One important thing to do prior to BoJo letting us all out to play.

What do all our RC models have in common? Ten points if you answered a power source.

How many of you have checked, charged, replaced your batteries in the last month?

I would guess not many since we have had other things to think about of late, however now is the time to check since this lock-down won't last forever (I hope) and it won't be any good simply putting your batteries on charge on Saturday evening and expect then to perform on Sunday morning. Sod's law says if it can go wrong then it will at the most inconvenient moment.

So what can we do to stop Mr Sod getting the upper hand. Let us consider a typical setup in a sailboat, Tx and Rx set up so that they are talking to each other (bound correctly) two servos :- one for steering and one for sail control, these can vary from a standard servo to a very powerful winch servo. Finally a battery and a switch, which most would agree is the weakest link, however most switches are reasonably reliable and a good dose of WD40 will normally restore a switch to 100%.

Which leaves us with the battery, so lets consider a four cell Ni-MiH pack with a capacity of 1000Mah.

It's nominal open circuit voltage should be 4.8volts, fully charged about 5.2 volts and discharged about 4.4volts. It's capacity if in good order should be able to deliver 1000ma (1A) for one hour from fully charged to discharged.

So how can we see if the battery is up to the job, firstly the non-technical method:-

step 1/. turn everything on and give the sticks a wiggle if all working go to step 2/.

step 2/. load up one of the servos but not so much that it stalls and have a wiggle again, there should be no significant slowing of the servo (be careful here as stalling the servo could lead to it letting out it's hidden smoke, ruining your day!)

Slightly more technical method:- as before but using a multimeter or battery checker to monitor battery voltage whilst under load e.g. starting volts = 4.8v at rest, moving servo under load always above 4.4 v battery OK, below 4.4v battery suspect.

Best method:- make a load adaptor from a spare servo lead, terminal block and a 12v5w car bulb, the bulb will consume about 250ma (1/4A) so in our example should provide power for four hours. Plug load into spare channel, monitor voltage over 4hr period.

Please note that here we have only considered NiMiH batteries, there are more types that we use e.g. SLA (sealed lead acid), Nicad Packs, LiPo packs, LiFe packs but these in general power the model via a bec (battery eliminator circuit) in the speed controller and in most cases will stop the motor before the radio fails.

On a final note you did check, charge, replace the batteries in the tranny didn't you? ready for when BoJo lets us out to play.