

TIGER RAG



NEWSLETTER OF THE TIGER MOTH CLUB OF NEW ZEALAND INC

WINTER 2019



Don't they look great. Seven Tiger Moths lined up at Taumarunui at the inauguration of the Tiger Moth Club. To celebrate we illustrate all 30 aircraft that were at Taumarunui on the first ever Tiger Moth Fly in. Most of these aircraft are still airworthy and it would be great if they could return once again 50 years later. Invitations have been sent to owners. Thanks to Don Noble for the colour illustrations of the Tiger Moth line up.

THE INAUGURAL TIGER MOTH CLUB FLY-IN TAUMARUNUI 25-26 October 1969



ZK-AJP Tiger Moth owned by Bob Shewry of Tahora. This Tiger is still current but no longer has the coupe top.
Photo Don Noble (Ardmore 25 Mar 1966).



ZK-AKM Moth Minor, owned by Dave Lilico of Auckland in 1969, seen here at Ardmore in July 1969. It is still current with Stan Smith.



ZK-ANQ Tiger Moth owned by R. L. Scrivenor, Tauranga seen here at Dairy Flat on 31 Mar 1973. Don Noble photo.



ZK-AQJ Percival Proctor 5 was owned by Wellington Air Taxis Ltd, Wellington has ended up with The Golden Age Flying Society.



ZK-AQX Ercoupe 415CD which was flown by Harry Newton from Europe to New Zealand, the smallest aircraft to have flown the Tasman was owned by M. H. Jensen of Auckland, and based at Ardmore. The Ercoupe has been restored to flying and is Still current.



ZK-AUZ Tiger Moth was owned by D. J. Billingham of Whakatane, and in this Don Noble Photo was at Tauranga on 25 Nov 1963.



ZK-AVI Tiger Moth was owned by Myles Robertson of Wellington and is seen here at Taumaranui on 26 Oct 1969 earlier in the day for it unfortunately crashed that very day during a take-off. Don Noble photo.



ZK-AVU Auster 5 owned by R. M. Fechny, Aylesbury seen here at Aylesbury 5 Jan 1969, a Ray Deerness photo. It is still registered to the same owner.



ZK-BKU Super Cub operated by North Shore Aero Club seen here at Hamilton when it belonged to the Waikato Aero Club.



ZK-BLV Tiger Moth owned by L. E. Harris & Son, Brooklands Station seen here at Omaka on 27 Jan 1973 still in the same scheme as it had at Taumaranui. Don Noble photo.



ZK-BPU Ceres, owned by James Aviation, seen here at its usual base at Piriaka on 1 Sep 1968 gave a demonstration of aerial top-dressing flown by well-known local pilot, Bruce McMillan.



ZK-BRM Tiger Moth owned by Valet Service (Nelson) Ltd at Nelson in this photo taken by Don Noble on 26 Dec 1968.



ZK-BSH PA-22 Caribbean operated by Bell-Air Charters, Whakatane seen here at Whakatane 1 Aug 1969.



ZK-BTX Super Cub owned by Rotorua Aero Club seen here at Whitianga 1 Jan 1968.



ZK-BUE Cessna 172 owned by W. R. Harding, Waiouru seen here at Ardmore on 19 Jan 1969. As one would expect it had the latest (for then) Wanganui Aero Work logo on the fuselage.



ZK-BUO Tiger Moth owned by the New Plymouth Aero Club in the days when a few Aero Clubs still had a Tiger Moth in their fleet.



ZK-BUZ Cessna 172 operated by Jack Bindon's Waikato Flying School, Hamilton seen here at Taumarunui on 13 Nov 1969 just three weeks after the foundation of the Tiger Moth Club.



ZK-CAE Turbulent then owned by R. J. Fleming, Hastings seen at Bridge Pa on 7 Sep 1968.



ZK-CAN Cessna 185 operated by Hauraki Skydivers, Auckland at Rotorua on 22 Feb 1969.



ZK-CGT Turbulent owned by J. Inder, Dargaville seen here at Te Kowhai on 7 Nov 1969.



ZK-CHH Cessna 150D owned by S. J. Steele, Hamilton.



ZK-CHO Cessna 172F operated by Waikato Flying School, Hamilton.



ZK-CKY Cessna 150H owned by Waikato Flying School, Hamilton.



ZK-CNZ Cherokee 140 owned by Rodney Aero Club, Kaipara Flats.



ZK-COI Cessna 150F owned by Waikato Flying School, Hamilton at Taumarunui 16 Nov 1969.



ZK-CSI Cessna 172I owned by Waikato Aero Club, Hamilton.



ZK-CWI Turbulent owned by Max Clear, Te Kowhai.



ZK-CYC Tiger Moth owned by Mark Robertson, Thames seen here at Ardmore on 4 Nov 1969 just a week after attending the formation fly-in of the Tiger Moth Club.



ZK-CZX Tiger Moth just restored by Ian Bennie from the remains of ZK-BBK. At the time it was owned by Ian Bennie, Auckland and seen here at Rotorua 25 Nov 1969



No aviation meeting was complete without the presence of the Department of Civil Aviation. They were represented by ZK-DCD one of their Cessna 182Hs. It is seen here at Tauranga in Jun 1969

THE TIGER MOTH CLUB OF NEW ZEALAND Inc

The Tiger Moth Club of New Zealand Inc was formed at Taumarunui on 25 October 1969 and the following were elected to administer the Club's affairs:



Bob McGarry (left), Arch Finch, and Ian Bennie ? get the Tiger Moth Club started.

President: Arch Finch (Finch Aircraft Services)

Vice-President: Ian Bennie, Browns Bay, Auckland

Secretary/Treasurers: Loretta & Bob McGarry

Committee: Messrs D. Billingham, Whakatane; Mark Robertson, Thames; R. Schrivener, Tauranga

Initial membership is 49 and subscription is \$4.00 per annum.

The club is aimed at the private owner but anyone interested is welcome to apply for membership.

The Club will be able to assist private owners with technical information and with any problems where an organised body can carry more weight than an individual application.

The Club's interests do not clash with the Golden Age Flying Society and the two organisations should work hand in hand.

The Tiger Moth Club's First Fly In

The Fly In was held at Taumarunui over Labour weekend 1969, the first aircraft to arrive was ZK-AUZ from Whakatane early on the morning of 25th October.

The weather was not the best and held up more arrivals until late in the afternoon when more aircraft were able to get through.

The line up on Saturday night consisted of Tigers AJP, AUZ, AVI, BLV, CYC and CZX.

Next day the Tigers were lined up for the TV cameras and some of the aircraft took part in a bombing competition.

A few more aircraft arrived during the afternoon of the 26th but again the weather washed out several more. A formation of six Tigers (BUO, AJP, CZX, CYC, BRM and BLV) gave a display and Proctor 5 AQJ was also airborne at that time.

Other displays were given by Ron Fechny in his Auster 5 AVU and Tiger aerobatics took place in CYC and CZX plus one other. Ceres BPU and Cessna 150H CKY were also demonstrated and Cessna 172 BUZ dropped two parachutists but they missed the airfield.

(Written by Ray Deerness for the Aviation Historical Society of New Zealand)



Four photos taken by Ray Deerness on 26 October 1969



Three Tiger Club members on day one were Taylor, Bob McGarry, and Kingsbury



Peter Harris takes Bob McGarry for a flight in ZK-BLV



Bob and Loretta McGarry
and Ian Bennie (?)



Here is a good reason for coming in 2019. The handsome Taumarunui Novice Aerobatics Trophy





Former President Jim Lawson with a photo of the Geoff Masterton Trophy Cup that was presented to him in absentia by the The de Havilland Moth Club Ltd. It was awarded to Jim for his exceptional services to engineering in support of de Havilland Moth Club representative aircraft types. On close examination of the photograph the cup is engraved as follows.

L & G
Coronation Cup
Presented to
The de Havilland Aircraft Co Ltd
Fire Brigade
By L & G Fire Appliance Co Ltd,
London E.16



The only photo I could find of the de Havilland Fire Brigade in action was the above photo showing the lads putting out a fire that destroyed this wooden Hotspur glider at Hatfield. Note the Heron just visible through the smoke. As many will know L & G hand held fire extinguishers were supplied with many de Havilland aircraft.

IN FLIGHT ENGINE RE-STARTS IN A TIGER MOTH

by Glenn Thompson

A concern I have had for some time is that although pilots are gaining type ratings on Tigers experience has shown that often instructors are only covering enough to let the aspirant Moth pilot operate a Tiger when all is well.

Often the candidate is only taught how to do wheeler landings & important techniques & topics are not even covered ie; three point landings, side slipping, reading & using a P type compass, with no discussion about ground looping or getting the engine restarted if it stops, let alone passing on knowledge about correct fuel grades to use. Many Tiger rated pilots & instructors have not experienced an engine restart even those with an aerobatic rating.

Often it's the blind leading the blind when it comes to instructors passing on their knowledge, often these instructors have little experience on Tigers & have gained their rating from fellow instructors with scant experience.

The following is my take on how an engine restart should be done. My first hand experience coupled with discussion with experienced flying instructors from the early 1960s will hopefully be of value to current & future Moth owners.

Although the following may seem to be very dramatic flying it is actually quite simple & straight (vertically) forward it requires minimal skill & is too simple to be regarded as an aerobatic manoeuvre. A little advance discussion & the required experience & confidence in the machine & oneself can be gained in one flight.

ENGINE RESTARTS

During Aerobatics sometimes the engine will stop turning – As during a very badly attempted stall turn ALWAYS select a suitable area to carry out a FLWOP before attempting engine restarts or aerobatics especially, low Aero's

To Practice Restarts

Position the aircraft so that a FLWOP can be completed from a failed restart -Trim in cruise - Throttle to idle – Nose up above horizon – Mags off – Open throttle to full (as in a normal shutdown) – Hold nose just above stall – Keep in balance - Wait for prop to stop – establish 60 MPH glide – carry out engine trouble checks Throttle 'Set' - Fuel on – Mags ON (Look at Both sets of switches) – Smartly lower nose to be vertically down.

Unplanned Restarts

Dive the aircraft exactly vertical – not nearly so – c/o engine failure checks –

Throttle 'Set' – Fuel on - Mags on (look at Both sets of switches) while waiting for speed to increase lookout & position aircraft by rolling on the vertical down line & plan to be able to c/o a FLWOP if engine fails to start.

Note: It is important to have the throttle positioned at the normal start "SET" position or up to 1/5th throttle so that the magnetos are not in the advanced position as this may cause the engine to kick back instead of starting forwards, especially so, if the impulse coupling is sticking or intermittent in operation.

At 1/3 throttle the mags are at full advance.

Depending on the HP & condition of the engine & which cylinder is on compression

The prop will usually begin to turn from 120 – 140MPH. On one flight with three restarts required due to falling out of badly attempted stall turns, the engine turned over and started at 120 next 130 then 140MPH on a good condition GM I 130HP engine.

(To clarify I was not the flying pilot thank you, but did venture some control input to tidy the situation & assure an efficient restart)

If the engine has not turned over upon reaching 160MPH the change of relative airflow as you pull out of the dive will usually turn & start the engine.

Expect to have to apply a significant force to hold the Tiger vertically down - This then has the effect that when you start to pull out of the dive you only have to slowly reduce the pressure you have on the stick (remember that you are trimmed for cruise speed – the nose wants to pitch up, with the risk of over stressing the airframe.

After the engine fires up, close the throttle, (to control airspeed) slowly reduce the forward stick force & check engine RPM - Keep it below 2400 RPM.

Once the speed is below 120MPH full throttle can be applied – this reduces the risk of over speeding the engine.

Exception: If your Tiger has a climb prop (fine pitch for Banner & Glider towing) full throttle RPM will be well below 120 MPH.

Several factors affect the airspeed that the prop will start to turn

Prop pitch & diameter (Turning moment) – How Tight the engine is mechanically - Leak rate of the cylinder on compression (How long will it take for the mixture in the cylinder to leak down verses speed) Does the impulse coupling on the right mag function freely.

If the engine has stopped from falling out of an aerobatic manoeuvre the engine has stopped due to a lack of fuel & thus the engine will have to turn over several compressions until fuel has returned to the cylinders.

Often the engine will turn over one blade, then stop on the next compression & the speed will have to be increased - Don't rush to pull out - start the pullout when the engine is running - This is because the engine stopped on a cylinder with a high leak rate then turned onto a cylinder with a slower leak rate.

If you operate a High compression engine ie; a GM IC or 10 series, it may not start turning until 160MPH Expect to use up to 1500 feet per attempt.

A non vertical dive will use up too much height & likely not start the engine.

This is the main reason aero's should be conducted over a suitable landing area.

Tiger Moth Club of New Zealand Inc.

Approved Instructors

May 2019.

The names of the Club approved instructors who have agreed to issue type ratings based on the syllabus by Dave Phillips are:

Dave Phillips,
Ryan Southam,
Peter Hendricks,
Phil Welcome,
Simon Spencer-Bower,
Peter McCombe,
Ross MacDonald,
Martin Burdan,
Bevan Dewes,
Andrew Love,
Ross Crawford,
Bill Lamb.

UP COMING EVENTS

2019

18-20 October 2019 Taumarunui Fly-in

This is a special event for it marks the 50th Anniversary of the Tiger Moth Club. Founded at Taumarunui there is no better place to celebrate this event. Once again our thanks to the Taumarunui Aero Club for their support.

2020

January The Tiger Moth Club has been invited back to the Walsh Memorial Flying School at Matamata.
February The Tiger Moth Club has been invited back to the Napier Deco celebrations.

SAFARI Rally

28 February 2020 The Safari from North Cape to Bluff, finishing in Ashburton in time for our annual AGM and fly in. Planning is well underway. The overnight stops have been confirmed, and potential excursions each day are being investigated. The route is outlined below:

Meet in Kerikeri on Friday 28 February 2020.

Saturday 29 February - fly up around North Cape and back to Kerikeri for the night.

Sunday 1 March - Kerikeri-Whitianga. Options along the way include lunch at Kaipara Flats, Waiheke Island, Great Barrier Island, Raglan.

Monday 2 March - Whitianga-Opotiki. Options include visiting the museum at Tauranga for lunch, White Island, Rotorua.

Tuesday 3 March - Opotiki-Gisborne. Those who wish to can go up around East Cape.

Wednesday 4 March - Gisborne-Dannevirke. Options include lunch in Hastings, Hawkes Bay wineries, Waipukerau.

Thursday 5 March - Dannevirke-Omaka. Options along the way include lunch at the museum in Masterton.

Friday 6 March - Omaka. Day off from flying to allow for rest and potential weather delays. For those keen to keep flying optional day trips include Cape Campbell, Nelson, Golden Bay, Marlborough Sounds.

Saturday 7 March - Omaka-Hanmer Springs. Options include lunch at Lake Station or Kaikoura.

Sunday 8 March - Hanmer Springs-Haast. Options include lunch in Greymouth, Hokitika.

Monday 9 March - Haast-Manapouri. Options include Big Bay and down the Hollyford to Glenorchy for lunch.

Tuesday 10 March - Manapouri-Invercargill. Options include day trip to Doubtful Sounds, Puysegur Point, Stewart Island, Bluff, lunch at Mossburn, Mandeville.

Wednesday 11 March - Invercargill-Taieri. Options include the Catlins, Gore, Balclutha for lunch.

Thursday 12 March - Taieri-Cromwell. Options include lunch at Clyde, Alexandra.

Friday 13 March - Cromwell-Ashburton. Options include Wanaka, the Mackenzie country, Omarama, lunch at Rangitata Island.

Accommodation is proving to be the matter requiring the most urgent attention so to that end we have been contacting accommodation providers at each location on your behalf, and we've managed to secure deals and hold rooms until 30 April 2019. Please note we're doing it differently this time and you need to book your own accommodation at each stop. If you're committed to coming on the safari we recommend getting on to this soon to take advantage of the deals we have secured for you and avoid missing out. Amanda

14-16 March 2020 AGM Fly in at Ashburton

2021

Labour Weekend October 90th Anniversary of the Tiger Moth Celebration at Rangitata Island. For those members who think this far ahead, rest assured that the 2021 Taumarunui Fly-in will not be held at the same time and your committee will discuss and make their decision known. Dates and details will be published in due course.

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proved modification.
Steel Tie-down plates, Fuel cock shims.

Wanted: DH60M parts
GlennSThompson@gmail.com 027 243 1089

ACCOMODATION

If you are travelling in the North. Tiger Moth Club members and aviators in general are invited to contact Mesa and Debbie for accomodation in their Air BNB. Pick up and drop off can be arranged from NZKO or NZKK contact 09 405 9715 or 0274 426 847 or e-mail: adventurestay@xtra.co.nz

Wanted by Tiger Moth Club

Archivist:

Volunteer needed to take over the archives and to convert all the minutes into an electronic format.

Safety Officer:

The Club wishes to instigate a Safety Management System to alert members and third parties of the inherent dangers at our events.

The Safety Officer position is for a person with experience around aircraft and public events. The suitable applicant will be confirmed by the Committee.



AIRCRAFT FOR SALE - TIGER MOTH

RAAF trainer A17-114, then VH-SSA, Vic, Aust., later restored in NZ as ZK-SSA. Excellent condition. Just 45 hrs since rebuild, new wood and fabric throughout. Engine 125 hrs SMOH, Alloy heads. Invincible prop. New Fuel tank, Long range tank, new brakes, Kannad ELT, Microair VHF and TXP, Thompson Aero Shoulder Harness. Includes Barnes/Gibson noise cancelling headsets in Leather helmets. Comes with spares too numerous to list but including prop, reground crankshaft, Heads, rebuilt impulse Mag etc, etc, etc, etc.

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A genuine DHNZ made Tiger Moth cabin structure. Removed complete from either ZK-AJP or ZK-ALJ many years ago. Needs overhaul and new perspex, but can be easily fitted to a standard Tiger Moth. Fly in shirtsleeves at altitude. Full details and history from the FEZ at Tauranga.

Buy, Sell or Swap is now available on the web site should anyone require it. Contact club at tigermothclub@gmail.com



Official Merchandise

<u>Item</u>	<u>SIZE</u>	<u>Price</u>
Adult T-Shirt (Navy with club logo)	Small – 2XL	\$25.00
Adult Polo with pocket (Navy with club logo)	Small – 2XL	\$40.00
Club Shirt with pocket (Pale Denim with club logo)	XL only	\$50.00
Cap (Navy with club logo)	Adult	\$25.00
Cap (Navy with club logo)	Child	\$20.00
Children's Polo (Navy with club logo)	4-16	\$20.00
Ladies Fleece Vest (Navy with club logo)	10 – 16	\$45.00
Men's Fleece Vest (Navy with club logo)	M-2XL	\$45.00
40 th Anniversary Pin		\$5.00
Official Club Pin		\$15.00

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Email:

tigermothclub@gmail.com

Or

Tiger Moth Club of NZ Inc
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President: Keith Skilling

Secretary: Ian Ashley

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Website: www.tigermothclub.co.nz

LIFE MEMBERS: Simon Spencer-Bower, Jim Lawson, John Pheasant, Loretta McGarry, John King, Alan Land, Les Marshall, Eddie Doherty, Jeanette Lei