOMMENDED
If questions persist, contact your Agent

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Both are buff metal machines and both gave me an eerie feeling that I had been rocketed back in time to a place over the English Channel circa June 1944 - American test pilot

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Te Kowhai Airfield, Hamilton

12 new Diamond DA40's arrive at Ardmore

AT THE START of June, the first two of twelve new DA40 aircraft arrived at the Ardmore base of Hawker Pacific. By the end of June, all twelve aircraft were assembled and ready for delivery, following a well planned process that saw empty containers being swapped for full ones every few days. This opportunity to work on such new generation aircraft was enjoyed by all involved, with crews working on weekends and holidays as required to get the job done.

Powered by IO-360 Lycoming engines and fitted with Garmin G1000 glass cockpits, the composite aircraft are highly specified for their intended training role with Massey University. All 12 aircraft were configured to Massey specification at the Diamond factory in close liaison with Hawker Pacific staff, particularly during the final fit-out and preparation stages.

The assembly process was typically straight forward for a modern aircraft.

NZ Operations Manager Peter McCarty describes this and the aircraft using adjectives such as smart, simple and practical. He says that the aircraft are

noticeably European in design; "everything about them exudes high quality, robustness and elegance."

Following assembly and certification (for which Peter says CAA were most helpful), the aircraft were test flown by Mike Foster ready for acceptance by Massey. This also proceeded according to plan with everyone involved being very pleased with the process and results.

The arrival of these 12 aircraft coincides with Hawker Pacific being appointed by Diamond Aircraft Industries as a Diamond Service Centre. Hawker

Pacific NZ General Manager Steve Siddall credits this appointment to his team's dedication to customer service and their ability to provide comprehensive care for fixed wing aircraft all under one roof.



The first of a dozen new Diamond DA40's to pass through Hawker Pacific's Ardmore facility for assembly and certification during June.

One Stop Maintenance

WITH A NEW mantra of "You fly her in and we'll do the rest", Hawker Pacific now offer the convenience of having complete maintenance, avionics and airframe services all on the same site at Ardmore. Whether your aircraft is old or new, fixed wing or rotary, large or small, privately owned or part of a commercial fleet, Operations Manager Peter McCarty will be pleased to discuss your requirements and demonstrate the level of service that the company seeks to grow its reputation from.

Avionics requirements are easily accommodated and everything from minor issues to panel rebuilds can be catered for in house. Hawker Pacific currently look after avionics for both Great Barrier Airlines and Air National. A component shop can handle maintenance and engineering issues with capabilities continuing to grow, particularly for composite aircraft. And now with a full installation capability for the Lycoming factory engines that they sell, customers no longer need to involve third parties in their engine overhaul or replacement process.

General Manager Steve Siddall is keen to also promote the facility as a one stop shop for those who may be purchasing or selling aircraft. Most such transactions will involve some degree of modification or maintenance, cosmetic adjustments, avionics changes, pre-purchase or CoA checks, and more. Hawker Pacific has the capability to attend to all of these and to develop ongoing maintenance programmes to suit customer needs.

Contact Steve or Peter on 09 295 0665 to discuss your requirements.

ARRIVALS - Apr/May 2009

| | | | |
|-----------------------------|--------------------------------------|------------------|--------------------|
| BZP Cessna 180D | Tokoeka Bush Co | Rangiora | Aeroplane |
| DCL American Champion 8KCB | Kapiti Districts Aero Club (Inc) | Paraparaumu | Aeroplane |
| HFR Robinson R22 Beta | CHL Investments Ltd | Christchurch | Helicopter |
| IMR Eurocopter EC 130 B4 | North Shore Helicopters Limited | Albany | Helicopter |
| IXW Eurocopter EC 130 B4 | Advanced Flight Limited | Auckland | Helicopter |
| JLS Rans S-7S Courier | Mr B A Esler | Christchurch | Microlight Class 2 |
| JZL Pacific Aerospace 750XL | Pacific Aerospace Limited | Hamilton | Aeroplane |
| MTA Diamond DA 40 | Massey University School of Aviation | Palmerston North | Aeroplane |
| MTB Diamond DA 40 | Massey University School of Aviation | Palmerston North | Aeroplane |
| MTC Diamond DA 40 | Massey University School of Aviation | Palmerston North | Aeroplane |
| MTD Diamond DA 40 | Massey University School of Aviation | Palmerston North | Aeroplane |
| MTE Diamond DA 40 | Massey University School of Aviation | Palmerston North | Aeroplane |
| NFB Bombardier DHC-8-311 | Air Nelson Limited | Nelson | Aeroplane |

TRANSFERS - Apr/May 2009

| | | | |
|---|--|------------------|-------------------------|
| BMY De Havilland DH 82A Tiger Moth | D G Strong | Palmerston North | Aeroplane |
| BPM Piper PA-18A-150 | Elizabeth James Limited | Havelock North | Aeroplane |
| BWN Cessna 172A | Mr P J Blake | Invercargill | Aeroplane |
| CAT Grumman G-164A | Aviation Adventures Limited | Lyttelton | Aeroplane |
| CJP Jabiru ULT | Mr P J Karl | Ohaupo | Microlight Class 2 |
| COG Piper PA-18A-150 | Evans G B & M A | Hawarden | Aeroplane |
| DGQ Piper PA-28-140 | Perry Family Trust | Hamilton | Aeroplane |
| DJU Cessna 172M | Mr J W Johnson | Nelson | Aeroplane |
| DNO Cessna A150L | Air Napier Limited | Napier | Aeroplane |
| DZD NZ Aerospace FU24-950 | Evans/Nuttall Syn | Hawarden | Aeroplane |
| EEL Pacific Aerospace Cresco 08-600 | Taumarunui Aerial Co-Operative Society Ltd | Taumarunui | Aeroplane |
| EFX Grumman American AA-5A | Mr D M Harnett | Shannon | Aeroplane |
| FJD Piper PA-22-160 | Bilancio Limited | Auckland | Aeroplane |
| FLH Cessna A152 | Mainland Air Services Ltd | Mosgiel | Aeroplane |
| FLI Jodel D9 UL | Mr J P C Land | Kaikohu | Microlight Class 1 |
| FVL Micro Aviation B22 Bantam | M J Taylor | Whakatane | Microlight Class 2 |
| FWF Quickie Aircraft Q200 | David Sosich & Helen Sosich | Whangamata | Amateur Built Aeroplane |
| GHD Schempp-Hirth Standard Cirrus | Mr P D Mundy | Nelson | Glider |
| GRS Schleicher ASW 20CL | Sandy Griffin and John Griffin | Te Puke | Glider |
| GSU Pipistrel Taurus 503 | Kaahu Family Trust | Russell | Microlight Class 2 |
| GYI Schempp-Hirth Duo Discus | L H Stephens | Papakura | Glider |
| HDF Robinson R22 Beta | Helipro Aviation Training Limited | Paraparaumu | Helicopter |
| HHP Hughes 269C | Goodman Holdings Limited | Waikanae | Helicopter |
| HLU Robinson R22 Beta | Heliflite Pacific Limited | Papakura | Helicopter |
| HOC Bell 206B | Mr G A H Petrie | Otago | Helicopter |
| HST Aerospatiale AS 350BA | Anatoki Helicopters Limited | Nelson | Helicopter |
| HVL Robinson R44 | Alabaster Helicopters Ltd | Taihape | Helicopter |
| HZA Robinson R22 Beta | Willowbank Trust | Napier | Helicopter |
| IAG Schweizer 269C | Greene Air Limited | Palmerston North | Helicopter |
| IAR Bell 47G-3B-1 | Helivork NZ Limited | New Plymouth | Helicopter |
| ICH Robinson R44 II | Wood Contracting Nelson Limited | Nelson | Helicopter |
| IHC Robinson R22 Beta | Garden City Helicopters Ltd | Christchurch | Helicopter |
| IJF Eurocopter AS 350 B3 | Faram Aviation Group Limited | Gisborne | Helicopter |
| INP Robinson R44 II | Mr J R Ambler | Auckland | Helicopter |
| IWW Robinson R44 II | Anrep Holdings Limited | Nelson | Helicopter |
| JRN Sigma Aircraft Sigma-4 | Mike Gray and Philip Walsh | Blenheim | Microlight Class 2 |
| MAC Evektor - Aertechnik Sportstar Plus | Aeroflight Aviation Limited | Cust | Microlight Class 2 |
| MGO Cessna 182S | North Shore Aero Club (Inc) | Albany | Aeroplane |
| MHS Lancair Internationa Lancair 360 | Mr N S Bartlett | Auckland | Amateur Built Aeroplane |
| MTP Maule M-6-235 | W.A & S.M Macdonald | Blenheim | Aeroplane |
| NPE Cessna 152 | Air Napier Limited | Napier | Aeroplane |
| OUI Cessna 172R | Aeromotive Holdings Limited | Hamilton | Aeroplane |
| PAF Piper PA-38-112 | RNZAF Base Auckland Aviation Sports Club Inc | Waitakere | Aeroplane |
| STG TL TL2000 Sting | Afternoon Coffee Club | Albany | Microlight Class 2 |
| TZS Tecnam P2002 Sierra | The Gallagher Family Trust | Manukau City | Microlight Class 2 |
| WFS Cessna 172M | Nelson Aero Leasing Limited | Nelson | Aeroplane |

DEPARTURES - Apr/May 2009

| | | | | |
|-------------------------------------|-----------------------------------|-----------|--------------------|------|
| AEJ De Havilland DH 60M Moth | The Moth Limited | Napier | Aeroplane | Exp |
| BAR De Havilland DH 82A Tiger Moth | Mr J D Copland | | Aeroplane | Dest |
| CHP DHC-1 Chipmunk Mk 22A | T R & S J Green | Oamaru | Aeroplane | Exp |
| CNM Piper PA-28-140 | Mount Aeroplane Limited | Tauranga | Aeroplane | w/d |
| DBC Roger Mann Ragwing Special PT2S | Mr D B Crawford | | Microlight Class 2 | Rev |
| DSE Cessna 207 | D G & D E Allen | Karamea | Aeroplane | Exp |
| FKP Thruster Aircraft Thruster R377 | Mr D K J Edmonds | Brighton | Microlight Class 1 | Rev |
| GHK PZL-Swidnik PW-5 "Smyk" | Mr H J Kroef | Pokeno | Glider | Exp |
| GKA Schleicher AS-K 13 | Hawkes Bay Gliding Club (Inc) | Hastings | Glider | Dest |
| GLY Elliotts Olympia Eon Mk.II | T R & S J Green | Oamaru | Glider | Rev |
| HDM Aerospatiale AS 350B2 | Helicopters (NZ) Ltd | Nelson | Helicopter | Exp |
| HNF Revolution Mini 500K | Mr G A Sievers | Levin | Microlight Class 1 | Rev |
| HQJ Hughes 269C | Mainland Helicopters Ltd | Alexandra | Helicopter | Rev |
| HXR Robinson R22 Alpha | Heli-Pest Limited | Haast | Helicopter | Dest |
| JNO Boeing 737-376 | Jetconnect Limited | Manukau | Aeroplane | w/d |
| JWL Cessna 150M | Mr L D Selby | Napier | Aeroplane | Rev |
| SRL Cirrus Design SR20 | Auckland Aero Club (Inc) | Papakura | Aeroplane | Exp |
| TGR De Havilland DH 82A Tiger Moth | T R & S J Green | Oamaru | Aeroplane | Rev |
| VVC Curtiss P-40N | Pioneer Aero Restorations Limited | Papakura | Aeroplane | Exp |
| WGS Cessna 172K | ZKWS Limited | Auckland | Aeroplane | Rev |



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Launching the Aircraft Engineering Association of NZ

A refocusing and rebranding of the AIA Engineering Division

from Don McCracken, Deputy Chair AIA Engineering Division and General Manager, The Vintage Aviator Ltd.

One of the events planned for the Aviation Industry Conference Week in Blenheim at the end of July is the launch of the Aircraft Engineering Association of New Zealand. Don McCracken explains the focus and challenges of this group as it works to support and advocate for aviation Engineers in New Zealand.



and information sharing. Membership to AEANZ will be as it has been under AIA membership for organisations and companies. However, individuals who are not companies will also be eligible for membership under the following grades:

- **LAME/ADE** - Licenced Aircraft Maintenance Engineer or Aeronautical Design Engineer.

OVER THE past twenty four months, the function and purpose of the AIA's engineering division and the value it adds to its members has been a serious discussion point at many engineering meetings. Many members have requested a forum for more effective communication between members and a desire for a collective voice when dealing with the regulator. This has prompted a refocus and rebranding to create the Aircraft Engineering Association of New Zealand, or AEANZ (pronunciation A-enz). At our last AIA council meeting, approval in principal was given to the new brand as an agenda item for ratification at the next AGM on Monday 27 July in Blenheim at the Aviation Industry Conference Week.

AEANZ will act as an individual entity, and be responsible for its own future, but remain under the umbrella of the AIA as a division. Communication in the past has been hampered by the lack of a satisfactory medium as well as inadequate funding to provide administration support and advocacy for engineers.

A Focus on Membership

AEANZ focus will initially be on increasing membership, thus strengthening the voice of engineering. As membership and funding increases, additional member benefits such as an AEANZ website would provide a forum for communication

- **AME** - Aircraft Maintenance Engineer or technician (non-licenced).

- **Trainee** - An engineering trainee, currently employed by a maintenance provider who is under an industry training provider contract. for example ATTTO, NMIT.

- **Student** - Any engineering student currently enrolled with an industry training provider university or other tertiary education provider, with the intention of joining the industry as a maintenance or design engineer trainee, to complete their qualifications.

Several members of the Society of Licenced Aircraft Engineers and Technologists have been approached regarding amalgamation with AEANZ and it is hoped that SLAET members will merge with AEANZ as one organisation representing aircraft engineers in New Zealand.

Challenges for Engineers

There are a range of challenges which engineers must focus on today. Some of these come from being in the aviation sector such as the relentless pressure on

cost and the obsession aviation has with paper work. Other pressures come from providing engineering services such as the degree and level of control that must and should be exercised. Changes to Rule Parts have not always been implemented as smoothly or as consistently as needed. We're all at the leading edge of technology change and this on its own creates some pretty interesting opportunities. However at the moment we lack a strong and unified voice. It is too easy to think you are in this on your own when in fact peer and mentoring support can be provided.

AEANZ Representation

AEANZ intends to still vigourously represent the interests of the commercial engineering industry. The change means that it can broaden and widen its horizons to include the issues that individual engineers must address. Recently there have been a number of local meetings of engineers held. Once the general levels of concern were broken through it was interesting to see how much commonality there is between all aspects of what is a very diverse sector of the industry.

"...at the moment we lack a strong and unified voice. It is too easy to think you are in this on your own when in fact peer and mentoring support can be provided."

For more information

If you are interested in becoming a member of AEANZ or would like further information, please feel free to contact David Watson on 04 472 2707 or email david.watson@aia.org.nz



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KiwiFlyer Advertising Index

| | page |
|------------------------------------|----------------|
| Aeromotive | 7 |
| AeroFlight Aviation | 44 |
| AeroSport Aviation | 35 |
| Air Maestro | 25 |
| Aircraft Logistics Support - Rotax | 34 |
| Airspray Ardmore | 5 |
| Aquamax Hydroblasting | 28 |
| Ardmore Flying School | 41 |
| Ardmore Helicopters | 41 |
| Ardmore Sky Station | 45 |
| Asia Pacific Aerospace | 14 |
| Autoflight | 38 |
| Aviation & Performance Parts | 39 |
| Aviation Cooperating Underwriters | 33 |
| Aviation Industry Association | 17 |
| Avparts NZ | 37 |
| Avsure | 36 |
| Campbell Aero Classics | 40 |
| Central Aero Engineering | 15 |
| Classic Models | 45 |
| Composites International | 33 |
| Corporate Jet Services | 45 |
| Critical Angle Camguard | 14, 45 |
| Dargaville Aero Club | 41 |
| Dennis Thompson International | 38 |
| DownUnder Pilot Shop | 9 |
| Falcomposite | 6 |
| FlightCell | 28 |
| Flight Helmets Australia | 16 |
| Gyrate NZ | 38 |
| Hawker Pacific | 33, 37, 42, 45 |
| Heliflite Pacific | 11 |
| Helispecs Helicopter Maintenance | 34 |
| Innovative Coating Supplies | 5 |
| Japan NZ Aviation | 37 |
| JetGo | 13 |
| KemTek | 16 |
| Latitude 37 Helicopters | 41 |
| LycomingEngines | 27 |
| Magni Gyro | 38 |
| Map Toaster Topo | 11 |
| Martin Aviation Services | 39 |
| Nelson Gyro Training | 38 |
| NZ Autogyro Association | 38 |
| NZ Warbirds | 6 |
| Olympus Australia | 22 |
| Pacific Aero Coatings | 14 |
| Performance Aviation | 8 |
| Petroleum Logistics | 26 |
| Reflect Icon Signs | 5 |
| Remuera Doctors | 33 |
| Rotor and Wing Maintenance | 12 |
| Solo Wings | 37 |
| South Pacific Avionics | 11 |
| Southern Ocean Safety | 28 |
| Special FX Supplies | 40 |
| Spidertracks | 8 |
| Standard Aero | 32 |
| Stewart Systems | 35 |
| Taranaki Flight Tech | 13 |
| Tecnam | 2 |
| TecMap | 25 |
| Thompson Engineering | 10 |
| V-Dub Shoppe | 38 |
| Walker's Upholstery | 34 |
| Waypoints Aviation | 41 |

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