

# The Kapiti Flyers Update – February 2015



<http://www.kapitimodelflyers.org.nz/>

**Did you know?** – that on 17 January, our Club turned 20 years old !



## 75 Years of Spread Spectrum radio

Whats this – a cool chick as a title photo? The Kapiti Flyers Update has gone downhill in a big way.! I hear the PC Police knocking on the door.

This is the face of Austrian-born American Hedy Lamarr. Born 100 years ago in 1914, died 2000. Along with co-inventor George Anthiel, she developed a "Secret Communications System" to help combat the Nazis in World War II. By manipulating radio frequencies at irregular intervals between transmission and reception, the invention formed an unbreakable code to prevent classified messages from being intercepted by enemy personnel.

Lamarr and Anthiel received a patent in 1941, but the enormous significance of their invention was not realized until decades later. It was first implemented on naval ships during the Cuban Missile Crisis and subsequently emerged in numerous military applications. But most importantly, the "spread spectrum" technology that Lamarr helped to invent would galvanize the digital communications boom, forming the technical backbone that makes cellular phones, fax machines and other wireless operations possible.

As is the case with many of the famous women inventors, Lamarr received very little recognition of her innovative talent at the time.

Her invention is the basis behind the "spread spectrum" radio systems we now take for granted in our hobby.

She was also a successful movie star.

## The month in review

- The month started with lousy weather, but a substantial improvement towards month end, particularly with balmy flying conditions in the early evening.
- The Nationals have been done, this year in Matamata. From all accounts this was a very successful meet. Next year's National's planning is considering moving the event to Easter, to get away from the traditional Xmas/New Year family commitments. Details available from MFNZ.
- Wings over Wairarapa – Another great event. A smaller turnout of aircraft on display and reduced number of attendees, but highlights for Andy included replicas of the 1910 NZ Pither monoplane, and the Richard Pearce plane. It was fascinating to see a formation of WW1 aircraft, including the world's only flying FE-2b (pusher prop – max speed 80mph, cruise speed 75, stall speed 40). This would be a great model for electric power. New activities included a large collection of commercial UAVs. Andy Avgas met several of our members on the very hot Saturday. This event was also used to host a symposium to discuss UAVs (unmanned aerial vehicles – FPV, drones, etc). Civil Aviation are developing a policy to control this activity and the modelling fraternity is looking for a sensible outcome which does not impact adversely on our activities.
- Roger Balfour has gained his wings – congratulations!
- Who left their Cloudsfly on the roof of their car and then drove off.? Big Ooooops! It still hasn't been found.



FE2b "Sparrow Strainer"

- Didn't the BBQ go well! Good turnout of members, friends, and family. The wind died off and we had perfect flying conditions till late. Did anyone take any photos? Lots of comments that we should do it more often.

## Committee Stuff

*"To get something done, a committee should consist of no more than three men, two of whom are absent" – Robert Copeland.*

Your committee met on 21 January and the following were noted for inclusion in the newsletter:



- **Observers** – the rule requiring 2 observers for 2 planes was felt to be cumbersome as this required the second pilot to find 2 observers. The rules have now been re-written such that:
  - One pilot under 400 feet – no observers
  - One pilot over 400 feet (ceiling 500 and 650 feet), - 1 observer
  - More than one pilot – number of observers is one less than number of pilots.

It was felt that this change would not compromise safety as 1 observer was deemed adequate to look after 2 pilots, with an emphasis on collision avoidance, looking for full size aircraft movements, and looking for pedestrian traffic on the walkway. The revised rules have been published on the webpage under "Services – Documents".

- **Flight etiquette** – please refrain from idle distracting chatter when acting as an observer.
- **Frequency board** – in these days of 2.4GHz radios the use of a frequency board is often overlooked. If you are a flyer using an older style cardboard radio, you **must** use the frequency board to ensure that someone else does not just "happen" to use your frequency.
- **Flight Box** – we used to have 2 pilots boxes. Following the extension of the runway, and other improvements, the current pilots box (with the protective fence), is now midway down the runway. Please use this for all flying.
- **Google groups** – This was a service available for members of Kapiti Aeromodellers' Club to exchange ideas. It is very popular with other clubs, eg WMAC, but for some reason never took off with our club. It has been decided to discontinue this service and the procedure to access this service has now been removed from our website.
- **Pit tables** -The new pit tables have been well received and are in constant use. The committee would like to hear from members on views on where they should be located and at what height (legs designed to be dug into ground)
- **Member welfare** - In the last month the Committee became aware of a member who had become hospitalised, but we had no way of contacting him or his wife to offer support. Our role as a club goes far beyond simply providing a venue to fly toy planes – it is a group of common minded people who can offer each other mutual support and companionship in a range of situations. None of us are getting any younger and we have a large group past retirement age. If you become aware of any member in difficulty, for any reason, please contact a committee member and we will endeavour to organise whatever support may be appropriate.
- **Blackberry** – The President is in contact with the park managers and it has been suggested that the club contribute towards the cost of removing the blackberry. This may be a good investment for the club, to be paid from retained earnings. Alastair is to meet with the contractor to discuss rates and work out what can be achieved for what cost. If it looks doable, then a proposal will be developed for your committee to approve, and for park endorsement. It is anticipated, that once removed, the park will cover the costs of ongoing maintenance to prevent regrowth.
- **Track upgrade** – the park managers have announced an intention to upgrade the walking track across the Northern end of the runway. This could impact adversely on flying activities if the walkway becomes popular. The President has made an oral submission to the Senior Park Ranger and we have been assured that our concerns are known and will be addressed. The Council has also called for public submissions so make your personal views known to Stuart Kilmister, Cycleways, Walkways, Bridleways Planner.

**Email:** [stuart.kilmister@kapiticoast.govt.nz](mailto:stuart.kilmister@kapiticoast.govt.nz) **Phone:** 04 296 4631

For more information see <http://www.kapiticoast.govt.nz/Our-District/Bridleways-cycleways-and-walkways/>

## Coming Events

- Club night - Tues 17 Feb. 7.30 pm at the Paekakariki Surf Club rooms.
- Silver Squadron BBQ lunch - Thursday 19 Feb
- 20 anniversary Rally – 7<sup>th</sup> and 8<sup>th</sup> March
- Waitangi day celebrations at the park – 6<sup>th</sup> February. The Council will be holding a function from 10am – 4pm and the roadway access will be ‘closed’. We are advised that if our members want to gain access they only have to turn up, state they are going to the flying field and they will be let through.

## New members

Its that time of year again where we tend to pick up a number of new members. Application forms have been placed in the clubhouse. If you are asked to propose or second someone for membership, could you please check to ensure that the forms have been completely and correctly filled out, and in particular that contact details are legible! Application forms and other information are also downloadable from our website.

## AGM

The earth is moving on schedule in its orbit and the AGM is not far away - on 21<sup>st</sup> April. At the AGM you get the opportunity to have your say on how the committee has performed, elect the next committee, and also to put issues forward for decision, or for the incoming committee to address.

If you have any issues which you would like decided at the AGM, you must prepare a “Notice of Motion” which must be in the Secretary’s hands no later than 14 days before the meeting. If you do not meet that deadline, the matter may be discussed, but cannot be voted on. You now have 3 months to develop your great idea for consideration. If you are uncertain about whether your issue needs to be considered by the AGM, or by the Committee, call the Secretary for guidance. The Secretary can also help you draft your “Notice of Motion”.

Further details, nomination papers, and proxy forms will be provided closer to the meeting.

## The Aero Pedallers

The cycling group is gathering strength with 15% of our members being active participants. In the early part of this month, with conditions generally unpleasant for flying, the cycling group has had several outings.

On Thursday 8<sup>th</sup>, 10 members (plus Dave’s wife Cherry) undertook a Christmas belly reduction ride along the river bank in Otaihangā Park. Pleased to see the good turnout of members, considering several of the usuals were out of town, injured, or otherwise occupied. The group also rode the trails in the Council owned Whareroa Farm. Not all smooth highway by any means and there were two flat tyres from the big sharp stones on the way down.



↑ Rehearsing for Rally day.

Peter Halfacre in the lead supported by wingmen John Miller and Warner Summerton. Other active pedallers include Swampy Marsh, Terry Beaumont, Ian Crosland, Steve Hutchison, Don Lyn, Ross Monk, Alastair Rivers, Peter Smith and Gordon Wood.

Andy Avgas trailing in the rear with intermittent engine failure.



High on the hills behind the Whareroa Farm. Altitude 300m. In the photo, Terry, Alastair, Pete, Peter & John.



Otaihangā Park. Gordon, John M, Cherryl Marriott and Peter

This is not a competitive activity . We ride at a leisurely pace and there is plenty of opportunity for social chat, encouragement, frequent stops and sight seeing. You have to be fit to fly and if its too windy to fly, we'll just get fitter! Come and join us – see Peter Halfacre ph 04 299 3324 or 021 057 268.

### Andy's help desk 1 - Trimming that plane



- Do you spend most of your flight fighting the plane just to keep it on line?
- Do your hands sweat and tremble?
- Are your loops pear shaped and your rolls like a corkscrew?
- Does your model pitch or yaw with changes in throttle setting?
- Are your landings like a train wreck?

Chances are your model needs to be trimmed. This is not just fiddling with the buttons beside your transmitter joysticks – this is about overall settings of control throws, wing incidence, balance, thrust lines etc. Its not just for the ace pattern flyers – a properly trimmed model will reduce the pilot work load for all planes be they sports, scale, or vintage.

The definitive source on a trimming sequence is that developed by Peter Goldsmith back in the last century. Look him up on Mr Google and you'll find many references and variations. A downloadable version has been added to the "useful links" section of our website, for those who have difficulty in

finding a suitable version. Alternatively, contact the Secretary for an email or paper copy.

Before undertaking the trimming sequence, have a look at your control throws. Make sure that you are using 100% or more of servo travel to get your desired control surface throw. Servo's generally work over a +/- 45 degree range, whereas your control surface will be +/- 20 degrees or so. To get this set up your elevator/rudder/aileron horn should be twice as long as the servo arm. If you have dialled your servo travel back to say 50%, you will be losing servo accuracy, repeatability and centring reliability.

### Andy's help desk 2 - Disposal of LiPos

Recently at the field I came across an old Lipo battery which someone had dropped into a bucket full of fresh water in an attempt to discharge it. The assumption was that someone (me ?) would eventually take it away and dispose of it. **I AM NOT YOUR MOTHER!** Please remove all your own trash.

A LiPo battery can be safely dumped in landfill once it has been discharged. One discharge method is simply to drop it into a bucket of salt water. The problem with this is that the salt water solution will only sustain a current of a few milliamps, and if the battery has a capacity of eg 2200mAh, it might take a week or so to flatten. Don't use fresh water as it is an insulator and the battery will not discharge.

A better method is to connect the battery to a light bulb or other load – with a 3s battery and a 10W car indicator lamp, you will get a discharge current of 1A which will discharge the battery in a couple of hours. Note that if the battery has a damaged cell, the passage of current through that cell may cause heating and battery swelling = potential explosion. Always put the battery in an earthenware pot and discharge outdoors.

When the battery is fully discharged (check with a meter) cut off the leads, one at a time, strip the insulation from the leads and wind together before throwing in the trash. This last step will ensure that the battery does not "recover" as some LiPos are prone to do.



### 10 years ago

Steve Alexander has kindly donated a stack of early "Kapiti Model Flier" newsletters dating back to 2003. This would have been a mammoth production before email, and relying on hard copies, printing, addressing envelopes and stamp licking. Its a lot easier these days! In February 2005 the President was Terry Beaumont, Editor - Nick Furmage, Secretary - Bruce Maroc, and Club Captain - Colin Taylor.

The highlights of that month were:

- The arrival of the new Kubota lawnmower. It was promptly named "Orange Roughy" but the name seems to have been lost over time.
- Complaints about the weather – too much wind. Surprise, surprise!
- Lots of familiar faces – Paul Buckrell with his F-15, Ron Nichols, Colin Taylor, Jim Hamill, Murray Milsom, Don Lynn.

- Praise for the installation of a bar at the Surf Club, with an expectation of having a barman at club nights – yeah right!
- Ron Nichols and Terry Beaumont attended a 10 year review of Queen Elizabeth Park Management Plan. KAMCI was the only park user group to attend. (Does this mean it is time for another review of the plan?)

## Rally Planning

As you have been informed many times, our rally is planned for 7<sup>th</sup> and 8<sup>th</sup> of March. This is a special event this year to celebrate 20 years of our club. Organisation is underway but we need to enlist the services of club members, on the day, for various duties. If you can help, please register your interest with the following:

Team	Leader	contact	Known 'gaps'
Catering	Brendan Whitaker	04 293 8876, 021 955 081	
Gate control and parking	Warner Summerton	04 293 7509	
Registration	Tony Whatmough	04 904 9167	need a couple of spare hands at the start of each day
Model scrutineering	Paul Buckrell	04 479 5995, 021 422 633	
Flight line control	Ryan Groves	04 528 5284, 021 630 605	
Field setup	Steve Hutchison	021 644 595, 021 644 595	lots of hands needed at start of day and at end of rally.
Commentator	David Treseder	04 233 8328	looking for 1-2 backups.
Publicity and general admin	Dave Marriott,	04 2347151, 021 909407.	In month before rally, looking for several hands in outlying areas to distribute posters to shops, libraries etc
Other tasks	1. We need a volunteer to make several large prominent donation boxes in an aviation theme. 2. If you hold a current first aid certificate and will be attending the rally, could you please let Ryan know. The Council requires us to have a list on hand of first aiders.		

If you have any bright ideas on ways of enhancing our rally to especially mark the 20<sup>th</sup> anniversary, please let any of the above team know.

For those members who intend to fly at the rally, a new page has been added to the website - "Rally 2015". This contains downloadable copies of registration form, rules, and model checking processes. Check this out and then there will be no surprises on the day.

**Weird, unusual or somewhat interesting links, loosely connected to aviation** (copy and paste link into your browser)

- FPV, indoor, carrier landings, star wars, marvel comics – its all here! <http://flitetest.com/articles/will-it-fly-avengers-helicarrier>
- "The faster we went, the less fuel we burned" - tales of the SR-71 <http://www.chonday.com/Videos/sr71jetplane1>
- Evolution of cockpit design, from the Wright Flyer to present day A380. <http://www.laboiteverte.fr/21-cockpits-davions>
- Flying the FE-2b <http://thevintageaviator.co.nz/projects/fe-2b/flying-fe-2b>
- Windy day at Birmingham airport – just like Kapiti! <https://www.youtube.com/watch?v=IP35ULU6IcQ>
- Solar Impulse – round the world flight on solar power - <http://www.engadget.com/2015/01/21/solar-impulse-2-schedule/>
- Re-union of giants – more Lancaster footage - <https://www.youtube.com/watch?v=5O12rem6d3g>
- Did you know? - the NASA "Opportunity" rover which landed on Mars 11 years ago for a 3 month mission, is still active and has covered more than 40km. Not bad for a skateboard sized solar powered radio controlled toy car!
- Fines for improper use of a drone <http://www.news.com.au/technology/gadgets/qld-man-first-in-australia-to-be-fined-for-flying-a-drone/story-fnda1lbo-1227196644698>
- Re-enactment of dambusters raid (photos + video) <http://www.dailymail.co.uk/news/article-2325460/Dambusters-Back-began-lone-Lancaster-marks-70-years-audacious-Dambusters-raid.html>

## Secretarial apologies

Sorry guys – an unintended glitch this month I sent out a general email to all members but inadvertently omitted to make it “BCC”. If anyone feels their privacy has been compromised, please accept my apologies. I am happy to pay a penance such as polishing your propeller, or tidying up your field kit, if that helps.

( just give him a good thrashing – Andy → )



## Safety note



A reminder that a first aid kit is kept in the clubhouse, and a defibrillator is available at the Rangers Office. ( take your mobile phone as you will need to call 111 to access the code to release the unit).

## Editors Notes

- Next time you go for a fly, take a digital camera with you, and email me some photos with a brief story. Always looking for items of interest, gossip, rumours and lies! If you want aeroplane photos – send me some!
- This is my 32<sup>nd</sup> newsletter and it may be time for a rethink on structure and content. Let me know what you like or dislike. Do you like to receive committee stuff, internet links, Andy's (sometimes) helpful technical stuff, advice of new members, coming events etc. ? What would you like to hear about? More bike photos ? Is the newsletter too long or too short? Would you like a bigger/smaller font? In the absence of a reply you may in future get a blank screen with a Kapiti Aeromodeller's logo! Comments to [kapitirc@gmail.com](mailto:kapitirc@gmail.com).
- I have had a couple of complaints from members who felt that they thought they had joined an aeromodelling club and "*I don't want to see any more of that bike shit*". Point noted. I have now set up a separate email list for those interested in the pedalling sideline. If you are vaguely interested but have not yet taken part, please drop an email to [kapitirc@gmail.com](mailto:kapitirc@gmail.com) and I'll add you to the cycling group email list. A separate page on the cycling group has been added to the web site.

Didn't the BBQ go well! Good turnout of members, friends, and family. The wind died off and we had perfect flying conditions till late. Did anyone take any photos?

Thats all for this month folks. May the wind be down the strip, your batteries always be charged and the right wing bolts in your flight kit. It helps if you take your transmitter.

Dave M  
Editor  
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