TIGER RAG



NEWSLETTER OF THE TIGER MOTH CLUB OF NEW ZEALAND INC

SEPTEMBER 2022

CALLING ALL TIGER CLUB MEMBERS

TAUMARUNUI REQUESTS YOUR ATTENDENCE



Not Long now til another Taumarunui Fly-In

Now that the restrictions imposed by the Covid-virus have been largely lifted, its time to get enthusiastic about flying to Taumarunui. The weather looks set to improve as we shift from winter to spring making this a good time to start planning. Those coming for the weekend are advised to arrange bookings but if that is too much to ask then a visit on the Saturday could be the next best thing. Thanks to a dedicated team in the Tiger Moth Club the weekend planning is as thorough as always for the express purpose of making an enjoyable Fly-in.

As members have come to expect, Amanda has been busy organising yet another flying excursion around the central North Island and those familiar with her safaris will know how much fun they are. Don't expect the terrain to be boring because those familiar with the central North Island know that one never tires of seeing the variations in landscape. If you want more details click on the link in the latest Cyber Moth. I hope you are convinced to give it a go.

Your committee is looking into all aspects of the scholarship programme and in this issue you can read all about the latest recipient, Roshane Mendis. Should you catch up with Roshane at Taumarunui you too can congratulate him in person and get more details. Young men like Roshane are the future of the Tiger Moth Club.

Right now the Tiger Moth Club is the only flying club in this country that has the interests of vintage aircraft and the folk that fly them at heart. If the name Tiger Moth Club makes you think its just for Tiger Moths then think again. Folk turn up at Taumarunui in all manner of aircraft. They are all welcome. The Tiger Moth Club in New Zealand is no different from the Tiger Club in Britain where in the early days homebuilt Turbulents sometimes outnumbered Tiger Moths. The Tiger Club encouraged these owners until the day came when they set up their own organisation. The same thing has happened in New Zealand. Where once we had more than a handful of Piper Super Cub owners come to complete for trophies we now find they are better served elsewhere. That is how things develop but that doesn't make Piper Super Cubs unwelcome. On the contrary all types of aircraft are welcome at Taumarunui. There is but one restriction. To take part in the competitions you must be a member and be registered and don't be too surprised to discover that you need a Tiger Moth for some events. But that's a fair call.

So open up your Cyber Moth, get on your device and check out the fly-in details. Get registered and while your at it give that aeroplane of yours a good look over. Hopefully we will get to see you at Taumarunui.

Cheers Janic Geelen (Tiger Rag editor)



The wrong end of the stick

by John King

The Summer 2021/22 edition of *Vector* had an article, "Dual controls: who can change them", which stated categorically that: "Installation and removal of dual controls is not routine maintenance and cannot be carried out by a pilot under a Part 61 licence."

This was news to many, including those habitually flying such aeroplanes as Tiger Moths, Austers and Piper Super Cubs with their second control sticks, easily removable for valid reasons. Indeed, the Piper pilot's handbook states that if the second seat is not occupied by a pilot, the control column should be removed to avoid interference by anything carried on the back seat, whether it be a load which might shift in turbulence (and it has happened) or a non-pilot who might seize the stick in fright (and it's hard for a pilot in extremis to turn around and deliver a clip over the ear to persuade somebody in the back to let go).

Some aircraft, including Robinson helicopters, are designed so that removal of the second set of controls takes mere seconds – and refitting it is just as simple and quick. Most licensed pilots, having gone through a fair bit of training and shown enough common sense to be allowed out unsupervised, could be trusted to handle such a vital component as a second control.

So does this strict requirement for the "removal or installation of any dual control [to be] carried out in accordance with acceptable technical data and be subject to a duplicate before being released to service", according to Warren Hadfield, CAA airworthiness chief advisor, apply to either or both the primary and secondary control? And does it apply to those types with quick-release controls?

Mr Hadfield was queried on this, and his reply was published in the Winter 2022 Vector: "As you will be aware, duplicate inspection requirements are an important safety control, with the requirements for duplicate inspection applicable, regardless of the complexity of the system involved ...

"I'm sure you will be aware of instances where a simple process to remove and install dual controls (or other role equipment) has resulted in safety of flight issue. In fact, the event which triggered this particular *Vector* article represented a simple control removal on one of the aircraft [you quote]. It was clear from that event (in the case of the two pilots at least) there was a lack of understanding of Part 43 as it pertains to dual controls, and the significance of maintenance on control systems."

The CAA appears to be referring to two accidents around the turn of the century. Two separate pilots of two different Tiger Moths had the rear sticks, normally bolted securely to the control system and never removed during normal operations, come away in their hand on takeoff. The results were crumpled wings but nothing more personally serious than cuts, bruises and wobbly knees.

It's important to note here that the primary, rear stick is never dismantled by the pilot and is naturally subject to an engineering duplicate check before its two securing bolts and split-pinned nuts are covered by a gaiter preventing items falling into the control box. Even if somebody can't be trusted to install the secondary control correctly for the other occupant, the PIC still has an intact set of controls, never fiddled with except in the maintenance hangar.

One of the Tiger Moth pilots freely admitted not having bolted the stick in, while the other aeroplane had flown some 30hrs since a full overhaul – and the accident had nothing whatsoever to do with the pilot. Ivan Strathern on investigation said there was no evidence of wear on the new paint on the tube where the bolts went through, so the stick was unsecured from the start and had sneakily worked its way out during long cross-country flights. It was an engineering problem, and worrying about the second stick wouldn't have altered a thing, despite the CAA's misguided belief.



Private pilots are not encouraged to let their passengers handle the controls. The author, however, while not an instructor, had no hesitation in letting his Auster passenger do the flying out of Motueka in January 1988 – he's none other than the legendary Popeye Lucas.

(Photo: Loretta McGarry)

So those pilots who habitually fly aircraft with an easily removable secondary set of controls fully understand the need for a duplicate check of the primary controls during maintenance, but they can see no point in having to go through such complication every time they spend a few seconds removing or installing the other stick. The primary control remains firmly bolted in, no matter what the state of the other one, and the CAA, more than two decades after the events leading to its conclusions, in missing the point entirely appears to have come up with a solution still in search of a problem.

The CAA emphasises aviation safety above all else. Which is more dangerous, taking out the non-essential stick and putting it back in without a duplicate inspection, or saving the hassle of finding a LAME to write up and certify it, by leaving duals in for interference by passengers? The CAA needs to review this situation and revise the requirement to something more logical, such as a simple requirement for the PIC to write the remove/install in the tech log, which in itself should be sufficient incentive to check that it has been done correctly.

And there's nothing quite like a fright to instil caution. As well as controls free, full and correct prior to takeoff, Tiger Moth aficionados also include a determined upward tug on that rear stick, just to make sure.



Classic 1946 built Auster J-1B powered by a DH Gipsy Major



First Chipmunk in New Zealand was ZK-APN (serial no 21) and it received its NZ cofa on 21 Oct 1947. Sold to the Wellington Aero Club it was written off when it crashed into Lyall Bay on 2 Sep 1950 This is the original type of canopy with flat side windows for both cockpits.

The Perfect Tiger Moth Replacement

During the late-thirties when production of Tiger Moths was steadily increasing at Hatfield, it seemed like sacrilege when that master de Havilland salesman, F. E. N. St. Barbe, told the board that as far as he was concerned the Tiger Moth was finished and de Havillands should be developing a replacement. St.Barbe had his own ideas of what that might be and it was not the elegant DH 94 Moth Minor which he considered was too light for military use. Then, out of the blue the opportunity was handed to Havillands on a plate. The Air Ministry wanted a new trainer, to specification T.1/37, a monoplane to replace the Avro Tutor biplane.

De Havillands submitted the DH 96, essentially a scaled up Moth Minor and a mock up was built but the Air Ministry dropped the T.1/37 specification when all the submitted designs were considered unsuitable leaving the RAF to soldier on with Tiger Moths and Avro Tutor biplanes.

A new specification, T.23/43, issued on 28 November 1943 looked promising for this time the RAF requirement was for a low-wing monoplane with side-by-side seating and provision for a third seat in the rear of the cockpit so the same machine could be used to replace the Tiger Moth as an elementary trainer and could also be used as a navigation and radio trainer. De Havillands presented their DH 105 design but none were built. The winner was the Percival Prentice but soon after it entered RAF service it was obvious that it was too big for an elementary trainer leaving the RAF with an even more urgent need to find a replacement for the Tiger Moth.

In 1945 F.E.N. St. Barbe went to Canada to outline Hatfields plans regarding the future of the Canadian de Havilland factory. St. Barbe sat with manager, Phil Garratt in W. J. "Jaki" Jakimiuk's office and there, on the desk in front of them, was a model of a low wing monoplane trainer that Jakimiuk had designed in his spare time. St. Barbe couldn't keep his eyes off it. St. Barbe knew a good design when he saw it and this model had the makings of a perfect Tiger Moth replacement. At the time the designers at Hatfield were flat out working on new Vampire developments as well as the revolutionary DH 106 Comet jet airliner, so St Barbe suggested that the Canadians built it. His parting words were: "If you make a good trainer, I'll sell it." Wsiewolod Jakimiuk was the former chief designer at the Polish P.Z.L. works and had not only finalised the design of the P.11 fighter but also the improved P.24 fighter, both of which served with remarkable success in World War Two. When he designed the all-metal P.44 Wicher airliner he was drawn to de Havillands because they were building variable pitch propellers. Later, when de Havillands began working on their own all metal DH 95 Flamingo airliner, they turned to Jakimiuk for advice.

Five days after the German invasion of Poland in September 1939, the PZL factories in Warsaw were evacuated and the employees were told to go to the Rumanian border where they were to prepare workshops for the expected arrival of British and French warplanes. That never happened so the Polish workers were told to cross the border into Rumania and then make their own way to France. Naturally quite a number turned up at Hatfield to seek employment.

Jakimiuk was one of the first to arrive but there was no suitable work for his talent so rather than let him go, de Havillands paid his trans-Atlantic fare and promised him work in the Canadian factory at Downsview. Many other former PZL employees followed. In his spare time Jakimiuk worked on a new trainer but there was no chance it would be built for the Canadian factory was gearing up to build Mosquitoes. By mid-1945 the design team at Downsview had shrunk to just 30 and to justify their existence they needed a new project. St. Barbe's enthusiasm for Jakimiuk's trainer was just what the factory needed and by the end of October 1945, Phil Garratt, the manager, gave the DHC-1 project the go-ahead.

Two DHC-1 prototypes, or Jakimiuks as they were referred to, were built while the factory prepared for production. Phil Garratt had second thoughts about the name Jakimiuk and as he was looking at the woods from the window of his cottage, he saw them playfully scampering about and at the next meeting the DHC-1 was named the Chipmunk.

Back in 1942 the Canadians had invited Geoffrey de Havilland Jnr to come over and test fly the first Canadian-built Mosquito but due to travel delays the first flight was made by a Canadian pilot. Garratt had not forgotten and so invited Geoffrey Jnr back to test fly the Chipmunk. Unfortunately Geoffrey was in the midst of the complex test programme of the tail less DH 108 jet and could not be spared so Hatfield sent Pat Fillingham instead. He was no stranger to Downsview having been sent there during the war and at the end of his stint he had flown a Canadian-built Mosquito back to England.

Fillingham checked out the Chipmunk and on 22 May 1946 flew it for the first time. The only change needed was a minor alteration to the rudder control. In all respects the Chipmunk was the trainer St. Barbe hoped it would be.

During May 1946 Fred Plumb, who had built the first Tiger Moth with Doug Hunter, arrived at Downsview to set up the Chipmunk production line. Plumb had helped in the construction of the DH 88 Comet racers and the DH 98 Mosquito prototype at Salisbury Hall so he knew one or two things about making aircraft.

When news reached Hatfield that the Chipmunk had been given a full certification in Canada, St. Barbe phoned Garratt and said:

"Let's have one over here."

Since the certification trials were over, the first prototype Chipmunk was no longer needed and so was shipped to Hatfield in November 1946 where it aroused immediate comment.

The first production Chipmunks had a reduced wing-flap movement, slightly wider undercarriage track, but otherwise were identical to the prototypes. Promotional examples were sent to the de Havilland Companies in Argentina, Australia, England, India, New Zealand and South Africa where it was hoped they would generate sales and in anticipation the Canadian factory built 29 Chipmunks in 1947. Sales were few so many of the Chipmunks were put into storage.

There was no question that the Chipmunk was a good trainer and an ideal Tiger Moth replacement, but the Canadians expected payment in US dollars and many countries who were looking for new trainers didn't have sufficient US currency. In 1948 three Chipmunks were re-manufactured for the RCAF as DHC-1B with stronger wings and a strengthened fuselage to overcome the aerobatic restrictions imposed on the earlier machines. They were identical in appearance and a large batch were sold to the Government of India for loan to Aero Clubs. Some of these machines have been imported here in more recent times.

When the RAF announced that the Chipmunk would replace the Tiger Moth, de Havillands expected a large order but the RAF insisted on several modifications. These were the fitting of a standard RAF instrument panel in place of the Canadian one, blind-flying equipment consisting of moveable screens so the pupil in the front cockpit could change to simulated night-flying in a matter of seconds. Then there was a radio intercom system and the canopy was widened by adding bubbles to improve the forward view from the rear cockpit. The undercarriage was moved forward 3-inches to compensate for the slightly heavier Gipsy Major 8 engine, a military version of the new Gipsy Major 10. Since all the modifications were done at Hatfield, it seemed logical to build the RAF machines in Britain hence avoiding the payment in US dollars.

Two Canadian engineers were sent to Hatfield to help set up the assembly line and they were accommodated in a small hotel on the outskirts of Hatfield. When the Canadians failed to show up for work the following morning, everybody suspected they had slept in, but that was not the case. The Canadians were found in a nearby hospital recovering from near asphyxiation due to a faulty gas heater in their room.

Just when de Havilland started building Chipmunks at Hatfield and Chester, the Canadians starting selling their DHC-1B Chipmunks to Egypt and Thailand and finally in 1950 to the RCAF for a pilot training scheme operated by the Royal Canadian Flying Club Association. These were to first to have a clear bubble canopy after which the Canadian factory ceased production and the jigs went into storage. This was a directive from Hatfield because they thought it was not in the interests of the company to have two versions of the same type competing for orders. Meanwhile by the end of 1952 more than 800 Chipmunks had been built in the UK mainly for the RAF but also the air forces of Ceylon, Denmark, Iraq, and Thailand.

A year later the British Government announced that the training of national servicemen would be curtailed because very few of these trainees stayed on in the RAF. Five flying schools, all operated by civilian firms on behalf of the RAF, were closed and their Chipmunks were placed in storage. The prospect of selling new aircraft with large numbers of near new Chipmunks coming on the market put an end to production at Chester and the last machine came off the line in February 1956.

Just when Chester finished their last machine, the RCAF ordered sixty new machines but they wanted even more refinements so it was decided to resurrect the Downsview production line and the final Canadian Chipmunk came off the line in October 1956. That was not the end for out of the blue the Portuguese ordered sixty Chipmunks and these were built under licence by the OGMA factory in Portugal. The last new Chipmunk came off the OGMA line in 1961.



CVM fitted with a Canadian bubble type canopy.

Jim Lawson with his Chipmunk UAS fitted with the RAF canopy which has the bubble side windows for the rear cockpit

UPAND COMING EVENTS

2022

Reminder to all Tiger Moth owners to register with DH Support, Duxford, UK for the technical data to keep your aircraft compliant

TAUMARUNUI 14-16 October 2022

open with a buffet or ala carte meal available at club prices.

<u>Annual fly in at Taumarunui Friday 14th - Sunday 16th October 2021</u> Our annual gathering at Taumarunui will be upon us before you realise. Thanks to our resident Taumarunui member, Jeannette Lei, the weekend organisation is all but complete. Friday is arrivals day, with free afternoon and local flying. Time to get in that last minute practice in local conditions. Then there is a get together at the Taumarunui RSA, 10 Marae St, where the bar and restaurant will be

Saturday morning a briefing will be held at 9.45 am promptly, followed by the flying competitions. There will be caterers at the airfield supplying lunch, tea, coffee, and cold drinks. What Tiger Club gathering would be without a prize-winners dinner and this year is no exception. Once again the Saturday night dinner and prize giving will be held at the Taumarunui Golf Club from 6pm, with dinner being served at 7.30 pm.

A courtesy van to transport those attending has been arranged. It will be available from Friday afternoon, until Sunday afternoon for transport to and from the airfield, your accommodation place, and the dinner venues. A small donation for the use of this service will be made.

So members come rally together. Get registered and make this year an event to be remembered. Registration forms can be downloaded from your latest Cyber Moth. Remember there are still some well-priced motel accommodation available in Taumarunui. Be quick, the rooms are expected to be all booked soon.

Our Treasurer, Amanda Rutland, has organised a tiki tour to and from Taumarunui. Please register your interest if you haven't already done so. Info in the latest Cyber Moth. Mogas will be available at the airfield from a tanker at local fuel prices. We are expecting to also have 100LL available. If you require this service could you please note that on your registration form as requested.

Anyone holding trophies awarded at last year's Fly-in are requested to bring them with them, or ensure they are returned to a committee member by Oct. 6th.

Registration for Taumarunui comes to \$20 and the Saturday Evening meal is \$55. The cost increases for this event are inevitable and will go a long way to help recover some of the expenses in running the weekend. Please have your registration returned by FRIDAY OCT. 7th., to assist with catering and planning.

Registration of interest for a tiki tour.

Register here for the Taumarunui spring fly in



Trophies for presentation at Taumarunui

John & Val Hainsworth Hikurangi Challenge Trophy

for Bombing and Spot Landing

Ross Duncan Red Tiger Trophy

for Tiger Moth Spot Landing

Ralph Saxe Memorial Trophy for the Perfect Loop in another aircraft type

Grant & Karen Drinkrow Trophy for a Perfect Loop in a Tiger Moth

Ross Duncan Memorial Cup

Ray Deerness Challenges

Presented for Photography and Writing

Photographic Competition

This is to be aviation related and not photo shopped - 2 prints per competitor. One of these \prints may be used for display purposes so as to encourage further and future interest in the challenge.

Name and address to be marked clearly on the back of each entry.

Writing Competition

This can be an historical account of anything aviation, an event, learning to fly a Tiger Moth, a short story or something like a children's story, living and flying with a pilot of vintage aircraft - use your imagination up to 2500 words!

Each entry, if failing to win can be re-entered the following year for a second chance.

The winning photographs and script supplied may be used for the 'Tiger Rag' but remain the property of the creator.

Both of these Challenges are open to supporters of The Tiger Moth Club of New Zealand as well as members. One of the primary considerations for these challenges is to include those folk who faithfully attend Tiger Moth Club events but who have not participated in the flying. In this way it offers supporters and family of Club members an opportunity to achieve an award.

Personalised Number Plates for Sale.

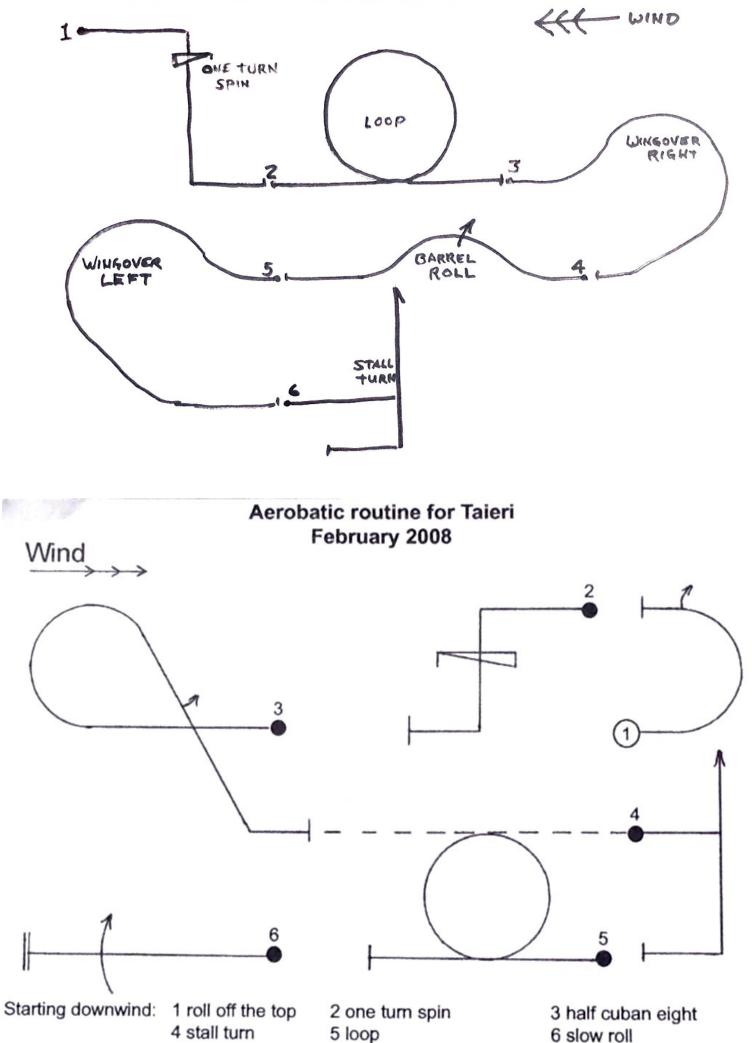
DH 82A

The Club has been advised that Loretta McGarry has reluctantly offered her Personalised Number Plates for sale, as she is no longer permitted to drive. Loretta is a founding Life Member of the Club and was our Historian for many years.

She is offering them at \$1900 or near offer. Anyone interested in purchasing these iconic Plates please contact Club Captain, Graeme Wood, or call Loretta direct at 09 2962236.



NOVICE AEROBATIC SEQUENCE 2019

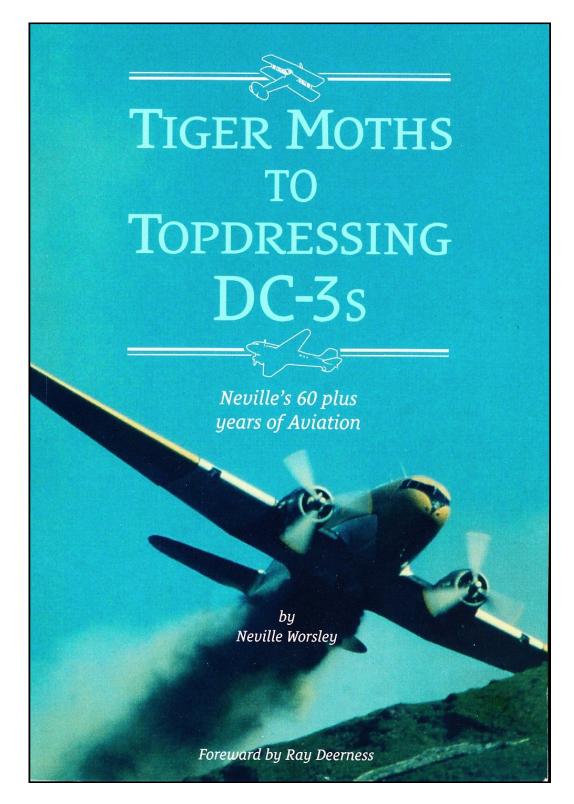




Tiger Moth Club Scholarship well spent

"Earlier this year I was lucky enough to use the scholarship funds to get my Tiger Moth rating and go solo. Huge thanks to all the club members who made it possible and donated so much of their time. Lastly, a thank you to the committee for the scholarship, not just for the funding but helping to make Tigers accessible for us young pilots to fly. I've enjoyed every second of it and now focusing on becoming proficient in aerobating the





Neville Worsley has written an interesting account of his life flying all manner of aircraft many of them unusual. The bulk of the book is about his days as a topdressing pilot starting with a Piper Super Cub and later flying de Havilland Beavers and the mighty DC-3. It starts with his training on Tiger Moths and gives a particularly clear picture of just what it was like to be a topdressing pilot. Living in small towns, never sure whether it would be a stay at home day or a day practically glued to the controls from dawn to dusk. Yes there were plenty of adventures and they are described in this 220 page book. This is a most enjoyable book to read and backed up with lots of photos covering an era now sadly passed.

For a copy of this book e-mail Neville at <u>dh822dc3@gmail.com</u> or call his cell phone 02102395922. The price of the book is \$70.00 plus postage which works out about \$7.50 Rural delivery is extra.

Better still why not buy your copy direct from Neville at the Taumarunui Fly-in. That way you can meet the author, if you haven't already done so, get him to autograph your copy, and save on postage.

Tiger Moth Club Official Merchandise



Lightweight Denim Blue Shirt 2017 Safari was \$75 now \$ 50.00



Adult Gold and Blue Polo SPF 50 polo shirt now only \$ 35.00

Adult Blue polo was \$40 now \$ 25.00

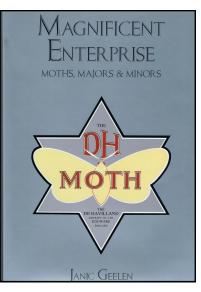
Kids Blue Polo \$ 25.00



TMC 50 th Anniversary Metal Badge **\$7.00**



Round neck T-shirt Men and Ladies Fleece Vests now only \$ 35.00



MOTHS, MAJORS & MINORS by Janic Geelen One of the finest books about the golden years of de Havilland. Full page 3-view drawings, accurate gen on all the Moths, Dragons and other 1930s designs. Includes the engines, propellers and racing successes. Hardbound. 214 photos; 56 Three-view drawings Now \$ 35.00



still available Standard TMC Metal Badge **\$ 10.00**

BUY SELL & OTHER USEFUL DATA



barking on an interesting flying history until 1972 when it crashed just off Motiti Island. The wreckage changed hands a few times, finally ending up with Colin Smith and his team at the Croydon Aircraft Company, Mandeville where it was rebuilt it to it's present pristine standard. No expense was spared in bringing AQB up to a standard that could be considered the best in the

world. AQB is currently in the safe care of the Croydon Aviation Heritage Centre, Mandeville, New Zealand

Further photos and details available to serious enquirers: email <u>dantyrrell@mail.com</u>

TIGER RAG PUBLICATION DATES

October: post Taumarunui issue December: Christmas Special February: as lead in for Ashburton AGM

Does anyone have a CAD file, or drawing, or photo of a Tiger cockpit cover? Thanks, Steve Betzler Robyn Pearce 313 N. Plankinton Ave. #422 Milwaukee, WI 53203 262-888-2845 tgrmoth@wi.rr.com

WANTED TO BUY—TIGER MOTH Contact Carl @ 021500737.



Patron: Simon Spencer-Bower QSM President: Keith Skilling Secretary: Ian Ashley 021 198 1810 Secretarial address: The Secretary, Tiger Moth Club of New Zealand Inc, PO Box 272 1640, Papakura, 2244 Treasurer: Amanda Rutland Bank Account: ASB 12-3194-0023828-00 Club Captain: Graeme Wood Phone: (09) 266 5044 Mobile: 027 293 2318 Website: www.tigermothclub.co.nz LIFE MEMBERS: Simon Spencer-Bower, Jim Lawson, John Pheasant, Loretta McGarry, Bob McGarry, John King, Alan Land, Les Marshall, Eddie Doherty, Jeanette Lei



Telegrams :

" Havilland, Edgware.'.

STAG LANE AERODROME

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Orders can now be accepted for DH Gliders. Demonstration Flights can shortly be given.

NO LANDING FEES.

Dear Sir,

We recently noticed a photo of one of your DH 52 gliders breaking up just after launch at Itford and this has dampened our enthusiasm regarding the purchase of a batch of your gliders. Our membership has not lost its enthusiasm for flying but we have decided to wait for the arrival of a new design from your company. Perhaps by the time the DH 60 comes along you will have a machine that is fit for our purpose.

Yours sincerely,

"Rusty" Nail, Chief Flying Instructor

