



**New signage for those who don't know where they are after landing.**

### Safety Moment

**Do you know where the fire extinguisher is?** It has been moved from the day shelter and is now in the container amenities block. You gate key will open the door.

**Do you know how to put out a Lipo fire?** – cover the lipo in sand to contain the flames. Use a conventional fire extinguisher to put out flames on shrubbery etc. Note that a fire extinguisher will not put out the Lipo itself.

We will shortly be putting sand buckets in the day shelter to deal with Lipo fires.

### The month in brief.

- We have a new camera . This was paid for by the WBOP District Council. We have come to regard this as “our” camera but it is owned by the TECT Park administration, for the benefit of all Park users.
- At a recent committee meeting it was decided that there will be no change in club fees for the 2018-19 year.
- The weekend of 24-25 Feb had perfect weather all weekend. Several members opted to stay overnight in a village of motorhomes, and tents. Roger Hutson flew one of his jets in recognition of the improvements made to the airstrip over the last 12 months.
- Revision of safety rules – The Committee is reviewing our operating rules. It is anticipated that this may result in some changes, particularly in respect of flying jets and multicopters. It is hoped to release a revised set of rules in a few weeks.
- We have bought a line marking machine. This will be used to mark out the edges of the runways, taxiways and pits areas and will act as a guide to the mowing crew. Hopefully this will enable us to maintain a 25m wide runway – at the moment it gets wider with every cut !
- You will shortly receive an invoice for Club and MFNZ fees (where appropriate). These should be paid by 31<sup>st</sup> March in order to maintain your insurance cover. MFNZ have said there is no grace period and those unpaid at 1 April will be uninsured.
- AGM – a formal notice of the AGM date April 4th has been sent to all members. This is our 72<sup>nd</sup> AGM. If you wish to stand for committee or wish to propose any remits, please get nominations and draft remits to the Secretary by 24th March.
- Rob Morgan is planning a new series of Radian competitions. Details soon.
- We are looking at another round of club monogrammed “polo” shirts. Price expected to be around \$35. If you are interested please let Dave or Bill know so we can get an idea of numbers.

## Build it and they will come.

The outfield mulching has been completed. After months of delays caused by inclement weather, equipment failure, slow parts supply, customs holdups, to name a few, the contractor finally turned up on site with two machines. These didn't just cut the vegetation down, but tilled the soil down to a depth of 100mm or so. The vegetation just disappeared. Wilding pines didn't stand a chance. Old logs became dust. On day one, one of the tractors disappeared down a hole and it took 4 hours to tow it clear. The next day there was an alternator failure, an oil pressure warning light and 2 broken driveshafts. The latter were due to hitting buried tree stumps. These have now been dug out and pushed into hollows and filled over. The contractor was always on the alert for downed aircraft and reported seeing a flash of red and white at the intersection of the two runways. Whatever it was, it is now buried in a million pieces. Sorry about that!

We now have one of the best flying sites in the country, with the outfield fully accessible for retrieval of downed models. There is room to put in two control line circles. Already some of the jet flyers have shown interest in flying at TECT Park.

The next step will be to sow the outfield with grass. We can sell this as a standing crop each year for balage. Even if we don't make money, this approach will reduce future maintenance costs. The Council has promised to assist with spraying of gorse regrowth.



Views from the South end log skid area



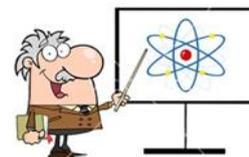
There's a tractor in there somewhere

From the North end



## Professor Flapbracket on mixing your own glow fuel

Last month members were asked if they would be interested in joining forces to purchase methanol in bulk – potential to get prices down to around \$2 / litre. Unfortunately there was somewhat less than a huge response. I have had several



requests for “how do I mix my own fuel?” Its not hard. If you can mix fuel for your lawnmower, you can do the same for your glow motors.

There are three ingredients – methanol, oil and sometimes a small quantity of nitromethane. All are freely available from model suppliers or from chemical distributors.

- **Methanol** – this is methyl alcohol, the simplest of alcohols. Methanol is poisonous, unlike the ethyl alcohol in beer, and will cause blindness if imbibed in excess. (*Ironically, the treatment for methanol poisoning is to overdose on ethyl alcohol. The ethyl alcohol will prevent you from absorbing the methyl alcohol. You will be very drunk, but alive.*)
- **Oil** – Old school engines ran on castor oil. Castor oil is extracted from the seeds of the Castor plant, and is a very good high temperature lubricant. It will often protect a “tight” engine from seizure. It has a disadvantage that it will turn to a gum over time, and engines stored for long periods will glue up. (*In WW1 fighter aircraft, pilots were exposed to oil being blown back from the engine, causing severe dysentery.*) In recent times there are a number of synthetic oils available, the most prominent brands being Klotz and Coolpower. I use both but prefer the Klotz “Super Techniplate” product which has a small percentage of castor oil, and reduces internal corrosion of the engine when in storage.
- **Nitromethane** – This is an oxygen rich chemical which when added to most fuels will increase power. It has a higher flame temperature and flame speed than methanol, which provides a better idle characteristic. It is not an essential ingredient and FAI competition fuels do not use nitromethane. For normal ‘sports’ flying, 5-10% addition on nitromethane will improve engine characteristics, particularly in desensitising needle valve lean/rich transition and idling. If you are into very high performance (eg competition speed), nitromethane of up to 65% is sometimes used. In these extreme conditions nitromethane has a cooling effect on the combustion, enabling engines to run harder without seizure. One disadvantage of using nitromethane is that the exhaust gas contains nitric acid, which will corrode the internals of your motor when in storage. If you are using high levels of nitromethane, you should flush the engine after use and use an “after run” oil. (sewing machine oil, air tool oil or gun oil).
- **Antifoaming agent** – generally silicone based. This is optional but will avoid the situation where vibration causes the fuel to foam, resulting in an engine deadstick. I use automotive “Armourall” spray – 1-2 drops per litre. This is remarkably effective in reducing foaming.

**How much of each?** Check the documentation that came with your engine. In general engines with bushed conrods and ball bearing crankshafts can accept a lower oil content than plain bearing engines. Manufacturers recommendations range from 20% oil down to 5%.

**Professor Flapbracket’s formula for general purpose sport engines** – I have used this without issues in a range of commercial engine brands including OS, ASP, SC, Saito, MVVS, Super Tigre, 2 stroke and 4 stroke. This is for general sport flying where the engine operates throughout its rev range and is not under full throttle for long periods. For running in I will add a few % of refined castor oil (available from your pharmacy).

**Oil (Klotz)** – 14%

**Nitromethane** – 5%

**Methanol** – 81%

**Armorall** – 1-2 drops per litre.

Use this formula at your own risk. If in doubt use the manufacturers recommendations for oil proportion, which will be a “safe” approach, ( ie minimising warranty risk to the manufacturer!).

## Gate Issues

We had an issue during the month where whoever opened the gate, left the padlock locked. The last person out did not have a gate key and was not able to lock the gate. He contacted the Ranger who locked the gate using the Rangers lock. All good so far. The next day’s flyers could not get in and had to find the Ranger to unlock the gate. Our new Ranger was not aware that we had given his predecessor a key.

Some learnings:

- If you are first on site and unlock the gate, please leave the padlock open.
- If you are locking up after flying and the padlock is locked, the Ranger has a key to ‘our’ padlock.

## TECT funding changes

Most of you will have heard of TECT's proposal to change the way TECT's earnings are distributed to the community. Your Secretary went to a meeting during the month to get a briefing on how the changes to the TECT funding scheme will affect clubs and sports bodies.

Key points below.

- TECT is a 26% shareholder in Trustpower. It also holds other assets which generate a dividend income stream. TECT distributes this income within the WBOP region.
- Existing TECT customers within the WBOP region get an annual dividend cheque - typically around \$400.
- It is proposed that the dividend cheque to customers is to be discontinued. Instead account holders will receive an initial \$2500, followed by 5 annual payments of \$500. This is meant to reflect the Net Present Value of future dividend payments, and provides certainty, whereas there is no guarantee that the existing scheme can be continued indefinitely. Its a no-brainer - take the money.
- For clubs the news is even better. Under the current scheme TECT distributes \$7 million annually to clubs, schools etc. Under the new scheme TECT will distribute more than \$25 million each year. This provides a huge annual investment in the local community. We may get our sealed runway !

There was an active debate after the presentation. The TECT Park ranger Darryl spoke about the benefits of putting money into a broad range of community activities other than the traditional sports of rugby, cricket, tennis, golf etc and used TMAC as an example of where a small group had been able to develop a national class facility. He spoke very highly of our achievements.

## Indoor Flying ( a perspective from Mike Rice)

At the last Club night Gary Powell talked about setting up an indoor flying group over the winter months. There was a high degree of enthusiasm for this so Gary is now trying to fine tune the details. Indoor flying was a popular activity in the club only a few years ago, so it is encouraging to see it back on the agenda. There is plenty of time to prepare, and in the meantime Mike Rice has provided some comments from his experience.

*"Indoor flying is good fun but is also somewhat challenging. We live in a three dimensional world and I was taught that an aeroplane in flight has six degrees of freedom: to*

- 1. move forwards or backwards (accelerate or decelerate)*
- 2. move sideways, to left or right*
- 3. move up or down (altitude)*
- 4. rotate in pitch*
- 5. rotate left or right (yaw)*
- 6. rotate to left or right (roll)*

*In a typical indoor flying venue there are six constraints to these freedoms:*

- the floor*
- the ceiling*
- the four walls*

*If you have not previously flown indoors, I would recommend the following:*

*Tip 1 Start off with a model which is inherently very stable. A good choice is the Aeronca Champ which can be purchased from Pete Leaver (Hangar One NZ). I started with one of these and found it very predictable. It comes with its own transmitter but is also Spektrum compatible and so can also be bound to an existing Spektrum trannie.*

*Tip 2 Learn to fly it outdoors on a fairly calm day. When you feel that you have full control, take it to your indoor venue.*

*Tip 3 Do not use the soft-start option for the motor control – you need a very responsive throttle control for indoor flying.*

*Tip 4 Do not be tempted to go for one of those lovely little micro scale WW2 foamies. I tried mine at the QE2 hall. Result: it flew straight down the hall and crashed into the far wall. Give them their due, they are almost indestructible. Someone then explained to me that (like their prototypes) they have to be flown fast to get good control response. From then on I flew it at TECT Park and never tried it again indoors again!"*



(for those who prefer to build, there are numerous designs available on the internet. Most can be made from sheets of thin Depron foam board. Also check out <https://www.rc-airplane-world.com/indoor-rc-airplanes.html> for more information. Parkzone makes a good range of prebuilt indoor models - Ed)

**And finally:-**



This is Fred Propwash. Fred uses a small catch bottle when filling his plane, to avoid the overflow from killing the grass.

Fred is environmentally responsible.

Fred is clever.

Be like Fred.



That's all for this month. Please keep the stories, and photos coming in. Don't neglect to do in a mate – no good deed goes unpunished.

Dave Marriott

Editor



