

ROTOR TORQUE

25th Anniverserary

October 2012 issue 125

2012/2013 Committee

| | |
|----------------------------------|----------------|
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| Events Officer | Rob Hopkins |

Official Newsletter of the Melbourne Radio Control Helicopter Club Inc. Inc. no. A0014397D

October 07
October 14
October 15
November 16 / 17&18
December 02

25th Anniversary
Fun Fly #5
General Meeting
Victorian State Championships
Xmas BBQ & Awards

MRCHC Cornish College. BBQ Lunch
MRCHC Cornish College. BBQ Lunch
Dingley International / MRCHC Club House
State Flying Field
MRCHC Cornish College. BBQ Lunch



Fun Fly at St Leonards about 1992



Curtis Youngblood starting up at the World Championships at Wangaratta in 1991



Close up of Curtis's model. Fuselages were all the go then.



One of the tents at the Worlds for competitors models



Ian Anderson telling us a little of the history of the MRCHC after the AGM



James Dargue's terrifyingly fast Kasama



Close up of the awesome 5 bladed head of the Hughes 500E



Some of the models that attended.



Sign of the times – the array of chargers and batteries on charge



The fabulous cake Jeff made with Dieter lighting the 'candles'

ELECTRIC, Or NITRO HELICOPTER?

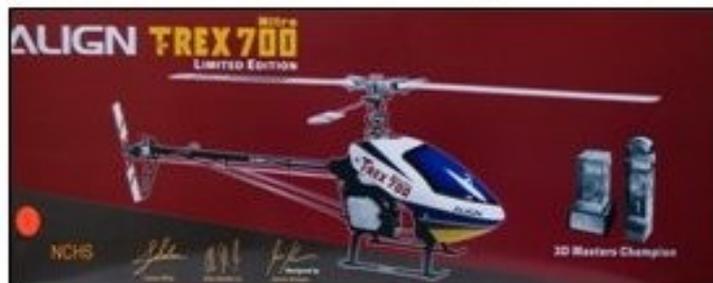
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PRESIDENTS REPORT



As my first report, I would like to take this opportunity of thanking Roger for providing steady guidance and leadership to our Club during his long tenure. The Club is in great shape, our membership is stable and our finances are solid. At the last AGM when Ian Anderson (a past member, past president and life member) proposed the honour of life membership for Roger, he offered some wise words to the committee – always keep in mind that you are there to serve the membership. Please get to know your new committee and discuss your requirements / issues with them. All I ask for is that all communications are positive and constructive – rather than offer complaints about what is not working – provide a constructive recommendation of how you would like to see the issue addressed.

There are many exciting things happening at the club this month! Firstly we celebrate our 25th Anniversary on the 7th October. This is an important milestone and we hope you will join us for the celebration. Also, we are about to acquire a significant piece of infrastructure through the generosity of one of our members. Our new Club House – or maybe it should be a Club Resort – is huge! The Club membership unanimously approved the purchase and I hope we will be able to use this facility for our club meetings in the future. The School has advised us of the best location and offered to assist with the trenching to deliver power and water. We also plan to keep the existing club house for storage and charging facilities and will retire the small shed which has served us well. As a sign of the way the facilities at our club have grown, the small shed was our only infrastructure for many years, before we acquired our new cabin about five years ago.

As we have grown and as new technologies emerge, the time has come to review how, what and where we fly. We have proposed a subcommittee to review this and provide recommendations for the membership to approve. To provide a varied perspective, Rob, Ben and Jason R have volunteered to produce a proposal and we invite club members to join this working group. Please advise any of the above three of your intent to assist.

Our Club is hosting the State championships in November at the State Flying Field. While this is not everyone's interest, please consider supporting your club. We plan to host a demo F3N Schedule on Saturday afternoon which we hope to incorporate into our Fun fly's in future to cater for our 3D Pilots.

I don't like to single out any single member for special mention – but maybe we can create a Legends Wall in our new clubhouse. While people like Andrew Donaldson and Simon Lockington (many years of representing Australia in F3C), James Dargue (3D master) might be candidates, one of my recommendations for Legend Status would have to be Dieter Keller! Always pushing the envelope of his flying, he is an inspiration to us all.

Looking forward to seeing you all at the Fun fly on the 7th – hope the weather gods will be kind to us that day!

Treasurer Report



So far this has been an uneventful year financially. There will be a bit more bean counting excitement soon as we are planning to spend around \$6,000 on relocating our new club house to the field.

Membership

We currently have 48 members, including three who have joined this year. Welcome to the club to:

- Steve Ciberlin (July)
- Nigel Gatley (August)
- Robin Gray (September)

Balance Sheet

Here is the September quarter balance sheet position:

| Account | This Year | Last Year | Difference |
|-------------------------|--------------------|--------------------|-------------------|
| Assets: | | | |
| Cheque | \$7,106.33 | \$8,231.84 | -\$1,125.51 |
| Undeposited Funds | \$0.00 | \$0.00 | \$0.00 |
| Investment | \$26,105.58 | \$20,371.74 | \$5,733.84 |
| Petty Cash | \$687.35 | \$568.65 | \$118.70 |
| PayPal | \$184.00 | \$184.00 | \$0.00 |
| Withholding Tax Credits | \$87.00 | \$0.00 | \$87.00 |
| Trade Debtors | \$300.00 | -\$100.00 | \$400.00 |
| Liabilities: | | | |
| | | | |
| Net Assets | \$34,470.26 | \$29,256.23 | \$5,214.03 |

The Trade Debtors amount is simply a function of incurring the expense last year and paying it this year – lopping the trees at the end of the flight line.

So you can see that we have improved our asset position by \$5,214.03 so far this year, but we will change all that when we pay for the new club house to be moved and for our 25th Anniversary celebrations.

Year to Date Income & Expenditure

The Club income comes from membership fees (the bulk of which come in at the end of our year at annual renewal time), events, bank interest and etc. at the club house.

| Income | This Year | Last Year | Difference |
|---------------------|-------------------|-----------------|-----------------|
| Membership | \$775.00 | \$340.00 | \$435.00 |
| Events | \$0.00 | \$440.00 | -\$440.00 |
| Sale of Drinks etc. | \$153.25 | \$111.00 | \$43.25 |
| Bank Interest | \$194.74 | \$0.00 | \$194.74 |
| Total | \$1,122.99 | \$891.00 | \$231.99 |

Generally our expenses fall into the categories listed below:

| Expenditure | This Year | Last Year | Difference |
|---------------------------|-------------------|--------------------|--------------------|
| Field Expenses | -\$400.00 | \$1,595.54 | -\$1,995.54 |
| Meeting Expenses | \$0.00 | \$110.00 | -\$110.00 |
| Club Training Helicopters | \$0.00 | \$0.00 | \$0.00 |
| Events | \$0.00 | \$113.00 | -\$113.00 |
| Food, Drink etc. | \$255.10 | \$120.10 | \$135.00 |
| Other | \$8.40 | \$262.45 | -\$254.05 |
| Total | -\$136.50 | \$2,201.09 | -\$2,337.59 |
| Net Profit/(Loss) | \$1,259.49 | -\$1,310.09 | \$2,569.58 |

The significant difference between this year and last year is our last year donation to the new school of \$2,000.

As always, if you have any questions about the club finances please contact me.

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Thank you and Other Thing

Roger Chapman



I just wanted to say how touched and honoured I am to have been made a life member of the MRCHC at our last AGM. Ian Anderson, an instrumental and founding member of our Club, who is also a life member, came to the meeting, I thought, just because he knew I would not be re-standing for the Presidency. Well that might have been part of it but it was also no doubt part of what he knew was to be proposed. I was rather taken back when at the end of our meeting Ian said he had something to say and as protocol goes asked me leave for a bit. When I was called back, the news was conveyed to me.

So to all of you, a very sincere thank you.

I will hopefully still be able to contribute to the Club in a meaningful way but it is fair to say as I mentioned in the last Newsletter, life is fairly complicated for me at the moment dealing with work and family health issues so you won't be seeing me around the field as much as I would like. I am still hopeful I will get my act together at some point and this will change.

I wish the new incoming committee under the leadership of Jeff smooth sailing ahead. It is an exciting time not only with the technology that is occurring in the hobby but also at our field. The school has been accommodating in allowing us to upgrade to a much larger Club House which has been kindly donated to us by a genres club member . Also of course next Sunday 7th October we have the celebratory event that marks the 25th Anniversary of our Clubs Incorporation. Having said that, this makes for a good segway into the following Club History. So with it being 25 years since the Clubs Incorporation (10 September 1987) and our celebratory event coming up next Sunday it is appropriate we reflect on the Clubs history. The following was provided by Ian Anderson. It is not a complete history but looks at more the Clubs beginnings. It is intended this be expanded and ultimately accessible through our web site.

History of the Melbourne Radio Controlled Helicopter Club Inc

The Club was formed in April 1987; this came about for the following reason.

For many years a group of Helicopter Enthusiasts had been flying at a school oval in Malcolm Road Braeside, this place was called Beda Park and was owned by St Beads College, unfortunately the school sold the land to a developer who quickly began turning it into an industrial estate.

One of the first problems this informal group of flyers had was to find a new site, and as we looked it became obvious that a club was needed so we could approach various schools and other people who might have been able to give us access to land.

I had mentioned the idea of forming a club many times but everyone was happy with the informal arrangement, however time got the better of us all and along with Max Tandy, Graham Smith and Paul Webber it was decided to have meeting to test the interest in officially forming a club.

One of the most important things that was required to gain a site was the issue of insurance, so in April 1987 a meeting was then called to see about the formation of a club.

This meeting was held at the home of Graham Smith in Frankston, there was little publicity and people only found out by word of mouth. We only expected about 20 people to turn up, well we were wrong. Such was the interest that about 50 people arrived this was more than we had ever hoped for.

It was decided that a club would be formed on that night with Barry Hendy to be President, Graham Smith Vice President, Max Tandy to be Secretary with myself, Ian Anderson being the Treasurer.

These 4 were to get things going and then to get the club registered prior to an official general meeting being called to vote in a full committee.

On the evening we had a loan of \$1000.00 made to the new club by Archie Robinson, this got us up and running until membership fees were worked out and we began to officially get members.

By the end of June 1987 we had 50 official paid up members and the formal committee was formed, this was as follows,

President: Barry Hendy, Vice President: Graham Smith, Secretary: Paul Webber, and Treasurer being myself, Ian Anderson.

Through a friend, Max Tandy approached St Leonards College at Bangholme and within a short space of time the club had a home the same place we use today.

St Leonard's were very accommodating and we were soon allowed to put up a shed that was donated by Keith Feldman. They also regularly mowed an area for us to be able to fly from.

One of the first official competition's the club was to begin running, was the Victorian State Titles. These had for many years been run by the Doncaster Aero Club owing to the fact they had a few Helicopter Flyers. The first event at the new club field was held on the main football oval to the right of the driveway as you enter. The school gave us access to an adjacent pavilion where we set up the scoring which was done manually then. We also had access to a Kitchenette. At that time the school wasn't as developed. What was the caretaker's residence has since been consumed by the schools expansion and is now the Principals Office. The current caretaker's residence came much later. With fewer buildings than there are today, our club shed was located to what is now the north end of the carpark.

By 1991 the club was up to 105 members and things were running well, it was in this year we were asked to take on the biggest task we had been involved with. That was to be the running of a World Championship event to be held at Airworld in Wangaratta. This event was to be run with Pattern & Pylon flying as well; a committee was formed to run the event comprising people from the various interest groups involved.

Barry Hendy, Bruce Smith, Paul Dewar and myself were to be the Helicopter representatives on the committee. Barry Hendy was appointed as the CD for F3C as he was the most experienced helicopter pilot in Australia and had been National and State Title holder many times. I was his assistant CD.

The event drew on the resources of the whole club with about 20 members being involved in the 5-day event and many more members taking the time off work to attend. We in Australia had never seen such high standard of flying and I am sure those members that were involved will never forget the experience.

The highlight of the event was an informal fun fly following the completion of the competition which was to be mainly for the people who had helped and the contestants both local and international that had attended. We anticipated and were prepared to cater for about 60 people but the attendance was overwhelming with about 500 turning up to watch the international visitors one of whom was Curtis Youngblood. This was the first time any of us had seen him fly. This was well and truly before 'U Tube'. We were all amazed at what this guy could do with a model chopper and it left many of our members with ideas as to what they could do. It was the first time we had seen what was really the beginnings of what was to become 3D flying as we know it today.

It was not long after the event that back in Melbourne we suddenly saw Robert Barbuto, John Wessell, Simon Ventevogel all beginning to do this strange 3D style of flying. It was certainly entertaining to watch but also costly in the early days as many models were lost practicing – not just from brain fade but also mechanical failure. Unlike now, models back then were generally not engineered for such a work out.

Max Tandy, was presented with Life Membership to the club for services and his contribution to the hobby at the time. He spent many hours introducing and encouraging new members to model helicopters and made many instructional videos. Max moved to Queensland about the mid 90's and became a distributor of X-Cell Helicopters and then when ill health overtook things he sold the business. Sadly Max passed away several years ago.

Over the years this club has been lucky to have had many members who have contributed to make it the successful club it is today, here are just a few of the names from the past. Some of you may still remember them. (Sorry to anyone I missed out)

Marvin Carr, Robert Barbuto, John Wessell, Simon Ventevogle, Paul Webber, Nick Csabafy, Max Tandy, Graham Smith, Paul Dewar, Barry Hendy, Mike Farnan, Glen Attwood, Archie Robinson, Keith Feldman, Mike Smith, David Crump, Lindsay Henderson and Peter Banhidi

I have left one name off for a reason, that name is Roger Chapman. Roger deserves a special mention, he has been involved with the club for a very long time now and has been the backbone of the committees over the years, our club should think itself lucky to have a person of Roger's calibre who devoted many hours to the running of the hobby at club, state and national level.

Since the clubs inception we have run many State and National events all with a great deal of success however the event that sticks in my mind as being the most successful was the first Shepparton International Helifest, we were able to attract many of the Japanese team flyers and of course Curtis Youngblood with some help from the MAAA and a lot of help from Mike Farnan from Model Engines.

For a while the event was run every 2 years and was widely accepted by Helicopter enthusiasts from all over Australia who travelled from the most remote of places to attend.

Through Nick Csabafy & Graham Smith we got involved with the Make A Wish Foundation who caters for kids with terminal illnesses. Through this organisation we began teaching David Chambers to fly model helicopters. David was confined to a wheelchair and only had limited use of his hands, but it was great to see the smile on his face when he finally managed to get a model to hover it was quite an achievement. Unfortunately David passed away at the age of about 18 but I am sure he loved his trips to the field and watching the models fly.

Over the years many of our members have travelled all over Australia competing in State & National events, and some such as Mike Farnan and Andrew Donaldson have represented Australia at the World Championships and have been very competitive.

Mike Farnan has achieved more than any other member winning more State and National titles than any other flyer in Australia, and he has represented Australia at International events approximately 5 times.

Mike also set world records for long distance flying over land and flying over water, these records have not been beaten and will not be for a long time I suspect. His achievements are recorded in the Guinness Book Of Records.

In more recent times with the introduction of International 3D competitions to accommodate this popular style of flying, James Dargue has excelled and has competed several times at the 3D Masters. An incredible achievement as one needs to be of a very high standard to be selected to compete at this event.

As a Club we should be proud of what we have achieved nationally and internationally from such small beginnings.

This is only a brief history of the club and its beginnings but hopefully it will give you some insight into how the club was formed and for what reasons.

Here is a list of Club Presidents from the first years to now

| | |
|-------------|------------------|
| 1987 / 1989 | Barry Hendy |
| 1989 / 1992 | Ian Anderson |
| 1992 / 1993 | Bruce Smith |
| 1993 / 1996 | Paul Dewar |
| 1996 / 1999 | Ian Anderson |
| 1999 / 2000 | Wayne Devlin |
| 2000 / 2002 | Peter Banhidi |
| 2002 / 2007 | Roger Chapman |
| 2007 / 2008 | Andrew Donaldson |
| 2008 / 2012 | Roger Chapman |
| 2012 - | Jeff Sussman |

I hope from my part in the formation of the club, that it will prosper and continue to grow, and maintain the ideals that were put in place in the early days. That was to promote and foster model Helicopter Flying in Victoria and beyond, I am sure we have well exceeded our expectations over the many years and will continue to do so.

Ian Anderson

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Problems with Thinner Foliage

We all know that supposedly it is meant to be good for lemon trees – but as we don't have any lemon trees behind the club house and as the foliage to the trees is a lot thinner than it used to be – the activity of 'watering' unfortunately has been noticed. We don't want a formal complaint to come our way especially when the school is being very accommodating with our new club house. Among other things we don't want the wall of the club house to smell like a urinal or any area near their recycling storage area for that matter. So please from now on do the right thing and grab the key out of the shed and use the toilet located in the radio club.

Next Meeting

With my new committee hat on (Public Relations) it is a topical time to look at how far our hobby has come in the last 25 Years or so - at the next meeting we are going to have a show and tell with some models. Hopefully it will be fun just seeing the comparison of where the hobby started to where it is now. Also, all being well, some movies of early pioneering efforts of modelers to sort out how to make a model helicopter flyable. Try and come along it should be a good night.

MRCHC 25th Anniversary

To celebrate the 25 years since our club's formation and as most of you know because you were there, we had an informal Fun Fly and BBQ last Sunday (7th October).

The weather started off a bit dodgy but cleared by the afternoon. It was great to see such a fabulous turnout that included some visitors from other clubs. It was also great that Ian Anderson could make it – if you have just wondered who Ian is, read Ian's 'MRCHC History' piece in this newsletter. Ian was instrumental in the formation of the Club back in 1987. Also Nick Csabafy, who as one of the photos reminds us, has also been around a long time and he too has been part of the Club from almost the beginning. For many years in the early to mid 90's, Nick was the Club's Newsletter editor.

There are some photos in this newsletter from the day which include a group photo of those that attended. In saying a few words I inadvertently thanked Jeff's wife for the cake but as Jeff quickly pointed out it was he who cooked it! Now this was no ordinary cake– it had to be in the form of a helicopter of course. So watch out 'Masterchef' as I don't think I am overstating things to say the cake was absolutely fabulous – may not win too many prizes in the 'glam' department but hey you could tell it was a helicopter and more importantly it tasted great. Well done and thanks Jeff.

Special thanks also to Rob for the huge effort he put into setting up the field and all the organizing he did to ensure the day ran smoothly. Well done and thanks Rob.

We had a fantastic array of helicopters both on show and flying – these included Jeff's Schluter Heli Baby fixed pitch machine showing where the hobby all began to James Dargue's terrifyingly fast Kasama. He thrilled us with an insanely high auto and blade stop. James's skill coupled with state of the art technology shows just what exciting flying potential there is. In the scale department our Club President Jeff also had his Hughes 500E multi bladed head model. Awesome detail, with a matching scale rotor head that finishes off the model beautifully. Back in the beginning this was what dreams were made of but unfortunately even back 10 years ago there wasn't the technology to bring all this together as a viable flying machine – but now it is.

It was a great day – thanks to all those that helped out, visitors, sponsors and for you the members who came along and supported the day.

Roger Chapman

Secretarys reports

Welcome to my first report as secretary of MRCHC, the club has been left in good stead from the helm of our recent retiring president, Roger placed time and considerable effort over the years to make sure this club prospers and continues to provide a place for all of us to enjoy our hobby. So to Roger I thank you for your immense effort over the years and hope you will be able to fly more regularly in the future.

Now enter our new president Jeff Sussman and I'm sure everyone knows Jeff, he is one to make new members known to him and if anyone needs to know whats new on the scene Jeff keeps aware of new technology which seems to be changing all the time.

There is going to be changes happening soon if not all ready, the new club house is for everybody to use so I hope that not just a few but someone will see that it needs a tidy up or clean, it belongs to us all and also broken blades could be taken home or disposed of somewhere else, sometimes I find them sticking out and as we all know after been crashed the splinters are apparent.

Also to change will be the flying stations, the members will be voting how this will be set so if you want to have a say come along to the general meeting and voice your opinion, once the areas are agreed to the map will be updated at our website go to newsletters/documents then click on new member induction booklet Appendix C - Flying area.



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The image is a promotional banner for ARK RC. On the left, the logo 'ARK RC' is written in a large, stylized, orange-to-red gradient font. Below it, 'RADIO CONTROL SPECIALISTS' is written in a smaller, white, sans-serif font, and '.COM.AU' is at the bottom. On the right, there is a close-up photograph of a red and black RC airplane's fuselage and wing. Overlaid on the bottom right of the image is the text 'NEED MORE HELP?' in white, bold, sans-serif font. Below that, 'or call' is written in a smaller font, followed by the phone number '+61 3 9495 6882' in a larger, bold, white font. A small red and white icon of a telephone handset is positioned to the left of the phone number.

Calculating Flight Time, Watts and Amps

Posted by Steven Carroll, Team HeliProz Pilot

Calculating Flight Time

In order to calculate an accurate flight time we need a smart charger capable of reading out mAh on a display. With a FULLY CHARGED battery, go ahead and fly your helicopter around for a set amount of time like you would normally fly. Try to not start the flight timer until the helicopter is spooled up and turn it off when you land or kill the motor (auto).

Take a 5000mAh battery that is flown in a 700 size heli. We fly for 5 minutes and recharge the battery putting back in 3000mAh.

Take the mAh charged and divide by the flight time.

Formula:

$(\text{mAh recharged into battery}) / (\text{flight time}) = \text{average mAh per min (for units we assume minutes)}$

Example:

$(3000\text{mAh}) / (5 \text{ minutes}) = 600\text{mA per minute of flight average draw}$

Knowing that we are using this, we can then take what is called the 80% rule for discharging Li Po batteries and estimate what our full flight time might or could be.

Formula:

$(\text{mAh recharged into battery}) / (\text{battery capacity}) \times 100$

Example:

$(3000\text{mAh}) / (5000\text{mAh}) \times 100 = 60\%$

So in theory our battery has 20% more use left before we need to land safely. Knowing that we use 600mAh per minute and 4000mAh = 80% of our batteries capacity, we can safely assume that our flight time can be up to 6.67 minutes instead of the 5 minutes we flew.

Calculating Average Watts in Flight

Using the average flight time amps pulled you can easily calculate the average watts used in flight with this equation.

$$\text{Watts} = \text{Volts} \times \text{Amps}$$

Voltage should be taken as a nominal pack voltage (so 3S would be 11.1V, 6S would be 22.2V, 12S 44.4V). Now under load batteries do fluctuate and go up and down according to load but overall this is a good average voltage.

So taking my example from the 450 size heli with a 3S 2200mAh pack pulling 15 amps average during flight, the equation would look like:

$$\text{Watts} = 11.1\text{V} \times 15\text{A} \Rightarrow 166.5 \text{ Watts}$$

Another example of my JR NEX E8. 2 x 6S 3800mah lipo average flight of 5 mins using 2500mAh per pack or 5Ah in flight = 60Amps average flight draw

$$\text{Watts} = 44.4\text{V} \times 60\text{A} \Rightarrow 2,664 \text{ Watts}$$

Calculating Average Amp Draw

Take a 2100mAh battery or 2.2Ah (450 size heli pack) and say we used 1500mAh in a 6 minute flight.

Ah = amp hour, so 1Ah is 1 amp for 1 hour, 3Ah is 3amps for 1 hour, etc

So we have 6 minutes (flight time) and 1500mAh -> 1.5Ah, since we used 1.5Ah (amp HOURS) in 6 mins, we discharged the pack 10 times faster than an hour, so we multiply this by the Ah/mAh used.

Average Amp Draw = 1.5Ah or 1500mAh x 10 = 15A

**ERRORS in calculations can occur from both the flight time calculated by user and the charger. To get this estimate as accurate as possible, care needs to be taken to start and end the timer when the helicopter is fully spooled up and when it lands. The charger also needs to fully charge the battery and some do so more efficiently than others. Although this error is likely to be small, it isn't exact and should be treated as such*



State Championships held on the main St Leonards Oval – about 1990. That's Roger competing in Novice.



Simon Ventevogle watching Rob Barbuto fly his X-Cell. Jetranger body was very popular back then.



Our only female club member, Marcia flying Wally Sterns Bell Huey at Braeside about 1986



Group photo from State Championships held at P&DARCS 1996



Guess who and looking very youthful. A clue – NC

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Melbourne RC Helicopter Club Inc. Flying Rules) **updated Feb 2011**

The MRCHC has an outstanding safety record. The safety of our members and our visitors is foremost to the Club and so the following rules are in place to help maintain a safe flying environment. Please observe the following rules at all times.

1. No member shall fly or operate their **helicopter equipment**, which has not been tested and checked prior to first flight, is obviously faulty or is obviously in need of repair.
2. No member shall fly or operate **equipment** to the danger of others or in a manner as to present the likelihood of harm or injury to person's or person's property.
3. The **Frequency Keyboard** shall be used at all times where possible for 36Mhz . NO person shall fly or operate any equipment unless the appropriate frequency key is in position on the keyboard. No person shall **remove a Frequency Key** from the Frequency board apart from the owner thereof.
4. **Frequency Keys** are not required for 24Ghz Spread Spectrum but transmitters must be on the approved list Refer [MOP 058](#)
5. Any member or visitor found to have **caused loss or damage** to any other member's Helicopter, property or equipment through unauthorized operation of their own equipment or by dangerous or irresponsible behaviour shall be liable for such damage or loss.
6. NO pilot shall take off or land in the **pit area**, fly over the pit area or the Car Parking area. Flying is permitted in Authorised flight areas only (ref. map in the Club House).
- 7 All pilots shall maintain 9 meter separation form their helicopters at all times
8. No member is permitted to fly unless they can be identified by **wearing a current Membership Identification**.
9. **Visitors** flying at the field must sign the visitor's book prior to flying: - Visitor Rules apply. A Current member must sponsor the visitor and brief the visitor of the club's Flying Rules.
10. A directive from a club **Safety Officer** or a Committee member shall be complied with immediately. Any dispute settled later by the committee.
11. Hovering in the **hovering area** shall not exceed 5 metres in altitude. Pilot must not hover the helicopter between the Pilot and the Pits.
12. The **hovering area** is for hovering, the model must not exceed walking pace.
13. **Mobile Phones** are not allowed on at the flight line at any time, Mobile Phones are allowed in the pits and in cars.
14. **There is to be no flying on Fire Ban days**.
15. All members who wish to fly on the **main flight** lines will require to have their Helicopter Bronze wings or greater endorsement. Visitors wishing to fly on the main flight lines will be required to have a member accompany them whilst on the main flight lines until such time as they have obtained their endorsement.