

PMP Spring Newsletter 2015

Welcome

Welcome to the Spring newsletter. First of all thank you for all the appreciative emails we have received re our Newsletters. Whilst I enjoy writing them your emails are a nice reward for the time taken. In the absence of the shows we used to attend it is a way of keeping in touch and passing on information we have gleaned over the preceding months. Whilst the weather has been a little on the cold side this winter the 'claggy' days have been nicely interspersed with some excellent, if somewhat, cold flying days. Roll on the lighter evenings and warmer weather.

PMP Developments

Work at PMP continues as those who read Andy Ellison's 'On The Edge' column in the March issue of RCM&E will already know although business could be a little more buoyant. Thank you Andy for the plug! The WingBat 48 slope soarer kit reviewed in the March issue of RCM&E went down well as we have sold a number of kits as a result. Interestingly though, more of the electric version than the glider version. The next model for the Mk2 treatment is the Mini-Metro. Model built, plan drawn, instructions written and production under way. The Mini-Metro was originally designed in the early eighties as a fun slope soarer. It was inspired by a friend's cobbled together slope soarer made from a Veron Cardinal remnants, namely the wing. I was in the RAF at the time and the RAFMAA Glider Comp. Sec. One of the events I organised was a rudder elevator only (I wanted to encourage as many to all and not dominated by hybrid pylon models) pylon race. The race was won by a Chris Foss Middle Phase but the cobbled together Cardinal, although quite a bit slower, was only beaten by whisker due to being able to turn tighter around the pylons.

Building Boards

We are frequently asked what material to use for a model building board. For 40 years + we have used Sundela. It is a cross between MDF and softboard that is often used for notice boards. You can stick glass headed pins in with your fingers. It holds pins firmly which do not readily pull out when rubber bands are used to hold the work in place, providing they are put in at an angle. The material is available from building supply merchants such as Travis Perkins and Jewsons. It is normally sold in 1200x2400mm sheets but a full sheet is a bit pricy so I suggest you find some friends to share a sheet or ask the builder's merchant who they have sold it to and see if they have an off-cut. A full sheet should provide 5 boards 480x1200mm (18.5in x 48in) in size. A suitable size for most building projects

David Plane Set-up

In the early days of using a David plane to shape leading and trailing edges to I had problems preventing the blade digging in to the wing sheeting. So to overcome the problem I now angle the blade so that on one side of the plane the blade is hardly cutting whilst on the opposite side has the required depth of cut. I also angle the plane so the cut is more of a slicing cut rather than being head-on.

2.4ghz Rx Aerial Placement

Whilst this has been mentioned previously it is worth re-iterating if it saves a model. Solid objects have the ability to block 2.4Ghz radio signals so the positioning of the Rx aerial(s) is very important. The best place for them is as far away as practical from motors and batteries etc. just behind the wing. If the Rx has more than one aerial then the tips must be a 90 degrees to each other for best all round reception. With moulded models, particularly if carbon is present, we suggest having them protrude out either side of fuselage by at least 50mm (2in) at a 45 degree angle. If the aerials are not long enough most brands offer longer replacement aerials. The aerials plug into the Rx board and judging by the stock we hold they all use the same gold plug and socket system.

Multiplex Receivers

We have received a couple of calls lately regarding the range of MPX receivers from F3J / E soaring competition flyers and large scale glider flyers, all flying at extreme distances with models spanning 4 metres plus. Needless to say I have followed up these calls with Multiplex and found there is a difference in performance between a DR Telemetry Rx and the equivalent non telemetry Rx. Multiplex has advised customers to fit higher the performance Telemetry Rxs to overcome the problem. This the callers have done and are now more than satisfied with the range of their sets.

Binding/Paring 2.4Ghz TxS/Rxs

A few days ago I had an embarrassing few minutes whilst demonstrating a new RC set to a customer. After showing him how easy it was to program I proceeded to the Bind/Pare operation. After several attempts to bind the set I gave up and got another one off the shelf only to experience the same difficulties. I swapped Rxs and TxS to no avail. Fortunately I have not yet lost all my marbles and recalled a similar incident a while back. To the amusement of the customer I walked across the room and switched the lights off! Bingo, Binding success. The problem was the fluorescent lights and a glass counter top. So I now add this to my tips for binding / paring one of which is, where possible, use a separate Rx battery for the operation and not the BEC on the ESC. The reason being the ESC BEC generates electrical noise which is why some ESCs have torodial chokes fitted in the throttle lead. This has the potential to corrupt the bind process.

The DSM2 System

There is a new EU ruling banning radio systems that search and lock onto vacant channels in their operating band. Our 2.4Ghz band has been divided into 80 channels and the DSM2 systems used by early Spektrum and JR sets operated this way by searching and locking onto two vacant channels. The downside of this system, although originally claimed by Spektrum to be technically superior, is the higher the traffic density the slower it operates leading to data loss and possible loss of control. Fortunately all mainstream brand current systems use the frequency hopping system which transmits on all 80 channels in a sequence using an algorithm. Spektrum, when they changed from DSM2 to DSMX, unlike other brands that have changed their

systems, made theirs backwardly compatible i.e. DSM2 Tx's will work with DSMX Rx's and vice versa. This will no longer be legal and when current stocks of backwardly compatible DSM2 / DSMX equipment run out they will be replaced by DSMX only stock. This means over time DSM2 Rx's will become obsolete as DSMX only Tx's replace those that can operate on DSM2 / DSMX. Our current stock of Spektrum Tx's do both DSM2 and DSMX so if you are thinking of upgrading your Spektrum transmitter in the near future and have a number of DSM2 Rx's then it is better done sooner rather than later.

ESCs to Rx Power Lead

Just a short note on using more than one ESC in a model or a separate UBEC / Rx battery. The rule is if using more than one ESC, a separate Rx battery / UBEC then the positive lead from the ESC to the throttle on the (one) ESC must be disconnected from the plug to avoid a conflict in the power supply to the Rx. This can be done by lifting the plastic tab on the plug and pulling out the positive lead. Tape the lead back on itself to the other wires so the BEC can be used on future models if required

Graupner Radio Price Drop

Over the New Year there has been a significant drop in the price of Graupner RC equipment. Good news for you the customer but not so good news for us the retailer as all our stock was bought at the higher old price. Nevertheless we welcome the price drop. The problem in launching a new brand in an already established market is a difficult one, particularly when it means ditching existing equipment because 2.4Ghz systems are not inter-brand compatible. Some are not even compatible with older versions within the brand! We are big fans of the Graupner HOTT system for our style of electric glider flying for reasons given in a previous Newsletter but unfortunately the most popular entry level 2.4Ghz system is the Spektrum DX6i so when modellers want to upgrade the transmitter Spektrum are at the front of the queue for the business.

Batteries in Winter

Batteries, like most of us, do not like the cold and if we are not careful we can be caught out and lose a model. The reason being the battery's internal resistance goes up as the temperature goes down. This means that the battery will struggle to deliver high current demands or not last as long in cold weather. Both situations can lead to the loss of a model. Years ago there was a practice of keeping Rx batteries in trousers pockets to keep them warm and only fitting them in the model when you were about to fly! I have not heard of this practice lately! Our advice is that in cold weather check battery capacity before and after every flight with a quality battery checker such as the one on our site that displays voltage and remaining capacity. It is more important that this check is done particularly on electric powered models, irrespective of the weather, to reduce the risk of over-discharging the LiPo and permanently damaging it.

Computers and Dust

We have been experiencing computer problems over the last couple of weeks with the computer crashing every 10 minutes or so. Trolling the internet for an

answer initially suggested a power supply problem. Covers off, revealed the processor cooling fan was choked with dust and the processor was running very hot. Dust removed, processor temperature normal, no joy. Power supply replaced and updated and RAM changed (another possible cause). Still no joy. More head scratching. More trolling Hyde Park of the internet. Eventually I decided I would get a new hard drive and start from scratch but before doing so my wife decided to re-install Windows. We had not done this before for fear of losing programs that were difficult to re-install. This took several hours to do and although it did not cure the problem the time between crashes was longer. We then deleted our virus checker and re-installed it, albeit a later version and checked for windows updates. Fingers crossed, problem solved. So far so good. What did we learn? One, Hoover out the dust every twelve months or so. Two, before re-installing Windows back-up critical files (we did do this) and delete the virus checker (we did it the wrong way round). While we do all our own IT work and consider ourselves computer literate we are not computer specialist. The cause of the problem seems to date back to when the keyboard was changed. The only spare one we had was a new but old multi-function one and I think the driver somehow conflicted with Windows and the anti-virus checker! Simple really!!! When installing windows select the update option because it does not overwrite the programmes/files, something we were unsure of and frightened to do except as last resort.

KST Servos

We have noticed that there are a number of lookalike KST servos on the market. As we are a KST stockists we contacted KST and asked them if they were manufactured by KST and re-branded. The firm reply was a definite NO. We buy our KST servos direct from the manufacturer so were concerned that customers would consider the rebranded servos to be KST and if they did not live up to expectations this could impact on the reputation of genuine KST servos.

Aurora 9 Transmitter Firmware

A customer recently experienced difficulties binding a Minima Rx to his Aurora 9 Tx. To bind the Minima and Micro Rxs to the Aurora 9 the blue light must flashing in the bind mode. The problem was we could not switch from a flashing red light to a flashing blue light. The reason for this was the Tx was operating on firmware version 1.06 and not the latest V1.09. Once we had updated both the Tx firmware and the Spektra Module firmware using the HPP-22 Programmer problem solved. The online instructions are fairly easy to follow. Note the module data port is covered with a label.

Signing Off

Well if you have got this far I hope you found it a pleasant and informative read. All the topics discussed are the result of conversations we have had with customers since the Autumn Newsletter. Please pay our site a visit www.phoenixmp.com even if you are not intending to buy anything as there are a number of new products not to mention a library of informative articles on a variety of modelling topics.

Happy landings

Stan & Sheila

STOP PRESS: BULK Purchase of Spektrum DX6i sets. Check out special prices

http://www.phoenixmp.com/acatalog/Spektrum_Sets_Transmitters.html

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New Models

Carrera Mk 2



Pzazz Mk2



Sierra Mk2



Toledo Mk2



Vagabond Mk2



Wallaby Mk2

