

# Kapiti Aeromodellers' Club Update --- February 2016



# MANZ Rally at Kapiti.

From what I saw on Saturday, it looked like a successful day. The jets were well represented and impressive as usual. The Westerly cross wind making the landings a bit tricky but most seemed to manage OK. There were a few "oopsies" that I heard about, never saw any myself but hope nothing too serious. Photos by Kelly Lynn.



#### The Presidential Podium

Hi all, another month has whizzed by. Been some great days at the field and for some, not so great. The preponderance of Westerlies has often made flying 'challenging' at times to say the least.

If you have been at the field in the last few weeks, you may have noticed that GWRC have installed a seat for those on the walkway/cycle track to sit and observe,

The numbers of people using that seat has been quite high at times, especially when the field has been busy. It's good exposure for us and keeps the track clear off the end of the runway.

The flying demo we were asked to put on for the opening of the track was a real fizzer because of wind, but thanks to those that turned up on the day and put a couple of Bixlers up. Don looked after the Holiday Programme people, but again weather dictated that not much activity was possible.

#### MANZ Rally.

I wasn't sure how that would go as we hadn't hosted one before. Needless to say it went well, and if we are asked to host again in the future, there are a number of things we learned that we would do differently next time. There were some great models, some great flying, but what I was pleased to see was that these guys are no different to the rest of us. Some smart models, some not so smart. Some sublime flying and some that struggled a bit. It was great to see so many club members come down to have a look. I think those that did venture enjoyed what they experienced.

The highlight would have to be the formation jet flying on the Saturday with Pete Brown and Hamish Loveridge. That was awesome. Just to prove the point that the very best can get it wrong, Hamish's day ended when he retracted his wheels prior to take off. Not the best decision!

I would also like to thank all those that tipped up and helped over the weekend. It was great to see you involved.

#### Maintenance.

Just like to say a personal thanks to all who have helped with the various jobs around the place lately. Club is looking very smart.

Have a great month.

Steve

# Visit to club by "After 3pm " group

On the 20th Jan we had a visit from the After 3pm group. Unfortunately the weather did not help and it was very windy, although mostly Northerly it was definitely not ideal. I took my 48" Extreme Flight Extra which I'm usually happy to fly in the wind as well as my 88" Extra as something for them to look at. Peter Smith and Ian Crossland were there with their Bixlers and Jeff Wastney had his Apprentice. Only my small Extra and Ian's Bixler braved the wind. The others remained safely stowed in their cars. I ran up the Extra and did a taxi run, so the kids could hear what a petrol engine sounded like. They took great delight in styling their hair in the prop wash while the model was tethered in the pits area.

It is quite something flying with 15 or so screaming kids firing questions at you while you are in the air, but at least we managed to give them something to look at. Quite a challenge landing in about a 13 knot wind with a bunch of kids scoring your landing. It was a great chance to show the young ones what we do, but also a bit disappointing that we had such a poor attendance from members. (I know the weather did influence this, so there is a weak excuse). Photos by Kelly Lynn. (faces of children deliberately blurred)



The vans arriving



Some of the group posing with the Extra



Ian was like the "pied piper"
...seen here discussing the finer
points of flying a model.



Landing with a group of onlookers.

# Glider Tug - "SD Greenley."... by John Miller

I have been glider towing using a "World models SUPER STUNTS". The motor was originally an ASP91 but feeling the need for more power I strengthened the fuselage sides with ply and installed a "Super Tigre 2300" This has since done many tows with great success. A winter project was needed and being keen to get a bigger plane and hopefully tow bigger gliders, Colin introduced me to a web site "Slope soaring UK", with a section dedicated to Glider tugs and free plan downloads. I read the reviews etc and went with Collins suggestion the "SD Greenley" Designed by John Greenley. The plan was basic but seemed simple, although ply was used for wing ribs, fuz. sides etc providing an excuse to purchase a scroll saw. The design is similar to the stick plane with a high mounted thick cord wing and I added an open cockpit to give a bit of realism and provide a place to mount battery monitors, rev. Counter and ignition light. The fuselage was lengthened by adding 75mm to the tail and 100mm to the nose. I was keen to try petrol powered motors and intended installing a Zenoath 74 (Quite heavy hence increased tail length). Near completion I chose a DLE 60 twin being a lighter modern design motor and assumed less vibration being twin cylinders. (To achieve balance a 100mm was added to the nose length.)

A couple of stats;

- Wingspan 2.2 meters.
- Fuselage length 2.0 meters.
- Weight 7 Kg.
- Power plant DLE60.
- Prop. 23x8.
- Wheels 125mm dia.

During this build many club members called in with encouraging advice and to bounce ideas. The model as depicted was test flown and trimmed by my son visiting from Auckland. I have had a few flights and a couple of small glider tows.

Unfortunately a Drama has happened . Had 3 flights last week , the first a short sortie, second a small glider tow , third a glider tow but at about 60 ft height heading North over the new cycle track there was a loud bang and plane fell from the sky ( Damage was bad to leading edge of one wing and superficial to fuselage). Interesting situation with a glider and tow line still attached but the skill of Colin saw him make a perfect emergency glider landing. When we got to the crash scene the model was pretty well intact but the motor was hanging free.

DLE supplied this motor with a carbon mounting plate and standoff spacers. The carbon mounting plate had delaminated hence I have since sent photos and entered e-mail discussion with the supplier who is waiting for comment from DLE. The plane has been repaired awaiting motor re-installation.

Glider towing provides another facet to our hobby which requires teamwork and challenges which, when it all comes together successfully can be rewarding.

Cheers John M.



The "Greenley" after her Maiden flight ... with the happy test pilot.





Back plate on firewall

Back plate on engine

As you have gathered the plate is supposed to be in one piece. If anyone has a DLE 60 with one of these "carbon??" backplates, please replace it. ASAP. Photos by Don Lynn.

#### Pilots Box.

The new pilots box is now complete, thanks to all those that organised and did the work to put it up. It looks great and has already proved its worth by stopping a model( without damage to the fence, or the pilot, or the model) well done guys... nice work. It is positioned centrally on the strip so is used for both Left and Right hand circuits.

Please fly from the box and do not just stand wherever you think is cool.

#### Rescue missions.

There have been several of these which is never really a good thing, but they do make for good reading. I was involved on one myself recently, but will cover that and the others in another edition. Jeff sent me this great story, so mine will wait... it's not nearly as good as his anyway.

# Flying in Christmas Holidays on Kapiti Coast

Just imagine – you are out with your partner, kids and/or dog walking through one of the



beautiful public parks on the Kapiti Coast when you come across a guy high up in a tree with a long pole poking at something high up in the canopy. Standing around are a couple of jokers peering up into the tree, one holding a black box and the other saying "Try the ailerons again!". Then there is a strange whizzing and whirring sound from somewhere in the tree above you. Something must be up, right? Right! It transpires that 2 KAMCI members one a rookie pilot and the other an experienced flyer (a foundation member, in fact) had decided to try flying a new plane, an Apprentice S 15e, which is a trainer model with 'sensor assisted flight envelope' or 'SAFE' technology (for details on this model and SAFE technology, see the video at https://www.youtube.com/watch?v=uc TdBa6AzfY).

This technology allows the pilot to switch between 3 modes – (i) beginner, where the flight envelope is heavily constrained limiting how steeply the aircraft can climb, dive and bank; (ii) intermediate, where the constraints are relaxed somewhat; and (iii) expert, where there are no constraints but the technology assists in maintaining the aircraft's position based on the pilot's control inputs.

They found a sheltered, secluded quiet park where the Apprentice's maiden

flight could take place. After careful pre-flight checks, the expert took off, gained height and then trimmed the aircraft. After landing, further mechanical adjustments were made and then the expert took the plane to a safe altitude before allowing the rookie to take control. After an uneventful flight, the expert landed the craft to check the batteries.

After finding there was still some power in the batteries, the rookie said "Let's try the take-

off in 'beginner' mode like in the video". In the video above, the Apprentice is shown doing a 'hands free' take-off, with the pilot using one hand to adjust the throttle only! The rookie was keen to test this claim. As in the video, everything went just fine - except for one thing. The rate of climb was limited to such a gradual climb that the slight crosswind took the plane directly towards a tall Totara on the boundary of the park, directly on the



climb path. It was only at the last moment that the pilot realised more elevator was not going to work unless the mode was switched to 'expert' – but by this time, the Apprentice had made a gentle landing high in the Totara tree.

While the flying session started in sunshine with little wind, the dense clouds looming out west seemed consistent with the heavy rain and thunder storms predicted for that afternoon. Time was at a premium! Neither pilots were skilled tree-climbers so a teenage son of one them was called in – but it was soon obvious climbing skills alone were not going to be sufficient. A tree-climbing friend was called in, armed with a ladder and a pole-saw. He climbed into the tree and flew into action as the distant claps of thunder occurred with increasing frequency and intensity.



With some swift movements and a few French words, the Apprentice suddenly dropped from the canopy landing gently in the hands of its owner. The small band in the aircraft recovery team decamped quickly without giving much away about the incident. The only thing mentioned were those words famously stated by Andy Avgas: "What happens at the strip stays at the strip" – except, of course, if it is stuck in a tree. The recovery was not a moment too soon – suddenly, all hell broke loose with heavy rain, lightning and thunder as the team packed their gear and left the park. Andy Avgas was asked for comment, but his response was a rather dismissive: "Isn't it Christmas time? Don't you get good things from trees at Christmas?"

#### Lessons learnt from this incident:

- 1. If you decide to not fly at the strip (where trees are designed to be lower), pack treeclimbing gear as part of your essential flying kit;
- 2. Remember the SAFE technology not only has a 'panic' button for when one flies into trouble, it also has an 'unpanic' button simply switch to 'expert' mode to fly out of trouble!

Questions still remain – who were these intrepid pilots? Where were they flying? Does Andy Avgas know more than he is letting on? If investigations find the answers to these questions, they will no doubt be treated in the way all good investigations are - they will be buried deep out-of-sight from prying eyes, never to be seen again.

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This article was contributed by Jeff Wastney, who is a KAMCI Member and also a rookie flyer who just coincidentally owns an Apprentice S 15e.

### **Upcoming Nationals:** Note from Des Richards

The Nats is next month!!

It is time to check out which planes you are going to take to the Nats and get your registration done..

Just to remind you, the office will open on site at Carterton at noon on 23rd March for you to check in.

The list of all events is in the next issue of the magazine out in a few days time and the online registration is at Registration | 68th Model Flying NZ Nationals

You can pay on-line or when you arrive, it couldn't be easier.

#### Also



# And don't forget our own Rally !!!



To wrap up, some links that were sent to me which make for some interesting reading.

#### From Alistair Haussmann

#### The hottest drone videos and articles of 2015

http://www.itnews.com/article/3018633/emerging-technology/the-hottest-drone-videos-and-articles-of-2015.html?token=%23tk.ITN\_nlt\_ITnews\_Daily\_2015-12-30&idg\_eid=bb0d74966b6c19fd24019c23ea1bebf2&utm\_source=Sailthru&utm\_medium=email&utm\_campaign=ITnews%20Daily%202015-12-30&utm\_term=ITnews\_Daily

## Not in my airspace: Airbus rolls out anti-drone system

This article should interest all flyers, technology could be directed at any flying object, even those noisy gassers, and high flying Gliders.

http://www.networkworld.com/article/3019660/security/not-in-my-airspace-airbus-rolls-out-antidrone-system.html?token=%23tk.NWWNLE\_nlt\_networkworld\_daily\_news\_alert\_2016-01-08&idg\_eid=bb0d74966b6c19fd24019c23ea1bebf2&utm\_source=Sailthru&utm\_medium=email&utm\_campaign=NWW%20Daily%20AM%20Alert%202016-01-08&utm\_term=networkworld\_daily\_news\_alert#tk.NWW\_nlt\_networkworld\_daily\_news\_alert\_2016-01-08

#### **From Alastair Rivers**

http://www.techbriefs.tv/video.mason/Algorithms-Let-Drones-Navigate;Motion-Control

#### From John Von Hartitzsch

Note - This was filmed September 17 1917, seven months before Manfred von Richthofen was shot down. The mechanic pre lubes the valves and they also inspect bullet holes in the cooling shroud. The engine in the Fokker had a stationary crankshaft which the cylinders revolved around, the propeller was fastened to the cylinder case.

The Red Baron... 100 year old film.

The following is a rare piece of film, 100 years old. It shows Baron Von Richthofen, doing an external inspection prior to a mission, as well as his putting on a flying suit prior to a flight in cold weather. If you look close you will also see Hermann Goering.

The Baron was shot down on 21 April 1918 by Roy Brown of the Royal Navy Air Services, a prelude of the R.A.F. The Aussie's also claimed that one of their machine gunners on the ground shot the Baron down; however, UK & Aussie Doctors, after an autopsy, stated that the fatal bullet was shot from above.

The author of this piece has been very involved as a Director of the Roy Brown Museum in Carleton Place, the home town of Roy. Many letters were written over the past 3-4 years and, finally, Roy Brown was inducted into Canada's Aviation Hall of Fame on 4 June 2015.

To think this film almost 100 years old! If you're interested in history or aviation, you should not miss this footage. It was just posted online, and I've never seen anything like it. It's from 1917, an up-close and personal look at the most legendary combat pilot who ever lived, the infamous 'Red Baron', Manfred Von Richthofen. Watch this extremely rare old footage and re-live history.

# https://shar.es/12Ag7e

#### **From Ross Monk**

#### Subject: Boeing's "Phantom Eye"... video

This all new unmanned drone has incredible capability. It currently can stay aloft for 4 days but soon will soon stay up 10 days. While designed as a surveillance platform, it carries a 5 ton payload that includes Hellfire missiles. Flying at 65,000 feet - the very edge of space, it is just about out of range of missiles.

#### **Boeing's New Spy Plane** General Characteristics:

Wingspan:

150 ft. (46 m)

Takeoff gross weight:

9,800 lbs. (4,445 kg)

Cruise speed:

150 kts.

Maximum speed:

200 kts.

Altitude:

65,000 ft.

**Engines**:

(2) 2.3L 150 horsepower

**Endurance**:

4 days at 65,000 ft.

http://video.boeing.com/services/player/bcpid1173939806001?bckey=AQ~~%2cAAAAukPAlqE~%2coAVq1qtdRjwBrlkHYj2MSytJiEK9s5fy&bctid=1331877361001

And that's it folks for another month. Let's hope for light winds and happy landings.

Remember... Club nights start again this Month ... 16th Feb 2016 ... 19h30.

Fly hard ... land soft.

Cheers

Don