



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

Sport Aviator

November 2014



www.saaauckland.org.nz

Committee 2014

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Composites	Alistair McLachlan	299 2775
Metal Skin	Kevin Paulsen	296 5125
Avionics	Liviu Filimon	268 1199

FRONT PAGE

Don Wilkinson in ZK-TOY on final approach to Gibson's beach Black Sands 2014. Photo Evan Wheeler

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Next Meeting

WHEN: Thursday 27th Nov 2014

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

SPEAKER: Two speakers this month.

Evan Wheeler on Emergency response.
Don't run to the Crash Site. Run for the extinguisher, make the 111 call summon others attention. Do what comes first FIRST.

Jon Farmer on, Jon All at Sea.
Navigating before satellites. Jon, a sea going ship's Captain and navigator, has a story to tell about how celestial navigation works. His experiences, the accuracy etc. and being Jon we can expect some very funny anecdotes.

3 President's Report



Hi Everyone

Like the months before, this November has slipped by so quickly leaving Christmas just a few weeks away yet again.

This more autumn like weather has messed around with the flying programme and seen a number of planned events postponed or cancelled. It did clear enough for Black Sands however, where in excess of 70 aircraft were on the field during Saturday.

The low tide time on Saturday saw the beach landing at Gibson's beach take place again but without the usual number of participants, due in part to concerns of soft sand from storms over the previous week.

The highlight of the year was the SAANZ 50th Anniversary Fly-in held at Hastings during March. A fantastic venue and also the planned location for the 2016 SportAvex. There is some great flying to be had in this area of New Zealand.

On the political front, I received advice this week that the proposed changes to the RPL allowing first solo on an RPL for fixed wing and helicopter flight are to be in place next year. There is still a hold up with glider towing and aerobatic flight, apparently due to further work wanted by CAA on these two matters.

This Thursday is our last meeting for 2014. We will enjoy a small tippie after the meeting so I look forward to catching up. Merry Christmas and Happy New Year to you and your families and may the wind flow freely under your wings.

Cheers
Evan



Hi Everyone

I don't know about anyone else but November certainly seems to have been a very busy month and it still has a ways to go yet before it ends. The month has definitely had its ups and downs though.

Firstly, and sadly on the down side of the ledger, we had the loss of Jon Farmer's Aeroprakt A22 Foxbat at Pukekohe East in a crash that saw the aircraft written off and the pilot and passenger, Doug King and Peter Cole, both badly injured. Jon has provided a description of the accident for the newsletter and you can read this in the Chapter News section this month.

Next, and on the up side of the ledger, we had the 10th anniversary of the Black Sands fly-in. The weather gods definitely smiled on the Waikato Thames Valley Chapter's event this year and as a consequence some eighty aircraft flew into Raglan over the course of the weekend. Delys and I managed to get ourselves organised enough to get down to Raglan for the weekend and thoroughly enjoyed our stay. It was great to see so many SAA members from around the country make the effort to attend.

Also on the up side of the ledger comes the welcome news that Steve Chilcott was able to take Paul Blackmore's newly finished Sonex, ZK-PDB, for its maiden flight on Friday the 21st of November. The weather gods and Steve and Paul's schedules finally managed to align to allow this to happen and I would like to congratulate Paul and Steve on this achievement. I was at Ardmore when Steve got PDB airborne and some photos from the event can be seen in the Chapter news section. Things did not go completely to plan however as PDB's engine wasn't performing optimally, which meant Steve had to limit the flight to a single circuit of Ardmore. I have no doubt Paul will get the problem sorted in due course and PDB will be back in the air again soon.

On to matters administrative. As you are no doubt aware Delys and I have taken on the role of SAANZ National Administrator. I think between us we will be able manage the role but it is definitely a bigger job than I had anticipated. That said we enjoy a challenge and this is most definitely that.

For those of you who are members of SAANZ, you should have received your Council Nomination forms for the 2015 SAANZ Council with your last issue of Sport Flying magazine. You will also have since received a reminder email about getting these forms in to the Administrator by the 6th of December. Can I ask that these forms be returned to me as soon as possible please, the sooner the better.

The mystery aircraft in the October newsletter was guessed quite quickly by David Wilkinson and he earned the chocky fish which he took home for his kids. The aircraft in question was a Curtiss F6C Hawk which Wikipedia tells me was a US Naval biplane fighter from the late 1920s of which some 75 were built.



This month's mystery aircraft is provided again by Barry Gillingwater. Have a go at identifying it and send me the answer by email.

I hope you enjoy the newsletter and I will likely see you on Thursday evening at the Model Engineers Clubrooms.

Cheers
Gavin

MEMBER NEWS

New Member – Peter McVinnie

By Peter McVinnie

Peter McVinnie has joined the chapter and provided the following introduction.



Aviation has been very kind to me.

My first flight was as a 7-year-old passenger in a Safe Air Bristol Freighter during the Christmas holidays 1960. My Father left it too late to secure a Cook Strait passage for car and family in the pre roll-on-roll off ferry days, when cars were sling loaded aboard the ferry. Dad booked the car and family on a Bristol Freighter for the trip from Rongotai to Woodbourne. The co-pilot came down to the small passenger cabin in the rear of the aircraft, and gave us a safety briefing and a small envelope containing cotton wool for putting in your ears to dampen the racket created by the two 14 cylinder Bristol Hercules engines.

I was hooked on aviation from that day, and decided I wanted a career in aviation.

Move on to 1970, as a Venturer Scout I attended year number four of the Walsh Memorial Flying School at Matamata. Vet and part time instructor Brian Harvey was my instructor in Cessna 150 ZK-CSW. Keith Skilling's father Hugh was the CFI. It was 10 glorious summer days of living and breathing aviation, soloing in 5 hours and completing 11 flying hours at the school. This wonderful experience reinforced my yearning to make a career as a pilot.

Being too young to obtain a commercial license, I decided to go to Canterbury University, and do a mechanical engineering degree, specializing in aeronautics. Whilst at Canterbury, I did what flying I could afford at Hamilton whilst home on holiday, and got my private pilot license in February 1973. I graduated at the end of 1973, and borrowed \$2,000, which seemed like a huge sum of money at the time, and continued full time lessons at Eagle Flying Academy under the guidance of Malcolm Campbell, who took me on as a C Cat on qualifying in June 1974.

I went to Ardmore and did my instrument rating with Warren Sattler, as Eagle had no instrument rated pilots or instructors. I recall at the time, Ken Fenwick, Waikato Aero Club CFI, was the only instrument rated pilot on Hamilton airfield. On returning to Eagle, Malcolm asked me to do his instrument rating, as he had ordered Baron ZK-ECA, which was the start of Eagle Airways air transport operation.

I had an amazing break in the first week of November 1974, when I received a telegram from NAC asking me to go to Wellington the next day for interviews and medicals. I travelled down on the early Tuesday morning Viscount from Hamilton to Wellington, and spent all day at NAC Headquarters, before returning home on the evening Viscount. Thursday two days later, I received another telegram from NAC offering me a job, and asking me to report to the NAC training School the following Monday to commence Fokker F27 type rating. So as an excited 22-year-old with 600 hours in my logbook, I hi-tailed it to Christchurch in my trusty Ford Prefect.

Thus started my career in Air New Zealand forty years ago. It has been a wonderful career, having flown F27s, Boeing 737s, 767s and both -200 and -400 747s, and now with the retirement of the 747-400 (my favourite!) I will see my three remaining years flying the 777s. I was fortunate to have two years in the early 80's, when Air NZ had an excess of pilots, flying 737s for Gulf Air based in Bahrain where I met my Welsh wife Donna, who was a flight attendant there. We got married in 1988, and have two adult daughters.

I have been thinking and looking at building an aircraft for many years. I first went to Oshkosh in 2007, and returned the following four years, trying to decide what machine was for me. After talking to many amateur builders at Oshkosh and seeking their advice, I made a list of requirements:

- Two seats - *"you spend 90% of your time flying on your own, then the rest with your wife or a mate - if you want a four seater, go hire one!"*
- Side by side seating - *"your wife doesn't want to look at the back of your head for hours on end!"*
- STOL performance - *"you gotta go do some bush flying!"*
- Tail-dragger - *"Tail-draggers are 'conventional gear' and get you back to basics with your flying skills"*
- High wing - *"less damage on rough strips"*
- Stick control - *"Wheel control is for 'tailor-made' machines!"*

After a lot of looking and tire kicking, I settled on the Glastar, which comes out of the factory with fuselage cage mountings for both trike and tail-dragger undercarriage, and it is not a huge job to convert from one to other. Donna was not keen for me to commence a build project, saying it would take too long, and "you want to get flying, so go and buy one already built"!

I looked at many Glastars in the US and Canada, and for various reasons have felt none were suitable. The first test flight I had was in a trike configuration, at Apple Field, California. It was an impressive and convincing demonstration by the owner, an ex-Highway Patrol C185 pilot, of the low speed handling characteristics of the Glastar. I was convinced the Glastar was the correct aircraft for me, but this one's builder had artificial legs, and as he couldn't use toe brakes, he had devised a very awkward and odd hand brake system that put me off that machine.

My last trip on the 747 was to San Francisco with a two-day layover. . There were two for sale in the area that I had seen on Barnstormers - the first at Modesto was a 150 HP trike, which had me fairly excited, as it was the best I had seen to date. The next day I drove 200 miles north to

Redding, where N90PM, a 180 HP constant speed tail-dragger was for sale. It was being sold on behalf of a deceased estate, and the aircraft hours, specifications and condition were exactly what I was looking for, and I negotiated the purchase. It had been built by a dentist in Michigan as a trike undercarriage, and the nose gear was included in the sale should I wish to convert it back.



I went back to Redding a couple of weeks after purchase, and flew to Hayward, just south of Oakland where I assisted in dismantling it for shipping. It has been allocated New Zealand registration ZK-OPM, and as I write, the aircraft has just landed in Auckland in a container, with a Pacer that is the replacement for syndicate Pacer ZK-PAT that was destroyed in an accident at Pukekohe East earlier this year.

It will be re-assembled over the next few weeks at Ardmore, where I will base it until I retire, when I plan to move to Whitianga. I eagerly look forward to getting OPM in the skies, and to getting back into GA, and participating in SAA events. Aviation has been very kind to me!

PROJECT UPDATE

ZK-PDB First Flight

By Gavin Magill

As mentioned previously, Steve Chilcott managed to take Paul Blackmore's Sonex ZK-PDB for its maiden flight on Friday the 21st of November.

Although the flight was somewhat curtailed due to the engine giving less than optimal performance, it was still a milestone achievement for Paul to see his aircraft take to the air at last.



ZK-PDB emerges from the hangar



A final pre-flight inspection



Paul briefing Steve on the instrument layout.



Start up and taxi out



Taxiing back after high speed engine test run



Landing following the first circuit.



Post flight discussion re engine issues.

PROJECT UPDATE

Gary Briggs – Sonex #1531

By Gary Briggs

Finally I have finished the firewall this has probably been the most challenging component of the whole build so far. The stainless steel although very thin at 16 thou it is hard to form, I donated a fair bit of blood on this.



I bent up the glare shield and have finished the spar box. The rear section of the spar box will only get riveted once the wings have been fitted and the wing attach holes are drilled.



The floor structure has also been progressed where the seat will fit, soon I will be able to sit in the fuselage and make aeroplane noises



I hope to be able to test fit the wings soon.

Gary Briggs

PROJECT UPDATE

Ken Watters – RV7

By Ken Watters

Hi Gavin,

All the stiffeners, brackets and gussets now complete and I am now busy with riveting the skins to the framework.

Regards,
Ken Watters



INTERESTING READING

Gordon Sanders – AvWeb Articles

By Gordon Sanders

Hi All

The latest AvWeb newsletter contains a very good article on **cooling horizontally opposed aero engines**. It explains the theory and gives practical tips on solving cooling problems. Could be very useful if you're struggling with these. Members who have been around a while (I did not say 'older') will recall Phil Kennedy being hot (yeah, pun) on this subject. You can read the entire newsletter, including the Savvy Aviator cooling article, at the link below.

Avweb Newsletter link -

<http://www.avweb.com/eletter/archives/101/2948-full.html?ET=avweb:e2948:316277a:&st=email#223100>

Engine Cooling Article -

<http://www.avweb.com/news/savvyaviator/The-Savvy-Aviator-14-Engine-Cooling-Less-Is-More188945-1.html>

Also, in the 'New this week' section is a note that Van's Aircraft is working with Dynon to create a dual display system for the RV-12 LSA. This aircraft received considerable admiration from Chapter members at Black Sands and one wonders if it will become a 'standard' within the Chapter for its economy of ownership. The wings are removable, plugging in with the main spars overlapping, a technique used in many gliders. So it either occupies minimum hangar space or can be kept in a trailer. Rigging is reported to take about 5 minutes if you go slowly enough. Less time than it took us to find the pitot head, which is cunningly located in the centre of the spinner!

RV12 Dynon Article -

<http://www.avweb.com/avwebflash/newthisweek/New-This-Week223098-1.html>

Regards

Gordon

INDUSTRY NEWS

CASA Consultation - Jabiru

By Peter Armstrong

Peter Armstrong sent through the following link to a Consultation Draft issued by CASA regarding Jabiru engined aircraft.

CASA Consultation Draft – CD1425SS – Operating limitations for aircraft fitted with Jabiru engines

http://www.casa.gov.au/scripts/nc.dll?WCM:S:STANDARD::pc=PC_102279

To be read in conjunction with the accompanying notice of Clarification and Extension of Consultation Period

Background

CASA is responding to a high, and increasing, rate of engine failures among aircraft that are powered by engines manufactured by, or under licence from, Jabiru Aircraft Pty Ltd (Jabiru). Such aircraft are referred to in this document as 'Jabiru powered aircraft'.

The issues appear to be the result of several failure modes, which require separate investigation.

CASA has formed the view that its functions under the *Civil Aviation Act 1988* require it to mitigate certain risks to passengers, trainee pilots and persons on the ground. Accordingly, while CASA works with Jabiru to identify the causes of these engine failures and to implement appropriate corrective actions, CASA proposes a set of operating limitations on Jabiru powered aircraft.

Additional information

Contact: Lee Ungermann, Project Leader

Email: sport@casa.gov.au

Documents

13 November 2014

[Summary of Proposed Change – CD 1425SS \(24KB\)](#)

[Consultation Draft – CD1425SS – Operating limitations for aircraft fitted with Jabiru engines \(80KB\)](#)

All comments should be submitted via the Project Leader, [Lee Ungermann](#) by close of business **20 November 2014**.

17 November 2014

[Clarification and Extension of Consultation Period \(32KB\)](#)

All comments should be submitted via the Project Leader at sport@casa.gov.au by close of business **27 November 2014**.

NOTE: THE ORIGINAL SUBMISSION DATE OF 20 NOVEMBER 2014 HAS BEEN EXTENDED BY 7 DAYS. PLEASE SEE ACCOMPANYING NOTICE OF CLARIFICATION AND EXTENSION OF CONSULTATION PERIOD.

ACCIDENT REPORT

ZK-LFG Accident Report

By Jon Farmer

The Demise of Foxbat ZK-LFG.

On Saturday 1st November, ARMAC members had a BBQ lunch on Pukekohe East airstrip with the intention of evaluating it as a 'home field'. After lunch, Doug King who is the Foxbat agent, borrowed LFG under an arrangement with Peter Beer and myself whereby he is on the insurance policy and pays an agreed hourly rate. His first passenger was Peter Cole and they took off downhill on '24' for a 15 minute flight. On return, they voluntarily made a wide approach to allow another aircraft to takeoff and this may have distracted them as they came in a bit hot and high, with a light tail wind, uphill on '06'. About halfway up the strip the aircraft had not touched down and Doug decided to go round and put on full power. Then a combination of factors, low airspeed, tailwind, turbulence off the trees and, possibly, the false horizon at the top of a rising airstrip, all combined and the right wing dropped, touching the ground. The aircraft slewed right, dropped its nose and the nose wheel dug into a low bank, flipping the plane onto its back, in which position it slid about 15 metres onto a concrete pad. Doug and Peter were trapped by their legs upside down as petrol from the wing tanks swirled around!!! Club members rushed to the accident scene and there were enough able bodied men to lift the wreckage sufficiently to release the occupants and pull them clear. A doctor among the club members tended the injured. About this time, Graeme Weck flew in in his Murphy Rebel to get petrol and, being an ex-rural fire chief, he took the portable fire extinguisher from the petrol pumps to the accident scene. Soon police, ambulance and fire brigade were on the scene to put putty round the leaking fuel caps and wash away the spilt fuel.

Doug and Peter were taken to Middlemore hospital where Doug had his partly severed foot re-attached and Peter had multiple broken bones in his legs set. They are both still in hospital with Peter in a lot of pain but

Doug is quite chirpy and already setting about getting a replacement Foxbat for Peter Beer and myself.

The CAA duty accident inspector said that as nobody had died (thankfully) the wreck could be removed. The insurance assessor was informed and he asked Tony Antonievich to recover the wreck. Tony turned up about half an hour later with a flatbed truck fitted with a Hiab and several of us soon had the wings unbolted and the wreckage secured on the truck. Several days later I met the insurance assessor out at Tony's Vintage Restorations workshop and it only took a moment to declare the wreck a total loss, the rest of the time was spent looking at all the lovely old cars, trucks, fire engines and a Stearman filling the shed.

Pukekohe East airstrip has had its fair share of accidents in the past due to its slope and one-way nature. However, the Airparks Trust helped owner, Dave Locke to have the power wires at the top put underground and Doug King has removed a tree at the other end so that there is now a clear approach from either end. Doug has the use of the Pukekohe Flying Club hanger to assemble his Foxbat aircraft and there is a smaller hanger next door that might take 3 Bantam size aircraft. They are the facilities that ARMAC members were investigating with a view to establishing on the field.

Jon Farmer

Hi Peter,

I have selected a few photos of most relevance in my view.

Some points to note:

1 - The final uncontrolled flight direction was about 25 degrees to the right of the runway direction.

2 - The apparent initial impact mark is shown on the photo and is approximately 15 metres from where everything came to rest. This mark may have been from the noseleg or a prop blade.

3 - The throttle position was indicated as 'full throttle.' All engine/master switches were still in the 'on' position.

Please let me know should you require any further information and I would be

happy to help,

Kind regards,

Warren Butler



PROJECT NEWS

Bristol Scout Replica

By Nev Hay
Hi Gavin

I did not see the 7 Sharp TV programme but a friend mentioned it. The workmanship looks pretty good to me.

Nev

Jack's Bristol Scout Replica - Seven Sharp
Further to my notice about the Seven Sharp programme, I went to the military show in Cambridge (NZ of course) yesterday (remembrance Sunday) and took these photos of the plane in question.

The perfection of the carpentry is truly amazing. The builder used to get up at 4.00 am to start work on the plane.

Nev Hay

Google Search Results

Jack's tribute to WW1 flyers- PledgeMe

<https://www.pledgeme.co.nz/projects/1822>

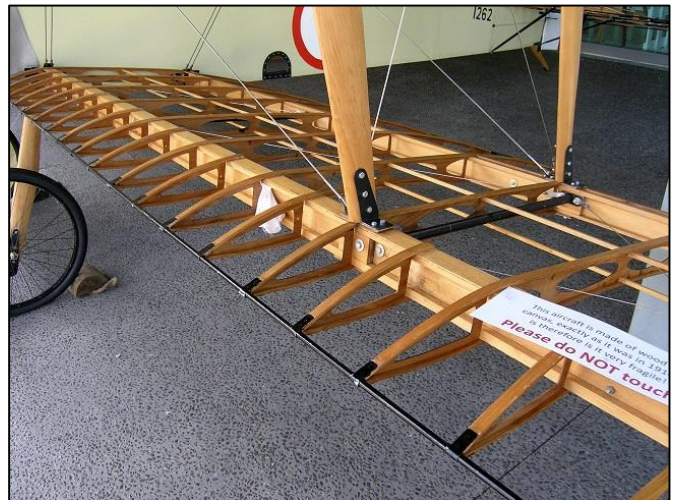
Jack [Godfrey??], our 82 year young aircraft builder, is building a full size, incredibly detailed replica of the First World War Bristol Scout.

These primitive biplanes were flying at the start of the war in 1914 and flew at Gallipoli. The replica is a centrepiece for a larger celebration of the sacrifices made by our fore-fathers in the 1914-18 war. The event is the Armistice in Cambridge event, planned for 8 & 9 November 2014.

Kiwis were known to have flown this type of aircraft and when finished towards the end of this year, it will be put on display so the public can get up close and touch it. The goal is to allow the public and schools to appreciate the flimsiness and primitive nature of the way our grandparents and great grandparents went to war for our freedom.

Some funding has been secured, but we need a small amount to finish it. As WW1 and its aircraft have meaning to so many kiwis, this seems a most appropriate way to raise the money.

Jack lives in a retirement village. Who said retirement villages were boring!?!



The following are images from Black Sands 2014. Photo credits to DCM, Evan Wheeler and Tony Smith (www.tonymithphotography.co.nz).







During research to support the Walsh Bros First Flight Centennial celebrations, 5 Nov 2011, I became intrigued with the fate of the 'Manurewa' after its crash and the subsequent purchase and rebuild by Sanford and Miller.

I collated Part 1 for Sport Aviator at the time of the 2011 celebrations but did not proceed to publication.

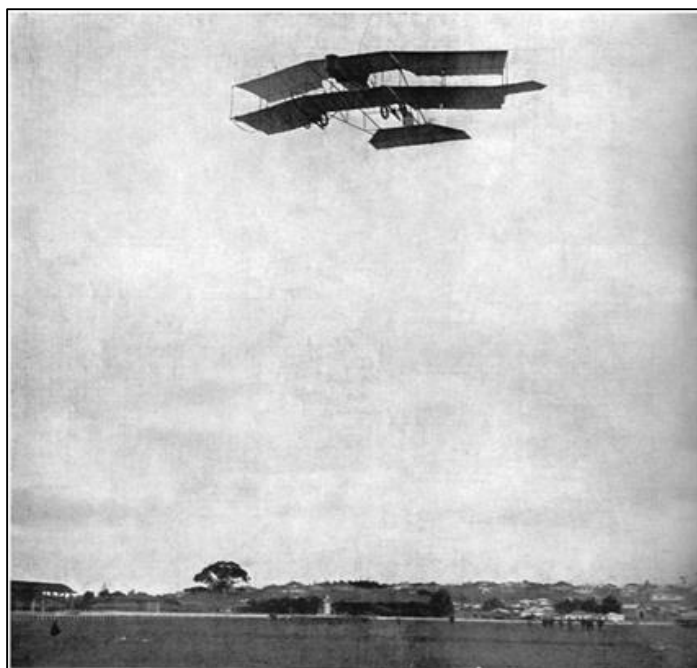
As supporters of the Neurological Foundation, Ann and I receive the foundations 'Headlines' national newsletter where I found, in the 2014 Winter edition the story, copied with permission in Part II. It highlights the life of William Miller and outlines his support and influence in Neuroscience in New Zealand.

I have brought the two articles together and thought you might be interested in the history, together with the life story, of one of our early aviation supporters.

As I am finding in my senior years there is life after a career in aviation but I suspect I have left my run to emulate Bill Miller a bit late.

Part 1. Sandford-Miller biplane flights Avondale, 1913

December 4th 2003 marked the 90th anniversary of the flight of the Sandford-Miller biplane from Avondale Racecourse to New Lynn. *As can happen in Avondale, the late spring weather had turned to heavy rain, soaking the plane and making movements in the air heavy and hard to control. Nevertheless, they landed in a paddock, and planned to return to Avondale later that day.*



Sandford-Miller bi-Plane over Avondale

In 1913, Auckland was in a state of "aeroplane fever". The novelty of heavier-than-air flight had caught the public's imagination, fuelled by the 25 July 1909 first cross-English Channel flight by Louis Bleriot, after which planes where the engine was in front of the pilot were dubbed "Bleriot's". (At the 16 April 1913 meeting of the Avondale Jockey Club, the principal race, the Avondale Handicap, was won by "Mr. T Hall's filly Bleriot".) In April of that year, exhibition flights of a Bleriot-style plane were conducted at the Auckland Domain by "Wizard" Stone at which "nearly 30,000" crammed the area to watch a brief, unsuccessful, and in fact comedic flight.

All the while, Frederick Sandford and William Miller worked at perfecting their flying machine on the Avondale Racecourse. Over much of 1913, they staged practice flights and tinkered with the 60 horsepower ENV engine of their "Farman" biplane (a "pusher" craft, named after Henri Farman's design from 1907). According to Athol J McD Miller, in his book *The Gardners of "Mataia" Glorit and New Lynn*: "...John Owen Gardner (1973-1931) "... was renowned for his knowledge of engineering ... [William] Miller ... and his partner [Frederick] Sandford assembled a plane at the Avondale Racecourse, but could not get the engine to function satisfactorily. Someone referred him to Uncle Jack who spent some time disassembling parts and adjusting the timing of the engine and on the day that he thought he had mastered the engine I went to Avondale with him on the back of his motor cycle. He was standing astride across the plane and still tinkering with the engine which was running sweetly ... Sandford who was at the controls took off, and they flew around the racecourse at a height of about 50ft and landed again. Uncle Jack had not altered his position during the whole flight and was still there sometime after it landed." (Maybe NZ's first Flight Engineer? -Nev).

Their biplane started out as a kitset "Howard-Wright" imported into New Zealand, by a syndicate of Messrs AN Lester, AJ Powley and CB Lester. The kit comprised of lengths of mahogany timber, calico and wire plus a set of rudimentary instructions, an engine and a propeller. The engine was a British made ENV model that produced 60-80 HP and could be expected to give a flying speed of 45 to 60 miles per hour.

The syndicate retained the services of the Walsh Brothers, Vivian and Leo, who were skilled engineer tradesmen, to build an aircraft from what had been supplied. In August 1910 the brothers set about trimming and cutting the timber and fitting it all together so that by early 1911 the aircraft was complete and ready to fly.

Dubbed the "Manurewa", the Howard-Wright was flown by Vivian Walsh from Glenora Park, Papakura on 5 February 1911. It was the first controlled, sustained, powered flight in New Zealand. It later met with several accidents and was wrecked.



Howard Wright Bi-Plane "Te Manurewa" at Glenora Park, Takanini. Feb 1911

Sandford and Miller took over the wreckage, rebuilt it to their own design, altering it "considerably", and started testing at the Avondale Racecourse, with the intent of holding their own exhibition flights at Alexandra Park.

On Sunday 13 April 1913, Sandford flew solo for the first time in his career (in Australia, he'd flown with a well-known Australian exhibition aviator named Hart), taking off from Avondale Racecourse before several hundred people, rising to an altitude of about 50 feet, flying the length of the course, before making a "few more modest flights as far as the space available would allow."

Leonard Pauling (whose sons George and Percy sold goods and fish in Avondale) kept a diary and made several references to the biplane and experiments out on the racecourse. One unfortunate incident that same April was reported as... *"Last Thursday the flying machine at Avondale cut a dog to pieces. According to Peter Buffett, this*

happened during an attempt at take-off, smashing the propeller and, of course, killing the dog". Short flights were reported in May. Buffett surmised that it was during this period that a Miss Lester was a passenger, and became the first woman in New Zealand to fly.

The Sandford-Miller plane also achieved the first cross-country flight in New Zealand on 31 August, taking off from Avondale with Sandford at the controls and Miller on board as passenger, levelling out at 250 feet and heading west. Possibly approaching West Coast Road, along Great North Road, Sandford turned back to make for the racecourse again, but the engine failed, and he made a forced landing on a glide in a paddock "against Binsted's slaughterhouse" beside the Rewa Rewa creek in New Lynn. The flight was one of 3 miles, at more than 70 km per hour. Two weeks later, after repairs by Miller, the plane returned across the Whau creek to Avondale. In October, they made a five-mile flight to and from the racecourse.

Come December and the promise of summer months to come, Sandford decided to test the flying capacity of the plane under the conditions of the recent heavy rains. At about 8.30 on 4 December 1913, Sandford took off, circled the racecourse, and then tried to head for Epsom. The plane's movements were too heavy to control, however, and he decided to force a landing in what was then known as "Clark's paddocks" in New Lynn. The Auckland Star was advised of Sandford's great confidence that the plane would later be able to exhibit itself at Alexandra Park.

Unfortunately, his optimism was for nought. The paddock was only half-an-acre, not allowing the plane enough of a runway for lift. Sandford had the plane wheeled back, however, trying to gain maximum distance and then started the engine, racing for a gap in the paddock's fence. The plane, however, failed to rise, and crashed into a corner post. "The pilot," the Star reported the next day, "was thrown many feet into the air, falling on his head, and the forepart of the machine was reduced to splinters and tangled wires."

Taken back by motor car to his boarding house at Avondale, Sandford remained unconscious for some time, with a badly damaged shoulder and wrist. Miller remained

optimistic, saying "we will not give in", but had to face the facts that the plane would have required to be completely rebuilt again, along with a new engine (in those days, this would have cost at least £800).

Arthur Morrish, then the editor/publisher of *The News* from Avondale, made an impassioned plea for the two men and their project in a letter to the *Herald*.

"These two men are the first local men to build a machine and make successful flights with it," he wrote. "Aviation is recognised the world over now as the foremost science, destined to materially alter the standing of any country possessing the best-equipped and most modern machines. Would it not once more redound to the credit of New Zealand, which has led the world in so many ways, to show that in the field of science also she has men with the brains to keep not only abreast of other countries, but possibly outstrip them?"

The Avondale Road Board raised a petition to Parliament asking that a grant be made to Sandford and Miller to rebuild the plane, but this, and Morrish's plea, was unsuccessful.

Frederick Sandford recovered and later went on to fly in action in World War 1 with the R.N.A.S and R.F.C., rising to the rank of Major.

William Miller is said to have later owned the Royal Garage at Khyber Pass (update, 3 May 2011: while the site, between the ASB building and Burleigh Ave is confirmed, the name of the garage isn't), farmed at Kelston, and died in 1977 after "several innovative business ventures", according to Peter Buffett, and because of them, Avondale has yet another legend to be part of.

Sources:

"The Sandford-Miller Biplane, 1913", by Peter Buffett, published in *West Auckland Remembers*, edited by James Northcote-Bade, West Auckland Historical Society 1990, pp. 103-109.

- *The Gardners of "Mataia" Glorit and New Lynn*, by Athol J. McD Miller, 1983, pp. 25-26.

- *New Zealand Herald*, 1913: 15 April, 17 April, 21 April, 8 December.

- *Auckland Star*, 1913: 4 and 5 December.

- *Timespanner*. – Blogspot 2009

<http://timespanner.blogspot.co.nz/2008/09/those-daring-young-men-in-their-flying.html>



Miller and Sandford and their plane which was rebuilt from the Walsh brothers' Manurewa, Miller in the cockpit, Sandford standing. Auckland 1913.

Walsh Memorial Library, The Museum of Transport and Technology (MOTAT)

<http://www.motat.org.nz/collection/collection-online/black-and-white-photograph-of-miller-and-sandford-and-their-355942/>

Part 2. William Miller: A man of many parts

Research Manager Dr Douglas Ormrod does some research into a major Neurological Foundation influence on neuroscience. (The research article below is reprinted here, in Sport Aviator, with his permission)

The Neurological Foundation has received many significant bequests in the last 42 years, but none have benefited neuroscience more than that of William (Bill) Stanley Miller who died in 1977. The Funds left to the Foundation by Mr Miller endowed the Postgraduate (PhD) Scholarship that still bears his name and that of his wife Beryl. To date 46 W & B Miller Scholarships have been awarded and many of the recipients have since become leaders in the field of neuroscience, both in New Zealand and overseas. Over the decades these scientists have established their own research groups and provided training for other young scientists so the ripple effect of Mr Miller's generosity extends far beyond the 46 three-year PhD scholarships.

By the time I joined the Foundation in 2001 the background to the Miller bequest had been lost through personnel changes and office moves. While this did not affect the prestige of the award or the continuing funding of Scholarships I always felt a bit sad that we couldn't give the Miller Scholars some information on their benefactor. Happily this is no longer the case.

Last year I gave a talk to the Epsom U3A (University of the 3rd Age) outlining the work of the Foundation. In my talk I highlighted the Miller Scholarship as a cornerstone of the grant portfolio. After the talk a woman came up to me and introduced herself as William Miller's daughter, Dorothy Bartley. Mrs Bartley was very pleased that her father's name was still memorialised by the Foundation 36 years after his death, and of course I was very pleased that I could fill in the blanks in our history. Though Mrs Bartley knew of the bequest she had never known what the money had been used for until she attended the U3A meeting. However, she did have a trunk of his papers which she had never opened and our conversation prompted her to do so in the following weeks; to our mutual benefit – and also to those interested in the history of Auckland. William Miller defines the term "a man of many parts".

Now that I had his full name I could also do some research and discovered a short biography by Cheril Clark-Jowsey called *A Man to Remember!**. Much of what we have learned of Bill Miller comes from this well researched essay. Born in Waitati, Port Chalmers in 1888 Bill Miller was an innate adventurer who ran away to sea at the age of 13. He was also a natural engineer and soon turned his attention from the sea to the air. By 1913 he had redesigned and rebuilt one of New Zealand's first planes, "the Manurewa". Renamed the Sandford Miller Biplane, it performed well, but crashed later that year. It was repairable, but there was no money to carry out the work and Bill Miller's first company folded.

Success, sometimes failure, and constant head-butting with authority were to be the pattern of his business life. He next turned his attention to the burgeoning motor industry, first starting a taxi business and then opening Millers Garage in Khyber Pass from where he serviced and sold cars. This led to a new venture importing petrol from America which he named Span Petrol and stored at the eponymous Span Farm in Glendene. His undercutting of fuel prices did not endear him to the oil companies and a mysterious fire at Span Farm ended that venture. Never afraid of hard work Bill then cleared Span Farm of bush and established an exhibition farm running 2000 pigs and many sheep.

By the mid 1930's with all his businesses running nicely Bill was looking for new challenges and turned to mining. He discovered manganese in the Bombay hills and then even more in the Hunuas. The fact that it was inaccessible and hard to get out just increased the fun for Bill and he laid railways and innovated many engineering solutions to access and extract the ore. During the war mercury was in high demand and Bill invested heavily in a mercury mine at Puhipuhi. Unfortunately after the war the price collapsed and Bill lost much of his fortune.

Bill Miller had several patents to his name, including one for the inflatable lifejacket, and Span Farm continued to flourish so he had a comfortable income. However, as housing grew closer to the farm there were many objections to the piggery and it closed in the

mid 60s. This did not put an end to Bill's industry and he began to develop Span Farm as a light industrial complex, taking advantage of the workforce which was now residing in the surrounding houses. The area is still the home of many light industries and the Span Farm slipway operates as a kind of "boaties commune" where people live and build and restore boats. He sold Span Farm at the age of 83 and died five years later in 1977. His wife Beryl died a year later.

The fact that he chose to bequest a significant portion of his estate to the Neurological Foundation is most likely because of his close friendship with fellow pioneer motor dealer John Seabrook, Chairman of the Council of the Neurological Foundation in the 1970s.

Says daughter Dorothy, *"Although my father accumulated considerable wealth he lived simply and it is wonderful to see that the fruits of his 70 years of hard work and entrepreneurship have benefited so many gifted young scientists."*

Adds Neurological Foundation Executive Director Max Ritchie, "The bequest made by Bill Miller allowed the Foundation to significantly increase its research funding in the postgraduate field which ultimately led to the establishment of a world-class neuroscience research community in New Zealand. It is a shining example of how a well-managed bequest can benefit society in perpetuity."

The Miller has now been joined by a second postgraduate scholarship, generously funded by Wendy and Peter Gillespie. Along with the Foundation's postdoctoral fellowship named for Philip Wrightson and the clinicians' research fellowship named for Professor Val Chapman, the Foundation through its benefactors is making a significant impact on encouraging excellence in neuroscience.

** A man to remember!* Historical essay by Cheril Clarke-Jowsey. J. T. Diamond Essay Competition; West Auckland Historical Society; Waitakere Libraries and Information Services

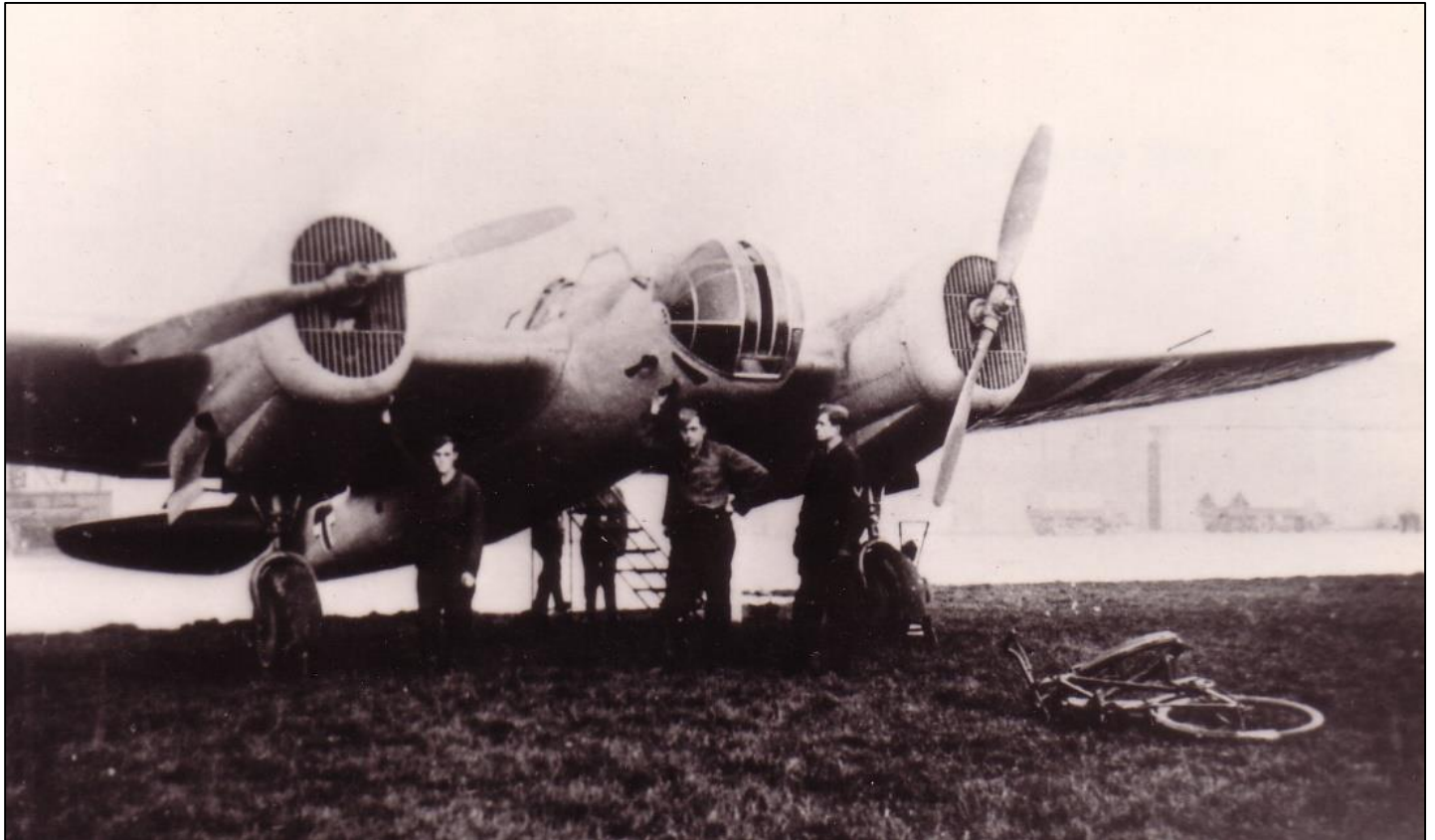
Source:
Neurological Foundation of NZ National Newsletter
Vol103, Winter 2014, 'Headlines'

21 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

Amazon Delivery Drones

From Nev Hay

Amazon is planning to test drones in Cambridge, England, as the battle to offer consumers same-day deliveries heats up.

http://www.theguardian.com/technology/2014/nov/12/amazon-drones-cambridge-prime-air-testing?google_editors_picks=true



ON THE WEB

Amelia Earhart

From Nev Hay

Amelia Earhart's plane found...maybe.

<http://www.iflscience.com/technology/found-aluminum-debris-amelia-earharts-plane>



ON THE WEB

Blue Angels Photo

From Gavin Magill

Blue Angels Photo. Spotted this photo on Reddit and thought you might like it.

<http://i.imgur.com/YqT1z0E.jpg>



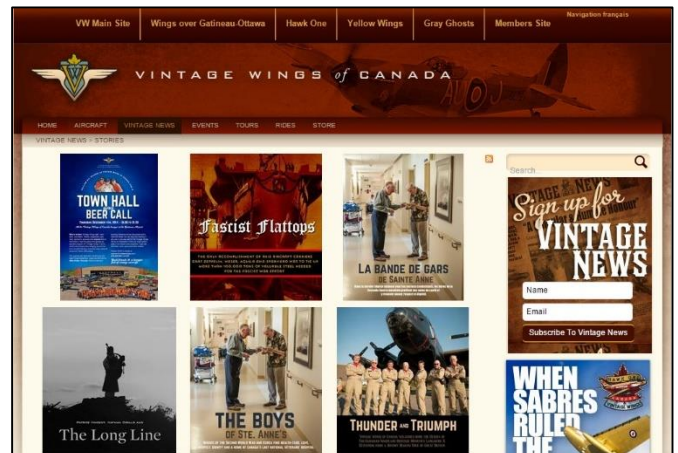
ON THE WEB

Vintage Wings of Canada

From Nev Hay

Nev found this great site of excellent stories. Well worth a browse.

<http://www.vintagewings.ca/en-ca/vintagenews/stories.aspx>



ON THE WEB

Another Flying Car

From Gavin Magill

Another flying car concept.

Stuff Article

<http://www.stuff.co.nz/travel/news/62797902/are-flying-cars-the-future-of-travel.html>

Youtube Video

<https://www.youtube.com/watch?v=kzYb68qXpD0>



ON THE WEB

Spin Recovery Techniques

From David Wilkinson

Interesting test flight showing three different spin recover techniques from fully developed spins in upright and inverted orientations.

<https://www.youtube.com/watch?v=mX5YVhnNhOE&feature=youtu.be>



ON THE WEB

Precious Metal Engine Failure

From Gavin Magill

This turned up on my Facebook feed. Worth a look and not too long. The pilot reacts amazingly quickly to the engine failure and handles it really well.

<https://www.youtube.com/watch?feature=youtu.be&v=u2A5ywM8TNk&app=desktop>



ON THE WEB

Drone Defibrillator

From Robin Hickman

A Dutch engineering student has revealed a prototype 'Ambulance Drone' ... a flying defibrillator! It tracks emergency mobile calls using GPS to navigate. Maybe a GOOD use for drones

<https://www.youtube.com/watch?v=y-rEI4bezWc>



ON THE WEB

Red Bull Pilot - First Person View

From Karl Pudney

First-Person View Of The Red Bull Air Race Grand Finale

<http://www.boldmethod.com/blog/video/2014/11/pilot-view-red-bull-air-race-grand-finale/>

If you've ever wondered what a Red Bull Air Race looks like from the cockpit, then check out this first-person view of the race track through pilot Martin Sonka's eyes. To say this is fast-paced is an understatement...



ON THE WEB

Replacement aircraft for Jon Farmer

From David Wilkinson

A replacement for the Foxbat Jon Farmer?

<http://vimeo.com/91987170>



ON THE WEB

White Knight Encounter

From Robin Hickman

Passengers on board this plane bound for San Francisco encounter Virgin Galactic's SpaceShipTwo and its mothership, the White Knight II. Even more impressive, the aptly named SpaceShipTwo executed a parallel landing with the commercial airliner.

<http://www.chonday.com/Videos/jegalctospc2>



ON THE WEB

Witchypoo

From Nev Hay

Must be Halloween



Nov 27 **Auckland Chapter Monthly Meeting**
Speakers: Evan Wheeler & Jon Farmer
Title 1: Emergency Response
Title 2: Jon all at Sea

Aviation Calendar

2014

Every Sat **Dargaville Aero Club**

The place is buzzing every Sat, wet or fine, windy or calm, and the \$12 lunch at 12.30 is good value. Club 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

Dec 06 **Competition Aerobatics Course** **North Shore Aero Club**

Competition Aerobatics Ground Course.
 Full day introduction to competition aerobatics at North Shore Aero Club. Followed by a flying syllabus to be completed at your leisure. More info at <http://www.nsac.co.nz/whats-on/competition-aerobatics-ground-course/>

Dec 19-21 **80th Anniversary of NZ's First Airline** **Hokitika**

Combined with 150th anniversary of the Hokitika gold field. More info at www.saa.org.nz/public_pages/events.php

2015

Jan 01 **Wings Over Woodville** **Athbey Farm Strip, Woodville**

10th annual New Years Day fly-in at Athbey Farm airstrip, Woodville. Arrive in time for \$10 lunch. The long list of aircraft types attending previously appears to lack a single RV model! More info at <http://www.saa.org.nz/promoter/promoter/events/view/new-zealand/woodville/athbey-farm/wings-over-woodville>

Jan 03 **Paul Marshall Award BBQ** **North Shore Aero Club**

Posthumous award of the FAI Paul Tissander Diploma to Paul Marshall, president of the NZ Aerobatic Club 1990-2012. The award to be presented to Paul's family at a BBQ at North Shore Aero Club. Unfortunately no more details available at press time.

Jan 03-04 **Pauanui New Year Fly-In** **Pauanui**

For further information contact Trevor Barrett on 07-825 2896 or 029-847 8478 or email: trevor@allseasonsair.co.nz

Jan 16-18 **Wings Over Wairarapa** **Hood Aerodrome, Masterton**

A 4-day aviation event combining 3 flying display days, an adventure aviation rides day, a tradeshow, etc. Theme is 'Experience 100 years of aviation'. Over 70 aircraft expected.
<http://www.wings.org.nz/>

Jan 06-08 **Healthy Bastards Bush Pilot Champs** **Omaka Airfield, Blenheim**

More info and registration at www.marlboroughaeroclub.co.nz

Feb 06-08 **Great Plains Fly-In 2015** **Ashburton Aviation Museum & Airfield**

Includes SAANZ AGM, Wings Award Dinner, etc. Further details to be confirmed. Download your info pack and registration form from the SAANZ web site http://www.saa.org.nz/public_pages/events.php

Mar 18-21 **National Aerobatic Championships** **Hood Aerodrome, Masterton**

(Note: moved from Waipukurau). New venue with many facilities, both for flying and accommodation. Unofficial practice day Wed 17th. More info at <http://www.aerobatics.co.nz/>

Apr 03-05 **Classic Fighters Omaka Airshow** **Omaka Airfield, Blenheim**

SAA Easter weekend. Friday is Practice Day, including the Marlborough Lines Twilight Extreme of sunset flying, concert and fireworks. Sat and Sun are the main airshow days with over 100 aircraft participating. Full info at: <http://www.classicfighters.co.nz/>

Jun 20-26 **AirVenture (Oshkosh) 2015** **Oshkosh, Wisconsin**

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.



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