

RECWINGS

THE MAGAZINE OF THE CANTERBURY RECREATIONAL AIRCRAFT CLUB



- AIRCRAFT FIRE - WHAT WOULD YOU DO?
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OCTOBER 2017



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RECWINGS

is produced by a keen group of individuals within the **Canterbury Recreational Aircraft Club**.

To subscribe to the e-mailed edition please contact editor@crac.co.nz.

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Contributions for the next edition are due by **November 8th 2017**. We invite contributions from all, with editorial discretion being final.

Brian Greenwood
editor@crac.co.nz

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*Cover: Would you go out on a limb if your aircraft made this much smoke?
Peggy Krainz and Friedrich Walentin perform at Warbirds Over Wanaka 2010*

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AIRCRAFT FIRE – WHAT WOULD YOU DO?

BRIAN GREENWOOD



The purpose of this article is NOT to pose as an expert offering advice, but as a fellow pilot posing the question “What would you do?”.

We’re incredibly lucky – aircraft fires are almost unheard of these days. That’s probably because we’ve learned from the experience of our pioneering predecessors, in terms of aircraft design, maintenance, and operating procedures. Aviation safety is, of course, a shared pool of knowledge.

None-the-less it is something, like forced landings and bad weather detours, that we should be thinking about and planning for. Things can, and do, go wrong. Some pre-planning and practice will make a huge difference to the outcome.

Creating a fire requires three things – fuel, heat, and air. Aircraft contain lots of fuel in the many litres of petrol, oil, and brake fluid – and some aircraft are constructed from flammable materials such as doped fabric or sail cloth. We generally have plenty of air, and our internal combustion engines and electrical systems can provide ample heat. The idea of regular maintenance is, amongst other things, to keep these well separated. It’s that simple.

If you fly an oily old plane such as mine, keep the engine bay and cowlings clean, and get any leaks fixed quickly. An oil leak plus airflow has already given you two out of the three requirements, a typically hot exhaust will complete the trio.

There are quite a few different situations where fire may occur – fuel and oil fires would have to be the worse, but brake fluid over a hot brake disk or burning electrical equipment are also possibilities. Cabin fires tend to be electrical in nature, and even portable devices must be considered in this age of self-immolating mobile phones. Lithium batteries burn like crazy. Post-crash fires are also a possibility, and are partly mitigated by lots of forced landing practice.

So, what happens if things do go wrong? In the air, your priority is simply to get your passengers, you, and your aircraft on the ground as safely as possible. However, unlike a “normal” forced landing technique, the fuel and electrics tend to get turned off sooner. It’s all about time management, doing things in a priority order while still flying the aircraft, remaining as calm as possible, and assessing the situation. Good skills!

For myself, my aircraft is quite simple and there’s not a lot of electrical systems to have to worry about, so it would be glide speed/attitude, fuel OFF, pick a landing field and approach, and a quick assessment of the type of fire. If there was any way of leaving the electrics on briefly to get out a mayday call, I would – but consider that (in a real fire) it might be better to activate the ELB/PLB than risk the aircraft further. Other pilots may do an assessment of electrical fires and can pop a circuit breaker and recover from a short circuit in a particular system. Personally, I will leave that to much more experienced pilots and concentrate on getting down safely!

Familiarise yourself with any fire-fighting equipment that your aircraft may be fitted with – in our case that usually means hand-held extinguishers. Check the thing for pressure (and current test date if appropriate) and make sure you know how to use it before you need to. It’s hard reading the instructions while flying, especially under duress. Note that most extinguishers must be held vertically to operate correctly. I was unaware of this until I took a safety course at work.

One other type of fire needs to be considered: environmental fires. It’s probably a greater risk to Microlight pilots, we operate out of all sorts of landscapes and environments, and our aircraft are small with (often) low-mounted exhaust pipes. In the companion article, I describe how I saw a Cessna 185 set fire to the short, dry grass underneath the aircraft.

If you want to scare yourself, examine the heading photo of the Bristol Freighter taken at night – you can clearly see plenty of sparks bouncing around in all directions including a ball of them rolling over the dry Blenheim landscape. The red streaks visible along the fuselage are sparks too. I admit that this aircraft is slightly too large to be a Microlight (or LSA) and I don’t know of any Bristol Centaurus-powered Microlights, but the technology is essentially the same as the stuff we use.

As an aside, the grass area had been carefully dampened by the airshow crew before the demonstration, and the fire service was on close stand-by. Just as well they knew the risks, make sure you do!

I am not an authority on fires or firefighting, and I have found that, for every opinion, someone has an opposite opinion. I knew people who refused to wear a seat-belt in a car in case “they ended up underwater”. This, even though seat-belts have been proven to be safer in nearly every crash – probably including most immersions! However, if you do have anything to add or contribute, please e-mail me at editor@crac.co.nz.

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AIRCRAFT FIRES – MY EXPERIENCE

BRIAN GREENWOOD

This month's theme is, by nature, and extremely serious one. I'm very pleased to say that no-one in my extended circle of friends has, to my knowledge, experienced anything too onerous. Aircraft fires are a rare event.

Except one time... many years ago I was killing some time at the Canterbury Aero Club front desk. Chewing the fat and being thankful that the poor old Cherokee had survived another lesson with myself at the helm. These were the days when the Aero Club was on the Terminal side of the Christchurch Airport, slightly east of where the International Arrivals now stands.

I was watching a privately-owned Cessna 185 on the grass opposite the Club's paved area. The pilot was obviously having trouble starting the old girl. It was a hot Summer's day and the grass was as dry as Winston during an impromptu press conference. We have all three requirements for fire – heat (the aircraft's exhaust), plenty of oxygen, and a good supply of fuel in the dry grass. I don't recall it being especially long.

Sure enough, the inevitable happened and there was a wisp of smoke and then obvious flames under the aircraft while it was cranking. My reaction was, perhaps, not the best but at least sufficient. I pointed, issued an expletive, and the loud instruction "Look!".

The Club instructors could not have reacted better if they had rehearsed. My Cousin John grabbed the desk radio and called the Emergency Services, while another snatched the fire extinguisher and sprinted for the aircraft, along with a couple of others.

The fire was spreading around the aircraft quite quickly but the fire extinguisher soon had it out while the pilot was alerted and extracted.

Apart from slightly singed paint on the 185's bottom this was a no-harm event, thankfully.

The funniest part was 3 minutes later when the fire appliances arrived. They drove straight past the aircraft and aimed for the club house! After much pointing and yelling they were re-directed to a now slightly embarrassed 185 driver and aircraft. Those engines are massive and dwarfed the comparatively small plane.



A similar occurrence destroyed NAC's de Havilland Dominie ZK-ALD in January 1950. The aircraft was starting up at Rotorua Airfield for a return flight to Rukuhia when the port engine backfired. The grass underneath caught fire, and the pilot and 4 passengers managed to escape. Prompt work by the ground crew probably saved their lives, but not the aircraft or passenger's luggage.

This story is very relevant to us – many of us fly aircraft that are far more combustible than the Cessna 185. We tend to fly to all sorts of places in all sorts of conditions. I'm very careful around dry grass and chose where I start and taxi carefully.

FIRE CHECK LISTS

Straight from the club training manual, here are the two Engine Fire Check lists as a refresher. I believe that the full throttle item is to use any fuel in the fuel lines, possibly gain a little speed and altitude, and is an attempt to draw any exhaust fire back into the engine. It is supposed to be **internal** combustion after all!

Engine Fire In Flight

FUEL COCK	OFF
THROTTLE	FULL
IGNITION(MAGS)	OFF
MASTER SWITCH	OFF
FORCED LANDING	EXECUTE
AIRCRAFT	VACATE

Fight fire with Fire Extinguisher if safe to do so.

Engine Fire On The Ground

FUEL COCK	OFF
THROTTLE	FULL
IGNITION(MAGS)	OFF
MASTER SWITCH	OFF
AIRCRAFT	VACATE

Fight fire with Fire Extinguisher if safe to do so.

STICK AND RUDDER USERS GROUP REPORT

DAVE MITCHELL



The Stick and Rudder group were privileged to have Andrew Love as guest speaker on the evening of the 12th of October. Andrew began by telling us of his early years, going solo on his 16th birthday, followed swiftly by a PPL. A CPL was the next task and added to that eventually, a C then B Cat Instructors rating - all the while honing his aerobatic skills. Then last year, a very special event when he was awarded a Warbirds Scholarship. These are the young people who will replace our existing group of ageing Warbirds pilots. No doubt, Andrew will be the envy of many a young aviator! *(Editor's note: And a few old ones)*

Andrew now flies in the Intermediate Category. We were surprised to learn that the most important skills in aerobatics are discipline and attitude. The next surprise was the ranking he gave Brent's RANS S10 where he said he would very happy to fly it at Intermediate level. This is very good news and hopefully we will see one flown in a NZ National Championship. This puts the S10 against the Pitts Special!

Then from the floor " how can we have a go"! Andrew is going to follow this up by making an aircraft available in Nov and Dec and Paul Godfrey will be co ordinating this. Typically, this would be a 20 minute flight in an Airtourer aircraft allowing you to experience aerobatics. I would suggest that this includes a spin. Handle your aircraft badly enough to cause it to spin, having been in one and observed the control input to recover it - this may just save your life!

AEROBATICS TASTER

BRIAN GREENWOOD

As mentioned in Dave's report on the Stick and Rudder User's Group (combined with the Flying Enthusiasts Meetup), there is the possibility of some aerobatic training with Andrew Love in a Yak 52 (similar to the aircraft shown below) or an Airtrainer. Obviously both of these are GA aircraft and we will essentially be passengers (unless you're one of the club who have a full PPL) but still well worth the experience.

We need at least 10 people interested to make this worthwhile. If you're keen, please forward your name to Paul Godfrey (undergroundairways@xtra.co.nz). The flights are likely to be around 20 to 30 minutes duration, and I think the costs are \$180 for the Yak and \$120 for the Airtourer. The Yak dates are 11/11 at Rangiora and 2/12 at Ashburton. The Airtourer is only available during the week.

STOP PRESS: This opportunity is now over-subscribed and no places are available, sorry!

I can also echo Dave's comment about spin training. Many years ago, I was pestering my instructor about spins while we were doing some advanced stalls, so he demonstrated a full spin. Despite doing hundreds of rotations and pulling a zillion G, he reckoned it wasn't much more than one and one! A great experience which I cherish to this day.



Yak 52 ZK-ADM kicks up some mud at take off, NZRT 07.

Oh....Golly gosh...

A.K.A., Occurrences, Incidents and Accidents.



"Yeah well it was just a taxiing error it does not really need a 005, eh Nathan??"

We are all human, and Rangiora is a training field, used by CRAC, IAANZ, CAC and a couple of Helicopter companies. Therefore mistakes and "Oh Sh**" moments will occur. We all need to be ready for these and we are all taught traffic avoidance and "go arounds" for a reason.

But when does an "oopsy" become something we need to report? We have had a couple of incidents recently. A taxiing incident, where the lesson was "slow down". The second one was an engine failure in the Circuit which resulted in a text book forced landing in the river, where the lesson for all of us is that those EFATO practices are just not for show!

As the new President I am automatically on the CRAC "safety committee" with Doug the CFI and Duncan the Safety Officer. These incidents have meant that I have needed to come up to speed on "the process". In talking to club members there seems to be some mixed understanding, so here is what I believe is current "best practice" for club members.

These events happen that's life, we all understand that as does CAA, however for the vast majority 99% plus we want these events to be an opportunity for us to all learn. There is an old saying "a fool learns from his mistakes, a wise man from others mistakes". Naturally we cannot learn from others experiences if you do not tell us!

There seem to be levels of "occurrences"

Level 1

You are out and something occurs that scares/surprises you. Firstly if it involves another pilot talk to them “hey Jim, you cut inside me on that last circuit, is my radio not working or did you not see me ??”. Many little things can be sorted out between pilots over a cup of coffee or a quick chat. However you may feel that or want to move to a higher level especially if you think it is a safety issue that can relate to others.

Level 2

Jim cuts you off, and when you want to talk he says “stuff off”, or perhaps you are not sure if you should have/could have maybe was not clear on something. That is when a quick question with your instructor, or Duncan as the Safety Officer. “Hey Duncan, what should I have done when.....”. or “I was really pissed when that....”

Level 3 - Rangiora Airfield Occurrence Form

If it involves a safety issue, you do not get satisfaction with a chat, your instructor or Duncan the Safety Officer may suggest filling out this form (They are kept in the green folder in the office). The purpose of this form is to collate what is happening at Rangiora, and nearby to enhance safety at RT in general. It is NOT to dob someone in, For example, perhaps you had a near miss over River Junction. Report it, and perhaps the outcome is some more advice on better radio calls...However if CRAC has three “River Junction” reports and CAC five and Way2go one...then the Rangiora airfield safety coordinator (Nathan Clarke) may conclude that there is a general problem with River Junction and perhaps we need to change procedures there. However if no one reports these things then we are just all guessing.

To be clear, these forms just stay in the club and stay within the field they are for enhancing safety and learning lessons...not for telling people off. CAC at Christchurch also has an internal reporting system and Nathan tells me that 90% of the forms are dealt with internally only a few are deemed worthy of going to the next level.

Level 4 - a “005”

CAA has an incident form “005” which must be filled out if there is damage, someone is hurt or a significant safety event has occurred. The club safety committee and the Rangiora safety coordinator (Nathan) can advise when this is necessary.

Again the primary purpose of the “005” system is to gather data about trends and issues in safety; it is rarely used as anything else.

Again as an example both the recent incidents (Taxying into another aircraft and an engine failure forced landing) required a Rangiora form and a “005”.

There is a culture of keeping the paperwork to a minimum in the Microlight world, which I love too, but when it comes to safety we all need to be a bit more focussed, so please start using the system.

Nathan says that the word he hears around the country is that Rangiora microlight scene is growing rapidly and is really lifting its game by showing better leadership, discipline and professionalism than other parts of the country. We have the potential to lead by example and continue this trend by having a disciplined approach to safety and reporting that will lead to a no harm environment.

Safe flying, good communications!

Glenn

RANGIORA AIRFIELD OCCURRENCE REPORTING FORM

BRIAN GREENWOOD

As mentioned by Glenn in the previous article, the Airfield Safety Committee has produced a reporting form to enable them to monitor trends. This is NOT to replace the standard CAA005, but to record and analyse occurrences around the airfield. It may be that an occurrence is relevant for both reporting tools.

Airport Occurrence Report

Date of Occurrence	
Time of Occurrence (24hr)	
Occurrence Type	
Other - Type (if applicable)	
Aircraft Reg (If Occurrence type is Aircraft)	
Vehicle Reg (If Occurrence type is Vehicle)	
Name of Person (If Occurrence type is Person)	
Location of Occurrence	
Other - Location (if applicable)	
Nature of Occurrence	
Other - Nature (If applicable)	
Occurrence Details	
Action Required	
Additional Notes	
Reported By	
Reported By Email Address	

Examples would be airfield conditions that affect safety, such as broken fences, or hard-to-spot signs or safety markers. Near misses or air traffic congestion near local reporting points would be an example of a developing trend that needs to be managed and actioned.

These forms are available in printed form at sites around the airfield including our club. They can be handed to our Safety Office, Duncan Fraser, or scanned/photographed and e-mailed to safety@crac.co.nz. An online version is under consideration.

Please use these to share any information that's relevant to the safety of yourself and others. Your near miss, reported, may save someone else's life.

CRAC TRIVIA NIGHT - RAISING FUNDS FOR THE DEFIBRILATOR

CRAC has purchased a defibrillator for the airfield, and some of our team have organised a Quiz night on October 30th at Monteiths in Rangiora to help cover the cost.

There are some truly awesome prizes being donated, including some **high-quality accommodation and superb meat packs**.

We really need to make a success of this, please support it if at all possible. It promises to be an entertaining and rewarding evening.



CRAC

TRIVIA NIGHT

Put your heads together to keep a heart beating
Come along for a fun night out while raising funds for the club defibrillator

- ◆ Monteiths Brewery Bar
75 Victoria Street,
Rangiora
- ◆ Meet at 6pm for 7pm
Start

Grab your cleverest family and friends to ensure you are Team #1
Teams should ideally consist of 6 members but must have a minimum of 4.

There are only 13 teams available so sign up fast to reserve your space

\$15 per head. Includes entry and one pizza per table to be served during the quiz

All day menu and "\$20 Pint and Pizza" available in the bar prior to 7pm.

An auction/raffel will be also be held so start stretching those bidding arms.

We have had some great prizes donated already. If you have anything you would like to contribute please let us know

To register your team email erin.heese@fleetpartners.co.nz

CLUB LANDING FEES

MIKE SHEFFIELD – CLUB CAPTAIN

I have heard that some pilots have received accounts for landing at Rangiora even though they are on the CRAC landing fee scheme.

This is to confirm the Landing Fees at Rangiora.

If you are registered and have paid your \$60 you are entitled to unlimited landings at Rangiora until end of June 2018. You are not limited to 50 as some have been told. You then are required to renew your fee.

You are not limited to how many aircraft you own based on the premise that you can only fly one at a time. But if you do have two or more in the air at once flown by friends be prepared to pay an additional \$10/day into the landing fee box.

This scheme is current to June 2019 at which time it will be re-negotiated with Council. If you do get an account that you don't expect, please ring the Council and explain your case.

CLUB POKER RUN

WORDS: MIKE SHEFFIELD

PHOTOS: KEVIN DORE

A very successful Club Event was held on Saturday October 14th. The 'Poker Run' is a series of flights between airfields where the entrants collect a playing card at each field. We had 14 aircraft and 16 entrants playing two hands of 8 players.

We received cards at Rangiora, Forest Field, Oxford, Loburn Abby and back at Rangiora. Each player was allowed to change one card back at Rangiora.

Red team winner was **Matt Dowdall**, Green team was **Karl Meyer** from ATC.

We were treated to a display of Ivan's Spitfire with many impressive low passes which sounded as close to the real thing as you will get!

We had a great BBQ after, and donated over \$200 to the defribulator – the event was cost neutral to the club.



All in all, it was a well enjoyed day and well attended by the usuals. Thanks to **Duncan Fraser**, **Dave McPherson** and **Ivan Campbell** for use of their strips and for preparing them for our visit.





*Bruce Norrie's pristine Rans S-6 Coyote II on short finals at NZRT.
© 2017 Brian Greenwood*



Not the way we should treat our passengers!
Peggy Krainz and **Friedrich Walentin** from
Germany (www.wing-walkers.de) perform at
Warbirds Over Wanaka 2010.

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Wayne has just returned from his bi-annual, update course for Rotax Aircraft Engines at Bert Flood's facility in Australia. This keeps him factory current all the way to the beginning of 2018.



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www.lightaviation.co.nz

WARBIRDS OVER WANAKA 2018



Above, Warbird Over Wanaka Flying Scholarship winners Adam Butcher (left) and Ryan Southam (right)

Warbirds Over Wanaka Flying Scholarship winner Ryan Southam says winning one of this year's scholarships means he can fulfil his Warbird dreams that much sooner.

Ryan, aged 42 from Blenheim, has won one of two \$5,000 scholarships awarded this year by the Warbirds Over Wanaka Community Trust from funds raised at the 2016 Airshow. The other winner is 35-year-old Adam Butcher from Te Anau.

The pair were selected from more than 30 applicants. Warbirds Over Wanaka General

Manager Ed Taylor says for the second year running the standard of those who applied was outstanding.

"Like the first year it was actually very hard to sort out the winners, there were so many who missed out who we are sure would have been very worthy recipients. We urge all those who missed out to apply again next time," says Ed.

Ryan plans to use his scholarship to gain advanced formation flying qualifications. Ryan is already heavily involved with the Warbird scene and ultimately wants to be a top display pilot but also to pass on his knowledge to others coming up through the ranks.

"Normally any training such as this would be spread over quite a wide time frame due to financial constraints, but with the scholarship I will be able to move forward at a more rapid rate. This is a real benefit of these scholarships," says Ryan.

Meanwhile, Adam is hoping to use his scholarship to get time in a Harvard to gain the initial experience required to eventually progress on to the WWII fighters.

"The P40 has always been a special ultimate goal, closely followed by every other type. There's just something about Warbirds: the noise, visibly different airframes, different handling characteristics, the personalities who fly them and the stories of the pilots who flew them in the various world conflicts."

"I see this moment as a reflection of all the amazing support I've had from many people over my aviation career to date. I have really enjoyed the journey so far and feel incredibly lucky to have an opportunity to progress to the next level of Warbird flying," says Adam.

The Warbirds Over Wanaka Community Trust has awarded four scholarships over the past two years and is hoping to be in a position to award two more next year following the Easter 2018 airshow.

Warbirds Over Wanaka International Airshow is being held at Wanaka Airport next Easter, March 30, 31 and April 1. For more information go to www.warbirdsoverwanaka.com



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THE OTAGO AERO CLUB 2018 WINGS & WHEELS DAY INVITATION

Aircraft Static display and short landing competition

After the huge success of the 2016 event which was held in association with the International Festival of Historic Motoring, we are planning our 2018 Wings & Wheels event and your club and members are invited to static display their "pride and joy". We will also be holding a short landing competition so come and test your skills.

We are inviting Aeroclubs and private owners of all types of aircraft and gyro models from around the South Island to join us (at your own cost). In 2016, we had over 10,000 members of the public through the gates and for 2018 we are hoping to attract even more.

Alongside cars, motorcycles and aircraft on display there will be market stalls, live music, a huge variety of food options, FREE children's entertainment, and plenty of other entertainment to keep the whole family happy for hours.

When: Sunday February 11th, 2018

Where: Taieri Airfield, Mosgiel, Dunedin

Time: 10.00am to 4.00pm

Cost: "FREE" entry for each aircraft and pilot (own cost to get there) *

*Additional passengers in aircraft will be charged entry fee. Children 5 years and under - FREE Children 6-16 Years - \$5.00 per person Adults 17+ - \$10.00 per person Family of 2 Adults and 2 Children (6 years plus) \$25.00

To effectively plan for this event, we would like to get an indication of how many clubs/aircraft are interested in attending. Please reply with expressions of interest and approximate club members by 30 October 2017 to:

Wayne Cunningham (Event Coordinator)

Email: flyguy12@xtra.co.nz or

Phone 027 285 3506

This is a great opportunity to showcase your club and aircraft to a huge audience, so please spread the word among your members and help us make this day a success.

ROYAL AIRCRAFT FACTORY S.E.5A

BRIAN GREENWOOD



The S.E.5a was a product of the Royal Aircraft Factory, who had produced such aircraft as the B.E.2 series, F.E.2, and R.E.8 aircraft. This organisation was renamed from the Army Balloon Factory in 1909 and later became the Royal Aircraft Establishment (RAE). It survives today as the Defence Research Agency (DERA).

The original S.E.5 (Scout Experimental) was designed around a 150hp (112kW) Hispano Suiza V8 driving the propeller through a gearbox. This engine was initially unreliable and under-developed, which caused delays in getting the aircraft into service in sufficient numbers. The airframe, however, was superb, offering excellent performance, good stability as a gun platform, and yet good manoeuvrability (not quite in the same league as the twitchy Sopwith Camel, however). An initial weakness in the bottom wing, which cost the life of chief test pilot Major Frank Godden, was fixed by the third prototype.

The design is attributed equally to Henry Folland (who later formed his own aircraft company, best known for the Folland Gnat jet fighter/trainer), John Kenworthy, and the previously-mentioned Major Frank Godden.

Only 77 S.E.5's were completed before production changed to the improved S.E.5a version. The major difference was the use of a 200hp Hispano-Suiza 8b engine, or the later Wolesley Viper of similar horsepower. The Viper was an improved, licence-built version of the Hispano-Suiza. This latter engine finally solved the engine issues and became the type's standard power-plant.



With the 200hp engine the aircraft became one of the fastest aircraft of World War 1. With a top speed of 138mph (222 kmh) it outpaced such aircraft as the Sopwith Camel (115mph), Albatros D.V (116mph), Fokker Triplane (103mph), and even the remarkable Fokker D VII (117 mph). The SPAD S.XIII equalled the S.E.5a at 138mph (The superb Aircro DH.4 could manage 143 mph but that was a day bomber).

The boxy design of the S.E.5a pushed the large radiator required to cool

the V8 engine out front, and put many off the shape. To my eyes, however, it has always looked well-proportioned and balanced. Its easy flying characteristics and docile handling (unlike aircraft such as the Sopwith Camel and SPAD series) endeared it to all, especially novices. The comparatively fast maximum speed gave it more chance to break off from combat and escape should the odds turn nasty. The airframe was very strong and capable of diving at high speeds without concern.

It was armed with a single .303 Vickers machine gun firing through the propeller arc, and an over-wing .303 Lewis gun on a Foster mount. The armament was probably split like this because the early hydraulic linkage for the gun synchronisation was unreliable, so the pilots had a second option in the over-wing gun. This did have the advantage of using the over-wing gun to fire upwards if necessary. Spare magazines for the Lewis gun were located around the cockpit.

The aircraft entered service with the Royal Flying Corps in March 1917 (100 years ago this year) with No. 56 Squadron. The later S.E.5a version arrived in June of the same year. Deliveries were slow due to engine shortages, and it wasn't until 1918 that the aircraft was fully in service. At War's end, it was in use by 21 RFC Squadrons and 2 U.S squadrons.



The S.E.5 was the mount of many aces including Albert Ball, Billy Bishop, Edward Mannock, Andrew Beauchamp-Proctor, and James McCudden.

S.E.5a's continued in RAF service after the armistice, but was eventually withdrawn in favour of the Sopwith Snipe and Dragon (the latter failed to enter service due to engine development issues).



One original aircraft still flies with the Shuttleworth organisation, and three "late production versions" are flying with The Vintage Aviator in New Zealand. These are all powered by original Hispano-Suiza 180hp engines.

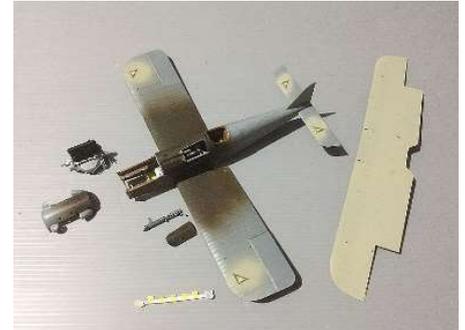


MODELLER'S CORNER: WINGNUT WINGS 1/32 S.E.5A
BRIAN GREENWOOD

Wingnut Wings S.E.5a was one of the first models that the company produced. This version is powered by the geared Hispano Suiza V8 engine, later models of the S.E.5a were powered by a direct drive version of this engine or the Wolseley Viper. The un-geared engines have a lower thrust line than the geared version shown here.

As a lot of the earlier Wingnut Wings models have sold out (such as the Albatros, which fetched huge prices on e-bay) I grabbed the chance to add one of these to my collection. Wingnut Wings models are not cheap, but this New Zealand manufacturer produces the best World War One models in 1/32 by far.

Construction is standard for a biplane, but I have learned a lot from the Sopwith Pup reported previously. This time I have rigged the aircraft before applying the transfers. The scheme I chose had the headrest removed in service but the prettier two-bladed propeller – WnW gives you FIVE colour scheme options in each kit!



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One issue that I had was trying to fit the cowling over the completed engine, it just wasn't working for me until I read a forum note to not glue the cylinders to the block, but into the cowling. I'd already glued mine but they parted ways cleanly with the block and were duly inserted into the cowling.

More capable modellers make or buy turnbuckles to glue into the wings, and attach the rigging to them. They look magnificent but this seems to be beyond my fine motor skills or patience. I use the "drill a hole right through and glue the monofilament into that" method. The 0.5mm holes are hard to spot (I tried 0.35mm but kept breaking the expensive drill bits) and the turnbuckles can be represented by paint if you want.

I reckon the S.E.5a is the best of the Allied World War One fighters, and the one I'd most like to fly. Although this might sound mad, there are three replicas available at The Vintage Aviator Limited (in case of a Lotto win) plus we have two of the excellent 7/8 replicas, ZK-TOM and ZK-SET. The latter seems to have retired to the National Transport and Toy Museum in Wanaka. There's another at the NZ Fighter Pilot's Museum at Wanaka, too. I'd better think about that tail-wheel rating!

Another flawless model from Wingnut Wings.



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COMMITTEE NOTES OCTOBER 2017

- Bank Bal \$30K
- \$15K to be paid off RGB loan
- Engine expenses of \$1K/Month kept separately
- Scott purchased Defribulator, to be reimbursed
- More detail to be requested on maintenance invoices
- Tech Night now Tuesday 21st November
- Loose compasses in both A/c being repaired
- Hangar floor to be marked with A/c positions
- One engine failure and one taxiing accident reported at NZRT
- Club Honours board draft shown
- Ice Cream fridge being delivered
- CAC begin instructing on Saturdays as usual this time of year. Watch for increased traffic
- Scott James, Glenn Martin, and Graeme Main proposed as our RANZ delegates
- Some discussion re "club spirit", participation in fly-ins remains high.

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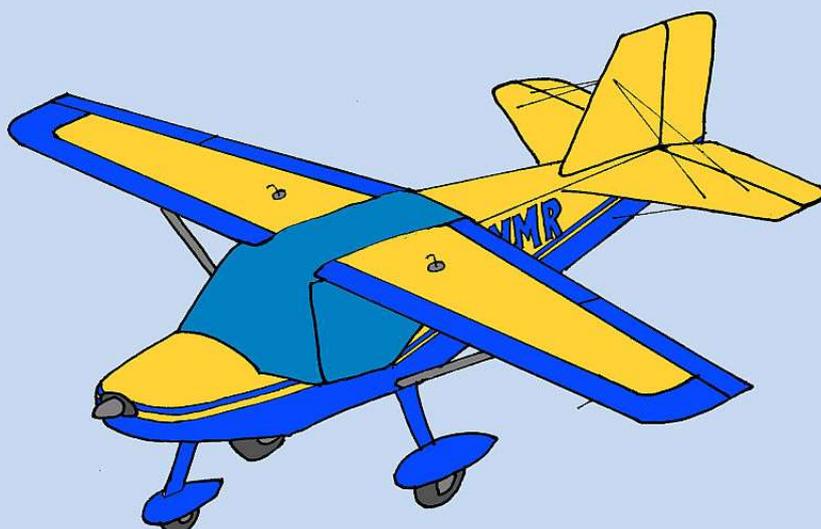
- 7/8th scale replica. (Graham Lee kitset)
- Built approx. 2003 by Mike Kindon, Canterbury Recreational Aircraft Club, Rangiora.
- Less than 50 hours flying time.
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- Annual certificate.
- Great condition.
- View by appointment (Rangiora).
- All offers considered.

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CRAC Revolution (for chat)

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Interested in joining us?

E-mail secretary@crac.co.nz or use the online application form.

We can send you an information pack which includes membership details, costs, and joining forms. Membership enrolls you for the magazine, too.

UPCOMING EVENTS

- 30th October – Club Trivia Night, see article
- 21st November - Tech night. GPS, Defibrillator Use - **NOTE REVISED DATE**
- 28th November – New Southern Sky Roadshow
- 16th December – Club Christmas BBQ and kids fun day. (Date to be confirmed)
- 11th February – Otago Aero Club Wings and Wheels day
- 30th March – 2nd April – National Fly-in at Oxford Strip
- 30th March – 1st April – Warbirds Over Wanaka 30th Anniversary show

Keep your eye out for weekly club e-mails, join the **CRAC Drop Of The Hat** WhatsApp group for informal group fly-aways. Join **CRAC Revolutionary** for general chat and good humour.

CONTRIBUTIONS AND ATTRIBUTIONS

Kevin Dore, Mike Sheffield, Glenn Martin, Dave Mitchell
RecWings logo by Eric Lim, criemil@yahoo.com

COOL LINKS

[NZ Aviation Forum](http://NZAviationForum.com)
rnzaf.proboards.com
[NZ Civil Aviation Blog](http://NZCivilAviationBlog.com)
nzcivair.blogspot.co.nz

Disclaimer: This Magazine is prepared by dedicated enthusiasts; the opinions expressed herein are not to be taken as official club policy

NEW MEMBERS

Welcome aboard to:

Jamie Campbell
Grant MacKay
Don Batchelor
Raoul Schipper
John Harris

Please make our new friends feel welcome.

CONGRATULATIONS

Vanessa Martin, ADV National

NEXT NEWSLETTER

Contributions requested, publishing deadline 8th November 2017 ("ish").

Next publishing date approx. 15^h November 2017

Brian Greenwood, Editor
(editor@crac.co.nz)

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