



The newsletter of the Sport Aircraft Association (Auckland Chapter) Inc

Sport Aviator

February 2013



www.saauckland.org.nz

Committee 2012

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Composites	Phil Richards	09 826 4150
Metal Skin	Kevin Paulsen	09 296 5125

FRONT PAGE

TNT and TOY make a fuel stop in Kaikoura on the way to the Great Plains Fly In 2013.

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Next Meeting

WHEN: Thursday 28th Feb 2013 -7:15pm

WHERE: Auckland Society of Model
Engineers Club Rooms
Peterson Road, Panmure Basin
Mt Wellington

SPEAKER: John King

John King on his many years
photographing "Ear to Ear".

Jon Farmer will also be giving a short
10 minutes presentation prior to John
King on the pack up of the Mosquito in
to its shipping container prior to
shipment to the US.



No update this month from Cyril.



Hi Everyone

With the weather continuing to shine down I am hearing from a number of members who are getting out and about and making hay while the sun shines.

February saw the Great Plains Fly In in Ashburton and Don and Dave Wilkinson made the trip down country to Ashburton for the event. Don and Dave sent through some photos of their adventure plus some words which you will find in the Chapter news section.



Dave Phillips

At last month's meeting Dave Phillips gave an excellent talk on flying the Mosquito and this was thoroughly appreciated by members. Dave's description of the first flight and the flying characteristics of the Mossie made it a most memorable talk.

His description of the consequences of a loss of an engine on takeoff or in flight gave a glimpse of the risks involved with flying this aircraft for the first time.

I have received a number of project updates this month which is heartening to see and I would like to thank those that have sent these in. I would encourage other members who are building to also send updates as these are what myself and others like to see in the newsletter as well as the flying adventures.

As for my own flying, there has been very little these last couple of months. The JQP syndicate did complete the 25 hour service on the Sonex in February and she is once again fit and healthy and rearing to go although minus her spats once again until we can sort out a couple of stripped screws.

For those not present at last month's meeting the mystery aircraft was identified as a Hawker Fury with a Bristol Radial engine instead of a Roll-Royce Kestrel. This was correctly identified by Warren Sly. Barry tells me the clue was in the Hawker name on the tail apparently. These particular aircraft were built for the Iraqi Air Force of the day.



This month's mystery aircraft might prove a bit more difficult. Look for it on page 15.

I hope you enjoy the newsletter.

Cheers Gavin

MEMBER NEWS

New Member – Ken Watters

By Ken Watters

Ken Watters has recently joined the Chapter and sent the following profile.



Ken Watters – Profile

I am currently a partner in a construction project management and architectural consulting practice operating out of Papatoetoe. I am passionate about flying and am currently building a Vans RV7.

The stage of completion is Empennage largely done except for the fiberglass tips which I will do shortly.



Nice straight rudder trailing edge.

Left wing is complete also but for wing tips and some final tweaks. I am about 80% through with the right wing and hope to start the fuselage very shortly.

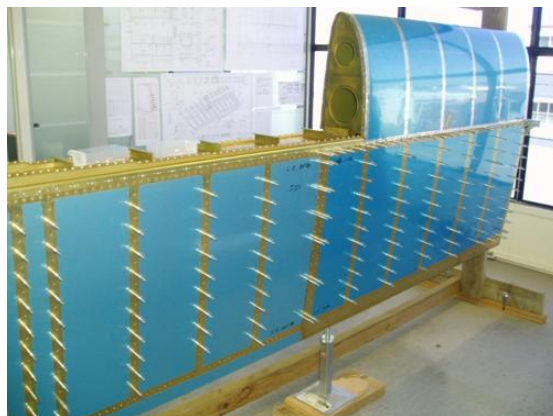
I am building upstairs in my office where we have some space. The challenge one of these days is how I am going to get it out of there.

As far as my flying experience is concerned I am currently not flying but hope to do a RPL fairly soon.



Attaching the fuel tank to the left wing

I have some 1700 hours under the belt flying Cessna singles, Piper have a vacant corner and will have to face Seneca II and a Cessna 402. I obtained my PPL in South Africa in 1975 on a Cessna 150 after about 40 hours of flying.



Right wing ready for riveting

In 1977 I joined a construction company as a project manager mainly because I knew they owned aircraft for the business and I hoped to be able to fly their aircraft and build up my hours. As it turned out I did a huge amount of flying as part of my job and eventually obtaining an IF rating as well.



Since emigrating to NZ I have not flown and my licence has expired. I have attached a couple of pictures of progress on the RV7.

PROJECT NEWS

Menestrel Progress

By Steve Chilcott

Just a quick update on the Menestrel build.



The undercarriage legs have been aligned and fixed in place. The wheels and brakes have also been fitted with a bit of adjustment needed to give clearance between the Great Plains brakes and tyres.



The wiring for the instrument panel has been completed and just needs the wires fixing in place. Initial testing shows all is working ok. The rear canopy section has been fitted and the main canopy has just come back from Composites International and is ready for trimming and fitting. I had it blown a bit oversize to give me more headroom and it seems to have worked ok.



PROJECT NEWS

David Grove-Hills RV-4

By David Grove-Hills

Hello Gavin,

"Just three panels left to paint and rivet before David G-H's RV4 fuselage can finally be extricated from its jig, where it has languished now for *%\$#& years.

Was hoping to catch up with the David Wilkinson RV8 project!!!"

Regards David Grove-Hills.



POPEMOBILE

Popemobile At North Shore

By John King

Hi Gavin,

Nice to see proper use being made of the Chapter control van at North Shore at the weekend.

Kind regards,

John King

Editor, NZ Sport Flying, NZ Aviation News and all that sort of thing.



MEMBER NEWS

Norm and Chris' NZTG Trip

By Norm and Chris

Norm Bartlett and Co-pilot Chris Groves took the day off and flew from Ardmore to Tauranga for lunch at Classic Flyers. As always you always meet someone you know and talk Aeroplane. Chris did a nice job of flying the Lancair 360 and as can be seen we kept our speed down to about 160 knots. The hour meter read exactly one hours flying for the complete trip. One of the most asked questions on the L360 is "what are the things on top of the wing". I then give a short talk on vortex generators.



The all-important pre-flight



Shooting out of the Waihi Gap



Co-Pilot Chris



Turning base R07



Museum Visit – a must see if at TG.



Norms explains Vortex Generators again.



One two seat rocket back at AR pleased with itself. Amen

MEMBER NEWS

Ashburton In The Toys

By Don Wilkinson

I departed North Shore on Wed morning for Taumaranui and then Fielding. I had to visit a brother in Palmerston North hospital.

Was a good trip but a strong southerly was bumpy through the central NI. That evening I flew to Wanganui and stayed with our daughter as it was our granddaughter's 10th B'day. Good timing and the first time I have attended her big day in 10 years as it has always been on Fly In W/E. She won't change her birthday.

Thursday morning David arrived in WU in TNT non-stop from NE. The wind had changed and he had a quick trip. Together we flew to PP, that coast always seems so delightfully safe and the weather was just great.



Toy Off Kapiti

Visited my brother again as he was transferred to WN hospital overnight.

Friday morning TOY and TNT departed PP in the most idyllic weather imaginable. We left Cape Terawhiti at 2000 ft direct to Cape Campbell. You could have crossed Cook Strait in a kids Lilo dingy.



Hitting the South Island at Cape Campbell

Yes we both carry a SPOT tracker just in case.



TOY and TNT at Kaikoura

Kaikoura for fuel and Ashburton in formation overhead. I was taunted with a call from the ground station, "where's the trademark barrel roll Don?" Reply? "I'm behaving myself for change, sorry". Turned out it was Errol the Safety Officer on the RT just checking if my behaviour had improved since he blistered me for just that 2 years ago. Sometimes I get it right.

The fly in was as always good and apart from a foggy start Saturday the weather was fine.

Always good to see founding member Robin Hickman in attendance. He's been a consistent and interesting contributor to the Sport Flying mag.

The Grand Champion was a rather pleasant and remarkable outcome. Whether it was contentious or not, I'm not sure but with all the largely professional plastic and kit planes around today it was certainly a revelation to see a basic wood and fabric Taylor Titch come out on top. In the build process since the 1970s and so nicely finished by John Best. The work around the cabin was outstanding.

That Ashburton Museum gets better each year. DCM and Teagle turned up for the Saturday, joined us at the Wings Dinner and behaved reasonably well in our cabin at the motor camp. Great company.

David in TNT and I in TOY departed in formation at about 10.30 and arrived at North Shore about 5.10 pm. A most remarkable return home because of the unbelievably good weather. All good safe and enjoyable.

Don Wilkinson

MOSQUITO NEWS

Mosquito Dismantled

By Jon Farmer

Soon after its appearance at the Masterton airshow, the Mosquito had its last flight and was positioned in the Warbirds Restoration hanger to be dismantled into its main components for packing into containers for the voyage to the U.S.A. The fuselage along with various component's, went in one 40ft container and the two Merlin engines plus wheels and flaps in another.



A 60ft specially made open top container consisting of a 40ft and a 20ft, welded together, took the 54ft one piece wing. On Thursday 14th February, 2013, the two 40ft containers were carted to the docks and the wing followed next day.



MEMBER NEWS

Masterton Photos

By Barry Gillingwater

Barry sent me a selection of photos from his trip to the Wairarapa Airshow in January. Included below is a selection of these.



LAST MEETING SUMMARY

Warbirds Over Wairarapa

Nev Hay gave a brief synopsis of his trip to Masterton for the Warbirds over Wairarapa Airshow. He described the flight down as pretty rough at times into a 55 knot headwind but that the weather on the ground at Hood Aerodrome was quite calm verging on the uncomfortably hot. All in all he described the show as most excellent and thoroughly recommended it to anyone thinking of attending in the future.

Great Plains Fly-In Ashburton

A show of hands was requested for those members intending to fly down to Great Plains. About 4-5 members indicated they would be attending. It was mentioned that Bill Sisley was collecting a small group of aircraft to fly down.

Auckland International Airshow

Alistair McLachlan Spoke about the airshow which he described as unusual. He said it was well organized with the public on the Aeroclub side and four large screens on the hangar side of runway. There were however few aircraft involved with a R/C Mig being one of the stand out displays. The NSAC Robin's gave a spirited aerobatic display and an RNZAF 757 also did a handling display with Jim Rankin commentating. The Jet Man was of course there and interesting to watch. There were no other military aircraft present on the day Alistair went and no Warbirds. Costs were \$55 to get in reduced to \$35 on the Monday. Crowds were not huge with estimated attendance being 7000. Although the format was good Alistair said the show would have run at a loss.

Guest Speaker

There being no further business **Dave Phillips** proceeded to give the chapter an excellent summation on the preparation for and subsequent first flight of the Mosquito KA-114.

First off Dave described his background in aviation including membership of the former AACA, construction and ownership of a Turbulent project purchased off Syd Jensen and completed by himself and Dave Proven.

He then briefly described his flying experience from before he joined the RNZAF and then afterwards when he moved to civilian airline work where he ended up flying for Cathay Pacific where he continues to fly to this day.

Of the Mossie flight itself. Dave described his main preparation as coming from five different sources. These being;

- *De Havilland Pilot Notes for the Mosquito*
- *Articles written by Mosquito pilots.*
- *A NACA assessment from 1944*
- *Interviews with ex pilots*
- *And sitting in the cockpit.*

He also described how his recent flight in the Avro Anson had proved excellent experience in a much more docile aircraft.

He described the interviews he had with pilots about how to handle the takeoff and said he followed the advice of George Stewart when it came to the takeoff where rather than leading with the left throttle as recommended in the Pilot Notes, he stood on the brakes and took power up to roughly 80% and after the engines settled, released the brakes and went to full throttle on both engines before the aircraft had rolled more than its own length. This method has worked with no problems for all the flights.

Dave also described the details of what happens in the event of an engine failure on takeoff. Basically he said that if one engine fails after rotation at 125mph and before the plane achieves VMCA of 190mph, the aeroplane is going to crash and there is no way to avoid it. He said that every wartime Mossie pilot he spoke with had witnessed fellow pilots killed when they had engine failures on takeoff.

His also said that if an engine failed while in flight then during the landing approach, once the wheels were lowered you were landing as even with full power, on one engine it was impossible to overcome the drag of the undercarriage, aircraft flaps and radiator flaps and it was not possible to raise them in any hurry. Basically he said you had to approach high so you could make the runway after lowering the gear.

Dave wrapped up his talk with questions from the floor. These were called to a halt around 9:30 when Don Wilkinson presented Dave with a bottle of wine and a copy of the Sport Flying magazine as a thank you gesture.

The meeting was closed at about 9:30.

FEATURE

The Topsy Nipper

By Steve Chilcott

I have always had a soft spot for a rather unusual single seater aircraft. When I was learning to fly in the 70's in UK the Topsy Nipper was all the rage and it caught my eye. I developed an interest in building aircraft in later years and have built the Jodel D18 and am approaching the end of the Menestrel HN700 project. I have been keeping an eye out for my next project and started thinking about the Topsy Nipper again after having read a couple of recent magazine articles on it. I had managed to get a set of plans about 5 years ago so the idea has been there for a while.

The Topsy Nipper was designed by Earnest Tipps, a Belgian. The design was produced in 1952 and the first flight was on 12th December 1957. It was built by a number of companies including Avions Fairey, Cobelavia and Slingsby in the 50's, 60's and 70's. It is a single seater constructed of steel tube and fabric with wooden wings and tailplane. It is usually powered by a VW derivative engine but some have been fitted with Jabiru four cylinder engines.



The cowling shown above is one of the standard cowlings and it appears that drag was not such a problem in those days as it is now.

My research revealed that there was a company, Nipper Kits and Components, in UK that still supplied parts for the aircraft and sold plans for the wooden parts of the aircraft. Unfortunately to keep control of their investment the company did not sell plans for any metal parts and all metal parts described on the wooden plans were identified only by a part number. Even nut and bolt sizes were kept secret which made it difficult to work out what was going on.

One problem was that their price lists did not include a number of the parts required so I am not sure what you were supposed to do there. The fuselage was supplied by the company all welded up but you then had to buy landing gear etc etc. However the company has recently been sold and the supply of parts is in limbo while another company get production up and running.

After thinking about it for a while I decided that one of the main problems I would have is my height. I have tried to sit in D9's and Turbulents and it is obvious that I do not fit the ICAO description of a standard man as once wedged in both aircraft I was unable to move the controls. I attended the LAA flyin at Sywell last year with the intention of meeting up with fellow Menestrel builders but also in the hope that I would be able to try a Nipper for size. I met up with Neil Spooner who has a very tidy and highly modified Nipper. One of the modifications he had made was to move the seat back rearwards a couple of inches and lengthen the rudder pedals. This modification has been done on a number of Nippers over the years and is approved by LAA engineering. He was kind enough to let me try his aircraft for size and it was with great surprise that I found that I would fit comfortably even with the canopy down.



I spent some time talking with Neil and the friends I was with observed as we walked away, "you are going to get one of those aren't you". Neil was very interesting to talk to and was an absolute fountain of knowledge on all aspects of the Nipper. See his video on Youtube, 26 turn flat spin. He makes a very profound comment about halfway down just after the engine stops.

12 The Topsy Nipper Continued

However he did recover and the aircraft that was involved was the one I sat in so it came away from the incident very well. His final attempt at recovery was to use ailerons into the spin direction which dropped the nose and put the aircraft into a normal spin which he recovered from at 700ft.

Once home the search was on for an aircraft. I had an idea in the back of my mind that I would rather buy a wreck or disused aircraft in need of restoration as they were more likely to be available. Flying Nippers in good condition change hands very quickly in UK and Europe so the chances of me getting one were remote. I found one aircraft that had been involved in a landing accident and tried negotiating for it. The aircraft was in Belgium and although the chap selling it spoke good English he was a bit reluctant to tell me exactly what he was selling and I came to the conclusion that it had been stripped of all useful parts. I wrote to Neil and asked if he knew of any other projects around. It turned out that he had one hanging in his garage. It was a Nipper that had been caught in a hanger fire and all the woodwork had been damaged. However the steel was all straight and undamaged and somebody had had the good sense to clean it up and put a protective coat of paint on it. On my next visit to the UK I went along and had a look at what was on offer and decided it was exactly what I was after. It had been in the Norwich aviation museum for some years and then had changed hands a couple of times before Neil had bought it with the idea of restoration. We came to a deal and he is going to provide me with assistance in measuring and photographing parts that are missing and I need dimensions for so that I can manufacture them here.



Here it is outside the museum before being put inside the white display tent alongside. Fortunately the engine did not come with it!!

He has done a lot of work on making modifications and providing alternative parts for Nippers. It appears the rubber O rings on the undercarriage are now rarer than hens teeth so he came up with an alternative using bungee rubbers from a Piper Cub. The LAA has now given approval for that mod as well.



When I looked through the information of the aircraft it had originally been G-ATKZ. There was a very useful site that had details of all Nippers ever built but it seems to have disappeared now. I think it had been built by Cobelavia in Belgium and was serial number 72 powered originally by a Stark Stamo 45hp engine. Unfortunately all log books have disappeared so I can't be sure of exactly where it was built as there was a change over from Avions Fairey to Cobelavia around the time it was built. However Avions Fairey built 59 complete aircraft and 79 kits so the mystery deepens.

I have been told that there is a file with a lot of gathered information coming with the aircraft so that may have some more clues in it.

Further investigation on the www revealed that when Corgi the toy car manufacturers produced a trailer with an aircraft on it back in the 60's it was modelled on this aircraft so now I am looking to get one of those from ebay to provide me with inspiration.



Before paying over the money I spoke with Alistair McLachlan to ask his advice. I was very pleased to hear that he thought the project was viable and as the fuselage was all still completely to size and shape that the fire would not have harmed the steel.

The shipping from the UK seemed reasonably cheap at £160 for the crate that Neil had boxed it all up in. The shipper's main concern was that it would be going via the US and was it a military aircraft. I assured them it was not so all was well. Their second concern was that the crate was made of plywood so after a call to MAF I was able to assure them that we did accept wood into the country despite what their documentation said.

My set of plans that again came from Belgium, were sold by someone on ebay. They are the plans for the wood parts and are on the old fashioned plan copy paper that stinks and is turning pink. Unfortunately the details are disappearing so I think it will mean I have to build the parts quickly. I have tried copying them but a lot of detail is so faint it disappears.

The crate arrives here in March so I will do a quick clean-up of the parts to preserve them further and then look forward to the restoration once the Menestrel is in the air. Meanwhile I will start collecting all the difficult to come by parts and building any missing metal parts I will need so that the build goes smoothly.

A BIT OF HISTORY

Monopoly At War

By Bob Keith

Starting in 1941, an increasing number of British Airmen found themselves as the involuntary guests of the Third Reich, and the Crown was casting about for ways and means to facilitate their escape.

Now obviously, one of the most helpful aids to that end is a useful and accurate map, one showing not only where stuff was, but also showing the locations of 'safe houses' where a POW on-the-lam could go for food and shelter.

Paper maps had some real drawbacks -- they make a lot of noise when you open and fold them, they wear out rapidly, and if they get wet, they turn into mush.

Someone in MI-5 (similar to America's OSS) got the idea of printing escape maps on silk. It's durable, can be scrunched-up into tiny wads, and unfolded as many times as needed, and makes no noise whatsoever.

At that time, there was only one manufacturer in Great Britain that had perfected the technology of printing on silk, and that was John Waddington, Ltd. When approached by the government, the firm was only too happy to do its bit for the war effort.

By pure coincidence, Waddington was also the U.K. Licensee for the popular American board game, Monopoly. As it happened, 'games and pastimes' was a category of item qualified for insertion into 'CARE packages', dispatched by the International Red Cross to prisoners of war.

Under the strictest of secrecy, in a securely guarded and inaccessible old workshop on the grounds of Waddington's, a group of sworn-to-secrecy employees began mass-producing escape maps, keyed to each region of Germany or Italy where Allied POW camps were regional system). When processed, these maps could be folded into such tiny dots that they would actually fit inside a Monopoly playing piece.

As long as they were at it, the clever workmen at Waddington's also managed to add:

1. A playing token, containing a small magnetic compass
2. A two-part metal file that could easily be screwed together
3. Useful amounts of genuine high-denomination German, Italian, and French currency, hidden within the piles of Monopoly money!

British and American air crews were advised, before taking off on their first mission, how to identify a 'rigged' Monopoly set -- by means of a tiny red dot, one cleverly rigged to look like an ordinary printing glitch, located in the corner of the Free Parking square.

Of the estimated 35,000 Allied POWS who successfully escaped, an estimated one-third were aided in their flight by the rigged Monopoly sets. Everyone who did so was sworn to secrecy indefinitely, since the British Government might want to use this highly successful ruse in still another, future war.

The story wasn't declassified until 2007, when the surviving craftsmen from Waddington's, as well as the firm itself, were finally honoured in a public ceremony.

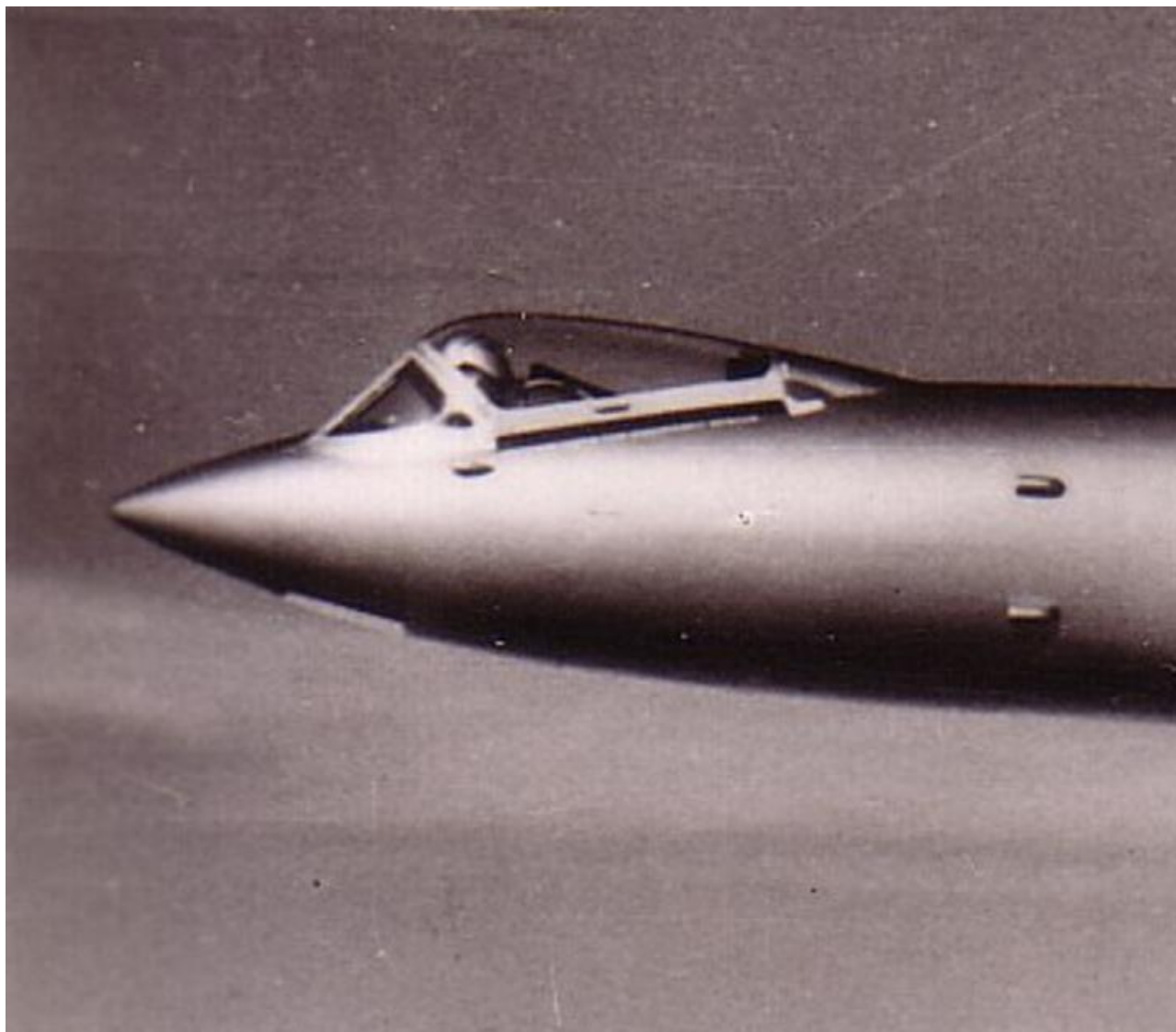
It's always nice when you can play that 'Get Out of Jail Free' card!

15 Mystery Aircraft Quiz by Barry Gillingwater

A test for all those plane spotters out there.

Identify the mystery aircraft in the picture below and email your answer to the editor at gavin.magill@gmail.com before the next Chapter meeting and the first person to correctly identify the aircraft will earn themselves a chocolate fish prize.

Note you will need to turn up to the meeting to collect your prize. ☺



ON THE WEB

Emergency Landing

From Brian Millet

Brian found this somewhat exciting moment which shows that it can happen to anyone, but staying calm sure helps.



<http://www.coolystone.com/media/5360/Emergency-Landing---Very-Intense/>

ON THE WEB

Foot Launched Glider

From Don Wilkinson via Robin Hickman

I want one – this really looks like fun.

Pretty neat glider...!

Foot Launchable / Ground Towable / Aerotowable / Foot Landable Sailplane

Some people have all the fun



<http://player.vimeo.com/video/39325401>

ON THE WEB

Nine Cylinder Honda Radial

From Barry Gillingwater

This might be interesting for members

Idea: Let's take nine Honda XR600 water-cooled motorcycle cylinder assemblies and build a radial engine for an airboat.

Russell Sutton says, "No problem."

Check out the result.



<http://thekneeslider.com/russell-suttons-honda-based-9-cylinder-radial-engine-is-running-strong/>

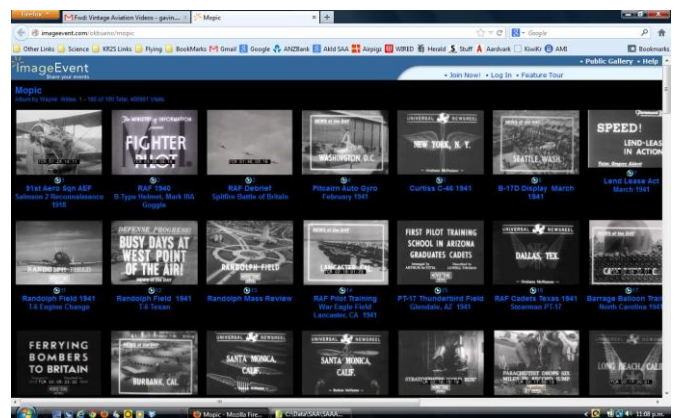
ON THE WEB

Vintage Aviation Videos

From Bob Keith

The link below was sent to me by my Brisbane friend. I had a quick look to see that it is a collection of some 150 video clips of aspects of aviation in America but did not view any.

(I did have a look and there are some great videos in this collection and it is well worth a look. –Ed)



<http://imageevent.com/okbueno/mopic>

Chapter Events

2013

Feb 28 Chapter Monthly Meeting
Speaker: John King
Title: Photographing "Ear to Ear"

Aviation Calendar

2013

Every Sat Dargaville Aero Club
 The place is buzzing every Sat, wet or fine, windy or calm, and the \$10 lunch at 12.30 is good value. Club is on the web at http://www.flyingnz.co.nz/club_pages/dargaville.html. If going as a group please have the courtesy to ring in advance so the cook expects you. Contact Murray on 027-478 4308 or the club house on 09-439 8024.

3rd Sun Turangi Aero Club Fly-In
Each All welcome for a BBQ lunch.
Month Contact Tony on 027-453 3740

Mar 02-03 Ardmore Showdown 2013
Ardmore Airfield
 An event for multi-discipline petrol heads with car show, air show, Warbirds, drag racing, drifting, gymkhana, etc More info at www.ardmoreshowdown.co.nz (site still under construction).

Mar 29-31 Classic Fighters 2013 Omaka Airshow
Omaka Airfield
 Fri to Sun of Easter Weekend. Heritage aviation on display in an action-packed weekend. Not to be missed if you can get there. More info at www.classicfighters.co.nz.

Apr 27 ANZAC Airshow
Hood Aerodrome, Masterton
 1200 – 1700. More info at www.wings.org.nz

If members are aware of other events that could be of interest to others please pass the details to Gordon Sanders - gordon@sanders.gen.nz for the March issue. But don't rush as you could be the first, and only, person in the queue ☺

Aviation Calendar

2013 Continued