# PMP Summer Newsletter 2014

## <u>Welcome</u>

Welcome to the PMP Summer Newsletter. Fingers crossed we will have at least as good a summer as last year particularly after the very wet winter. I think we deserve one! Over the last four years I think the weather has resulted in a number of modellers deserting the hobby for less weather dependant pastimes as business is not showing any signs of recovery. On a happier note Sheila and I will have celebrated our Golden Wedding by the time you receive this newsletter so please accept our apologies for our absence during the week of the 20<sup>th</sup> - 27<sup>th</sup> May when we had a short break in Majorca.

News from PMP is the Mk2 Sierra is at the production stage although we are still waiting on the weather to thoroughly wring out the preproduction prototype properly and get the photographs for the box label. As is the case nearly all the topics discussed in this newsletter are the result of conversations we have had with modellers / customers over the last few months so hopefully they are very relevant.

## Transmitter Fuses

Recently we have had who a number of customers with blown the fuses in their transmitters. Subsequent discussions have revealed that the transmitters were switched on immediately after being taken off charge. The recommendation is that the Tx battery is allowed a period of time to settle before the Tx is switched on. The reason of course, is the battery terminal voltage, when on charge, is considerably higher than when at rest. Also, the higher the charging current (fast charge) the higher the battery terminal voltage when the Tx battery is taken off charge and the higher the risk of blowing the fuse when the Tx is switched on. If the fuse is blown, before sending the set back for servicing, see if the fuse is situated in the battery compartment as is quite often the case. If so remove the fuse, check the rating and replace with same. If the fuse blows again then return Tx for servicing.

## Chattering / Noisy Servos

A customer recently had a problem with some noisy digital New Power servos. There are a number of possible reasons for servos being noisy due to either electrical or mechanical problems. Mechanical problems are normally attributable friction inside the servo or in the control linkage. In this case it was due the collar on the servo being too long so when the servo arm screw was tightened the collar of the servo arm was binding on the top of the case. Other mechanical causes could be servo case screws too tight and bowed control surfaces particularly those with Diamond tape style hinging. Common electrical faults are poor amplifier design, the use of Y leads, cheap receivers and electrical noise feedback in long servo leads. Servos with brush motors are often electrically noisier when new until the brushes 'bed in' so we recommend a bit of servo cycling of new servos before fitting.

#### LiPo Battery Balancers

There have been a few requests lately for stand alone LiPo Balancers. Since balancers have been incorporated in LiPo chargers the demand for stand alone balancers has been virtually non existent. Cell balancing involves discharging the voltage of the high voltage cell down to that of the lowest voltage cell. Unfortunately this reduces the overall charge of the battery so it is more efficient to charge and balance at the same time. Also it is one of the reasons why LiPo charge times are often longer than expected.

#### Sun Screen

Now that summer and the sun , when it appears, is at its strongest care must be taken to shield our computerised Txs from sustained bright sunlight. Recently one of my flying friends damaged a display screen on his transmitter after it was left unprotected in bright sunlight in his awning for an hour or so. Tx still works but needs a replacement screen. This brought back memories of an incident a few years ago when a Tx was left in the back of an estate car with the boot lid up in bright sunlight on a hot mid-summers day. When he went to fly the only thing operational was the power on LED. No fault was found during subsequent fault investigations. The conclusion was that the temperature of the Tx was outside its operation temperature limits.

#### Talking Txs

Since the Spring newsletter I have had the opportunity to explore further my Graupner MZ18 transmitter, in particular the telemetry facilities. I must say I do like the voice telemetry. The Tx display screens are difficult to read when flying and virtually impossible in bright sunlight so being able to audibly download telemetry information without having to look at the screen is a big plus. It is also much safer. Our eyes ability to switch instantly from near site to infinity is challenging at the best of times and even more so the older you get! Be honest, how many times have you taken your eyes off your model, for whatever reason, only to look back and not see the model where you thought you had left it! Graupner seem to be at the forefront re a cost effective, integrated telemetry system. All their Txs and Rxs have Tx, Rx battery and signal guality feedback (useful for optimum Rx / Aerial positioning). The MZ18 complete with a 6ch & 12ch Rx is £299.95. The Vario is £35.95. On a cautionary note some flying sites insist audio telemetry is only used in conjunction with earphones to avoid annoying other flyers. Graupner to stop flyers throttling themselves with the earphone lead have a Bluetooth module to their range that will work with most Bluetooth earphones.

#### New Items

A number of new items have been added to our inventory so it is worth spending a few minutes scanning the contents of our website www.phoenixmp.com . As mentioned in the Spring Newsletter we now have an account with Hobbico and the first few items have arrived namely Monakote in a selection of colours and the Tactic RC equipment which is competitively priced. Other items added include our own range of CNC cut epoxy control horns. Only four at present but other will be added as and when required. We are slowly increasing the number of items we manufacture. Currently out range of ply wood servo mounts are very popular as is our selection of servo covers. A new addition to the servo cover range is a set of covers for a full house moulded glider with a number of options for the flap 'thumbnail' cover accompanied by a cutting template for the Vladimir cross tail Graphite. We will shortly start to add a selection of canopies.

## <u>PVA</u>

It is common knowledge that when building retro wooden models we prefer to use PVA wood glue. Lately I have noticed that some PVA glue act more like the old fashioned balsa cement i.e. rest on the surface with little surface penetration. The reason I like using PVA is that it does not change the texture of the material unlike Superglue (Cyno) and as such has better shock absorption. Also if you make a mistake the joint can be disassembled with water! In addition the working time is a lot longer. This does not mean I do not use Cyno, just use it selectively. In fact I am a fan of thick Cyno due to its gap filling properties and longer working time. In my quest for a better PVA I used Deluxe Materials Speed Bond when building the new Sierra Mk2. This glue has been specially formulated for model use and has a distinct smell. What I noticed was that Speed Bond penetrates the surface of the wood to a greater extent and hence produced a stronger joint.

## On-Line Shop

Very occasionally some customers experience difficulties completing their online shop orders. If this happens please let us know so we can investigate the problem (we do not want to lose your business!). When we have investigated past problems no problems have been detected. The most likely cause suggested has been the security settings on the home computer and the web browser being used. Firefox seems to be a common denominator. Our site is fully compliant and checked on a monthly / annual basis.

## <u>Tailpiece</u>

We have had the odd customer lately who has blown up their power supply / charger so this is a brief reiteration of a topic discussed in a previous newsletter. Basically the 'glass ceiling' for power supplies, chargers and brushless motors is the maximum power i.e. watts they can handle. The specifications for all the items should state the maximum current (Amps), the maximum cell count (voltage) and the maximum power (watts). Watts is a product of Volts x Amps. Multiplying the max. Volts x max. Amps results in a Watts value far in excess of the specification maximum i.e. our 80w charger has a maximum of 6 cells and 7 amps. Doing the sums this equals:

6 cells x 5v x 7A = 210w (5v per cell charge voltage)

This over 3 times the rated wattage if 10% is allowed as a safety margin.

#### Vladimir Graphite 2E

It is quite a while since I bought this model so it is long overdue for 'assembly'. Apart from the quart in a pint pot act of fitting the rudder and elevator servos in the fin it is going quite well. As there is plenty of room under the wing I have decided to install a snake and fit the rudder there instead. After all it is a secondary control and I am not one to load a model with lead and bomb it around at high speed. One minor issue encountered concerns the servo covers, only two colour match their locations so having the facilities I decided to manufacture replacements. This I did and at the same time correcting some minor location errors and spraying them the correct colour. Unfortunately I could not find a true colour match. To overcome this I first sprayed them with a lighter shade which I then covered with a darker shade. It worked! These replacement covers are now available on out website. They will fit a variety on models as there is plenty of spare plastic to juggle with. Paper templates for the Graphite are supplied with the covers.

#### Futaba 6J Combi

We are overstocked on the Futaba 6J sets and the corresponding Rxs so please check our site for a really competitive price!

#### Posting LiPo Batteries

LiPo batteries along with aerosols etc. are covered by the Dangerous Goods Act and are banned items by Royal Mail and non specialist couriers. Consequently we can now longer supply LiPo batteries mail order.

#### Signing Off

Once again I hope you have enjoyed reading this newsletter. As previously mentioned all the topics discussed are the result of conversations with customers. Sometimes these conversations stray into other modelling areas. One regular topic of conversation is the rate at which model shops are closing. Whilst there is no danger of PMP closing at present I do understand as without income support (pensions) we could not survive as a business. The bottom line is support those who support you.

Happy landings

# Stan & Sheila

# Pictures of the Sierra Mk 2









