

TIGER RAG



NEWSLETTER OF THE TIGER MOTH CLUB OF NEW ZEALAND INC

AUGUST 2020

Tis time to prepare for a new season of flying and what better way to start than waiting for a sunny day when the aeroplane can dry out in the warm afternoon sun. It could even prompt an enthusiastic wash or polish. That has to be the best way to get a good look at the exterior of the aircraft and when you are done, you can pride yourself of all the places that are in tip top shape.

Looking ahead the restrictions on overseas travel would give the impression that 2020 will be different from other years and you would be right. On reflection though, it has to be said that the Tiger Moth Club did get their timing right. The Safari, the AGM at Ashburton, so well put together by the organisers, was arranged to just leave enough time for all those involved to get home before the country went into lockdown. Well done.

Right now members should be looking forward to the next gathering. The annual fly-in at Taumarunui. Those who come for the social events and those who come with a competitive streak are all welcome for that is what the Tiger Moth Club is all about. As always Taumarunui offers a unique get together in the New Zealand aviation calendar, which is why its worth the effort to get there. If for some reason you can't stay for the weekend you can always fly in for the day. One thing is certain. You will be welcome regardless of when or how you get there.

Ashburton AGM and Competitions



Des Lines gives a talk at the Friday Night BBQ



Above: What Jim Lawson saw

Ashburton

Below: What some others saw



Competition Results

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

Advanced Aerobatics 1st Ryan Southam
 2nd Andy Love
 3rd Ross Brodie

Trophy presented by Simon Spencer-Bower

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

1st Ryan Southam
2nd Kevin Paulsen
Tied for 3rd Tracy Dixon, Andy Love, Ross Brodie
6th Alan Butler

Tony McDonald Trophy for Novice Aerobatics

1st Tracy Dixon

Trophy presented by Graeme Wood

John & Val Hainsworth Hikurangi Challenge Trophy for Bombing

1st Neil Broussard
2nd Kevin Paulsen
3rd Simon Spencer-Bower
4th equal Amanda Rutland and Graeme Wood
6th equal Jerry Chisum and Tim Johnson

Ross Duncan Red Tiger Trophy for Tiger Moth Spot Landing

1st Simon Spencer-Bower
2nd Tim Johnson
3rd equal Alan Butler, John Baynes and Graeme Wood
6th Jerry Chisum

Air Race for Tiger Moths only

Take-off on Runway 06; Left turn to heading to Lake Hood; Right hand turn to round Lake Hood and then to sewerage pond; Down to Runway 02 to finish

1st Jerry Chisum 7min 29 sec
2nd Ross Brodie 7min 33 sec
3rd John Baynes 7min 35 sec
4th Amanda Rutland 7min 41 sec
5th Grant Wilson 7min 52 sec

Trophies for aircraft judged by Dennis Neville and Glenn Thompson

Temple Martin Memorial Cup for most original Tiger Moth

NZ1443/ZK-BRL Russell Brodie

Dudley Payne Cup for Most Magnificent Moth

ZK-ALK Grant Wilson

Scott Greaves Memorial Trophy for best return to Service

ZK-PHZ John Pheasant

Loretta McGarry Rose Bowl for best vintage aeroplane

ZK-ADT Jan Chisum

Winston Churchill Trophy

Trophy presented by John Baynes to Wayne Tantrum and Graham Hollie

Ross Duncan Memorial Cup

Presented to Rex de Bettencor (award decided by committee)



Ashburton The Saturday morning briefing



This young chap looks ready to enjoy a flight he is unlikely to forget

Hitchhiker

As it was a particularly busy time where I work, I didn't want to let my lot down by disappearing for 3 weeks (plus our season only goes for 7 months) so we joined the hard core at Omaka. Our good friend Dave Lace from Alaska was with us again so, in time honoured fashion, crewed with Jerry in Tiger BMY southbound. Not being able to find a 'victim', I thought I'd have a clear front seat in the Gipsy but Murphy's law prevailed and somehow it got filled up with 'stuff'. A pity should anyone want a change of seating arrangement!

On various Tiger trips over the years I've had a few passengers but few as enthusiastic as this hitchhiker. The morning we were leaving Taieri, the Thompson's asked around if anyone had a spare seat as they had, a few days earlier picked up a hitchhiker, Mark Schlegel, from Switzerland. Wouldn't it be great if he could get a ride in an aircraft to Ashburton?

A swap was arranged. The Thompsons took what was in the front cockpit and Mark the hitchhiker perfectly seated into ADT's open cockpit. In no time we were off, perfect flying conditions in concert with Tiger BMY. En route to Cromwell we flew over the interesting Taieri Gorge before landing in a big paddock above Oterehua where we visited the amazing Hayes Engineering plant and homestead. Luckily there was no OSH in those days!

Onward to Cromwell where we landed beside the racecourse, or was it in the middle? By this time, there were many oohs and aahs coming from Mark which I thought was generous coming from such a wonderland himself. After another fun dinner, Jerry and I eventually tracked down our B&B, Bannockburn Lodge, a few kms out of town which we can't recommend highly enough with 5 Star accommodation and very reasonably priced.

The next day, with the trial of being turned back to Wanaka twice due to total fog in the McKenzie Basin and eventually getting to Ashburton (by that stage, way too late for lunch at Rangitata Island), via a real 'dog's hind leg' route.

Mark proved himself to be the perfect passenger having blind faith in his pilot! He was totally ecstatic about the whole deal and just about wore his phone out with all the photos he took before meeting back up with his previous hosts at Ashburton - oh and me, my inert junk.



Hitch hiker Mark Schlegel, Jan Chisum, and the Moth

Heading Home



Above: The Chisum's over Kaikoura and Below: the Jackaroo at 4000ft over the Desert Road



This is not a Moth! You're damn right. It's not It's a Travel Air 4000 under restoration by Des Lines at Rangiora



Travel Airs were quality biplanes, designed by none other than Walter Beech, and in later years were the most sought after aircraft by dusting operators like the one shown in Precissi colours. Three ex duster Travel Airs were imported into New Zealand twenty odd years ago. Des Lines has one, Hallett Griffin another and the third is someplace else. Travel Airs are the American equivalent of the Moth, only bigger.

CROSS COUNTRY CONSIDERATIONS

Fuel Reserves:

Rules state that you shall plan to have 30 min fuel reserves at the end of the flight
In the 'Good Old Days' the rule was 45 min reserve for valid reason.
Tigers cruise at 80 Kts. Most modern aircraft do 100 + Kts I have been stationary at cruise power & have had cars towing caravans overtake me up the Desert Road

Maps & ?? Miles: 66 & 76

Remember that Maps are in Nautical Miles whilst most ASI are in Statute miles
This makes a real difference when it comes to flight planning Range, Endurance & ECT
Cut & fold maps to make it easy to use in flight. Have a North Island & South Island VFG

The most limiting factor of a Tiger Moth is the flight crew

Hypothermia:

Long flights & all winter flights pose the real risk of hypothermia
Remember temperature reduces 1.8°C per thousand feet. Wear appropriate gear
If rushing before flight sweat will turn to damp cold in flight
Often it is best to leave donning of jackets until the engine is started – get dressed whilst the engine warms. Dress in the slipstream on hot days. This will minimise sweating

Transferring Fuel:

The exercise from transferring fuel from the long range tank can help keep you warm
All 10 gallons can be transferred easily in 15 minutes
or in 5 minutes if you pump like you are possessed
Plan to transfer fuel in several small stints to prevent getting hot & sweaty

Food:

Have a few food snacks to eat whilst flying this will help to keep you warm. Aim to eat during the middle 1/3 of the flight this will give maximum energy & warmth

Dehydration:

The wind in an open cockpit will carry away vital water
Have water or fruit juice to consume, fruit juice will help to keep you warm & hydrated
It is best to consume fluids during the second half of a flight for the following reasons

Another stress raiser is the effect of cold weather on the bladder

Urine:

Plan to have plenty of time to relax whilst toileting, as a rushed leak will not empty the bladder fully. Once apparently empty relax for up to a minute, the bladder will contract, then you will be able to pass quite a bit more urine. Use this time to reflect on your planning
Finding you have a skin full at 5000' in minus 10°C with 45 minutes to destination, can limit your piloting skills when you are most fatigued

Provide the above information, clothing, food, drink and sick sack to your passenger

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UP AND COMING EVENTS

2020

16-18 Oct Taumarunui Fly in

Note: The High School hostel is not available for accommodation at this time

2021

5-7 Mar

AGM fly in at Thames

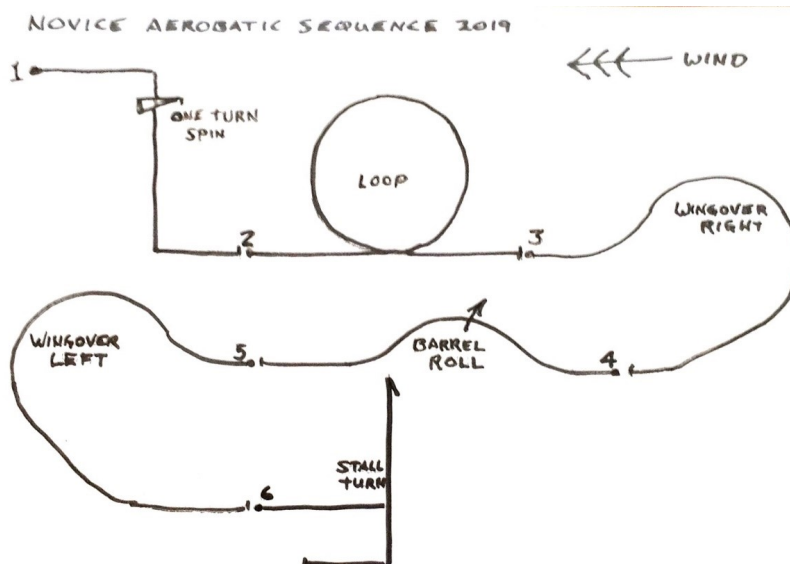
October

Labour Weekend

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.

Novice Aerobic Sequence

Here is a description of the upcoming Novice Aerobic Sequence competition to be held at Ashburton. Martin Burdan and many listed club instructors developed the sequence for pilots who may need an easy start for aerobatic competition, most specifically WITHOUT a slow roll.



This is for pilots who have not won any aerobatic competitions, and for Tiger Moths only. We have included the one-turn spin as an appropriate manoeuvre to attain the proper speed for the loop. The wingovers, right and left, with the barrel roll between are intended to be performed from a 60 degree nose up and ruddered around with 90 degree bank at the apex. The barrel roll should start at 30 degrees nose up and continue to 30 degrees nose down before pulling back to level flight. This produces positive G, no engine faltering. The final stall turn to the right is done from 80 degrees nose up to avoid prop stoppages and finish back to level flight. If 90 degrees nose up is used, the carburettor float will cut fuel to the engine. In that situation an immediate full rudder will cause an early cessation of the manoeuvre, propeller still windmilling. A slight hesitation will cause the prop to stop. A 90 degree straight down dive to VNE will get the engine windmilling again. Pull the throttle back to retard the magnetos and avoid RPM overspeed. 700 to 1500 feet of altitude loss is normal. Practice should always be over a suitable landing area. An aerobatic qualified judge will ride with each contestant. No aerobatic rating is required. Have fun!

Taumarunui Annual Spring Fly-In, October 16th – 18th.

Planning for the Clubs Annual Fly-in at Taumarunui on the weekend of October 16th to 18th is well under way. The format will be similar to previous years, with arrivals scheduled from Friday, followed by a meal at a yet to be determined venue. Saturday is competition day, followed by the prize giving and dinner at the Taumarunui Golf Club. Sunday is free for local flying, and departures to home bases.

Members intending to attend this weekend are advised that the Taumarunui High School Hostel has been closed down, and the facilities are no longer available to the Tiger Moth Club for transport, accommodation, or the Friday night BBQ.

Members and friends attending the Fly-in, will need to make their own arrangements for accommodation.

There are motels available in the Taumarunui, and early bookings are advisable. The Forgotten World Motel is reportedly already fully booked for a private function.

Mogas will be available on the field. However, we will be unable to provide Avgas to those that require it. The nearest Avgas pump is Z Energy at Te Kuiti.

Registration forms and further information will be published prior to the weekend, and will advise of transport and meal arrangements, and the trophies to be competed for.

Amanda has added:

The Forgotten World motel in Taumarunui that many of us often stay at in October is fully booked for Saturday 17th October with another group. If you're intending to come to the fly in please get in quick to book some accommodation in Taumarunui for the Friday and Saturday night.



One last look at the Tiger Moth line up at Ashburton

Patron: Simon Spencer-Bower President: Keith Skilling
Secretary Ian Ashley (ph 021 198 1810, email: iana@kcbbs.gen.nz or z11aox@icloud.com)
Secretarial address: The Secretary, Tiger Moth Club of New Zealand Inc,
P. O. Box 283 032, Postal Centre 14, Ardmore Airport, Papakura 2582
Website: www.tigermothclub.co.nz

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

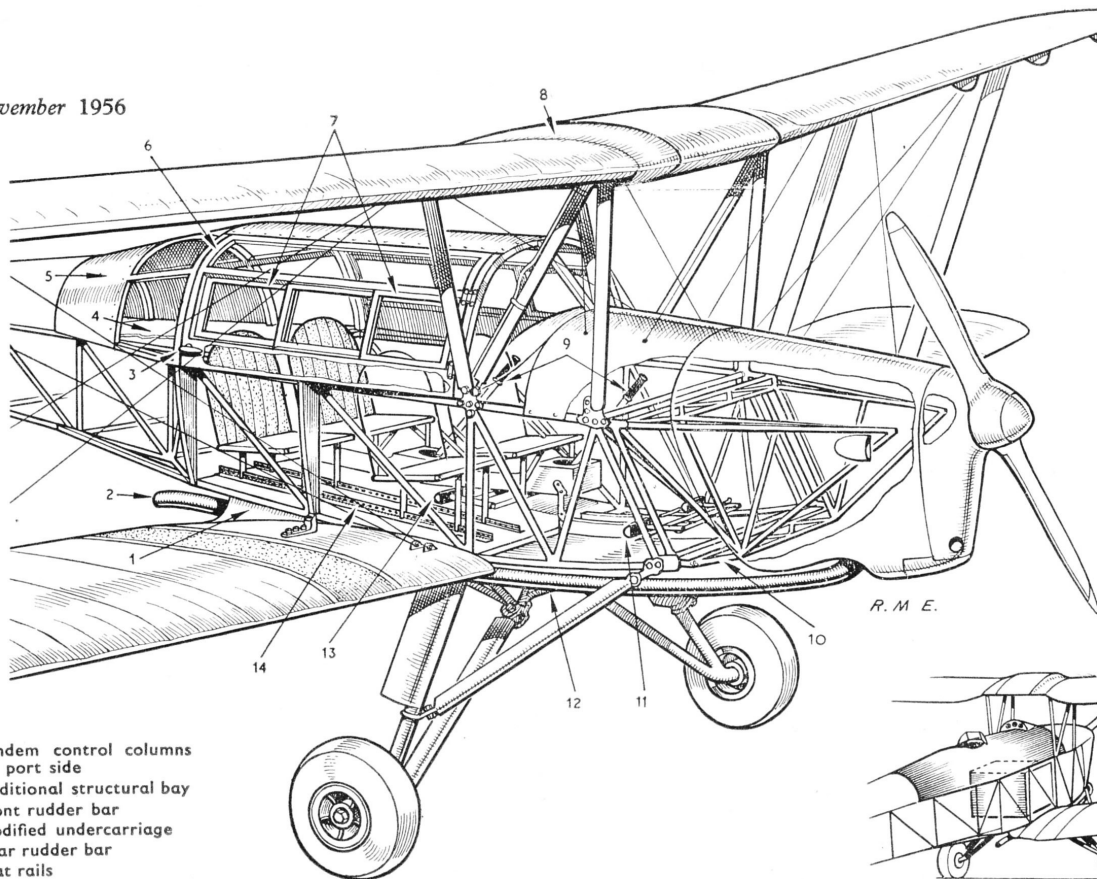
The Thruxton Jackaroo—one of the rarest Tiger Moth Conversions

810

FLIGHT, 23 November 1956

HERE AND THERE

THRUXTON JACKAROO: A "Flight" copyright sketch showing the salient features of this ingenious Tiger Moth conversion, described on page 826. The inset sketch depicts the crop-duster version, with a single cockpit on the port side and instrument panel on top of the fuselage decking.

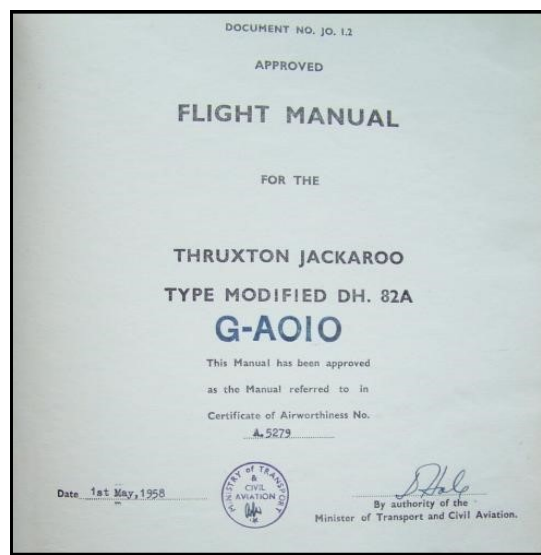


- | | |
|---------------------|---------------------------------------|
| 1 Wing fillet | 9 Tandem control columns on port side |
| 2 Long exhaust pipe | 10 Additional structural bay |
| 3 Cabin door handle | 11 Front rudder bar |
| 4 Parcel shelf | 12 Modified undercarriage |
| 5 Plywood skin | 13 Rear rudder bar |
| 6 Cabin door | 14 Seat rails |
| 7 Sliding windows | |
| 8 Fuel-tank fairing | |



Just 18 Jackaroos were converted by Thrupton Aviation in the years 1957 to 1959. One more was converted by Rollason Aircraft at Croydon in 1960.

Of these only four are still flying, one each in Canada, Australia, UK and now New Zealand.



Front cover of the Pilot's notes for John Pheasant's Jackaroo



Flying over Tauranga
Photos by John King



Some Propellers are Invincible



You can just see the ground crewman, both hands on the prop ready to pull down hard to coax that reluctant engine into life. Staring that man in the face was the decal of the Invincible Propeller. A clever advertising ploy and one copied by others but why the name Invincible?

George Adams, trained as an engineering patternmaker on ships propellers with Vickers, had emigrated from Kent and settled in Tasmania prior to the Great War. By 1915 he was back in England, joined Vickers who put his skills to good use making aircraft propellers at Brooklands .

George Adams returned to Sydney making propellers for several Australian firms ending with Genairco who manufactured both de Havilland Moths and later machines similar to Fox Moths until they went out of business in 1932.

George, joined by his son Ken, started his own business, and taking inspiration from the word Invicta emblazoned on the coat of arms of Kent, Invincible Propellers was born. Ken had a long career and completed his last propeller just short of his 102nd birthday.



The first Invincible propellers were made in a back corner of a motorcar service garage in Epping NSW but in 1936 George and Ken moved to Mascot where they turned out thousands of Invincibles for Tiger Moths and Dragons built at the nearby de Havilland works. Later the firm built various Mosquito sub components but during the fifties as more and more metal propellers came into use, the demand for Invincibles decreased. In 1966 George Adams retired, the company closed its shop, and the propeller making equipment was sold to de Havilland's, who then employed Ken to continue making the same types of propellers but now emblazoned with a de Havilland label.



In the fifties, the firm made some big wooden propellers. In the photo, Ken Adams is standing on the step ladder and George Adams at centre right with a newly built Bristol Centaurus test fan, engines that powered Royal Australian Navy Sea Furies and Butler Air Transport Airspeed Ambassadors.. Ken remembered watching one of these monster props, flung off the engine test stand, and then tumbling end over end down the runway at Mascot with the engine gearbox still attached!

Ken remained at de Havilland's for 16 years until de Havilland's decided to stop making propellers in Australia. Ken was 68 and ready to retire but two mates, also patternmakers, Tony Hill and David Green suggested the three of them build propellers on a part time basis in a local garage. De Havilland's sold them the propeller making equipment, drawings and approved manufacturing data and even arranged for product liability insurance through Lloyds of London.

In 1982 the three partners formed Invincible Airscrews Pty Ltd and were given approval to manufacture & repair fixed-pitch wooden propellers without limitations. They drew up a suitable logo with name Invincible framed by a propeller across a triangle thereby incorporating a link to the former Invincible business. They remain in business.



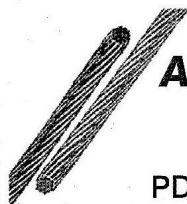
For Sale/Trade:

DH Rapide Rudder Bar & Pedal Assy complete with mountings in good condition & DHGQ 3 Prop Hub Locking Plates & Engine Baffles

Safety Improvement & Aerobic comfort: Raised Shoulder Harness Mod TAE/DH/100 for Tiger Moths

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"Manhood," thought Dickie "is a very serious business"

On a more serious note: who can identify the obviously de Havilland biplane in the photo?
The letters on the cowl are London Aeroplane Club, then owned and operated by de Havilland's.