

EDITOR'S NOTES

Yes!!! We're still in business!!! Come attend the club meeting on Thursday and enjoy some cheap pizza!

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PRESIDENTS COLUMN

I apologize for last months missing newsletter. Vacation combined with holidays and such resulted in no newsletter. So for those of you who thought that the spam blocker got it or the post office lost it, you now have the facts. With these dog days of summer meeting turn out, as well as flying, as dropped in numbers. Because of the decline in meeting participation, we are bringing back the door prize raffle. Personally, I don't mind a 1 in 4 chance of winning, however the idea is to add some incentive for people to drop in. Another suggestion has been to move the meeting location. Alan Stills has suggested possibly moving the meeting to the Deer Valley Airport restaurant or meeting rooms. We will be discussing this as there has been a rising dissatisfaction with Peter Piper Pizza.

I want to congratulate Chris Alex on becoming a new father on July 26 to a little girl named Baily Rayleen. To those of you who don't know Chris, he is our web master for the ARMS web page. If you would like to post some club type pictures, give Chris an email.

Last meeting we also discussed the dates for next years fun fly. We plan to use the same weekend in March as in past years. Any suggestions for the fun fly which require advanced legwork should be made now. Work will start soon on getting some preliminary designs together for the t-shirt, so attending the meetings over the next few months will be important.

That's it for this month, hope to see you all at the meeting.

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TECH TIPS

from the Thorn Creek RC Club, Lansing IL
Fast Charging: Will it Harm My Packs?
by C. Scholefield

First, let's define fast charge. The industry standard is any charge rate that will charge the cells in one hour or less. This fast charge capability thing is very interesting. Almost all Ni-Cds manufactured today for RC systems can accept fast charge (up to C rate, that's the rate at which you can charge the cells in approximately one hour).

Cells that are specifically sold as fast chargeable go through another step in the process. This step involves charging a sample from the production lot, and then measuring the end of charge voltage. Cells with the highest end of charge voltage are then analyzed for internal pressure. If the internal pressure is acceptable—that is not above a preset limit—the whole production lot is blessed as being fast chargeable. Of course this adds a finite amount of cost to the cell as they must be "formed" prior to being shipped in order to be fast chargeable.

Cells not destined for fast charge applications are shipped "unformed" by some manufacturers. The first charge after the assembly is what "forms" the cell. When you charge your RC system packs for the first time you are "forming" them. That is why the instructions tell you to charge the packs for 16 to 24 hours before you first use the system.

So in most instances you are safe fast charging the RC packs (transmitter or receiver) on the market if you first make sure they get a good first cycle formation charge—24 hours at a slow rate.

Where the problems arise is that some of the fast charge systems available are a little sloppy when it comes to terminating the fast charge, or they are pushing the cells too hard (higher than the C rate charge) and then damage occurs.

As a rule of thumb if your packs are not getting hot (slightly warm is okay) you are not damaging them in the fast-charge process. When pushing too much current into cells not designed to accept it there is the risk of driving the cells above 1.6 volts (the hydrogen-over-voltage point) and electrolyzing the water in the electrolyte and generating hydrogen. This is a cumulative event and repeated fast charge at these rates will result in sufficient accumulation of hydrogen to cause the cells to vent. When they do vent, there is a chance that the chemical balance will be disturbed and the cell capacity will fade.

Understand that the pack may not be fully charged when the fast charge terminates. It is a good practice, if you are going to fast charge frequently, to top off the packs

using the slow charger. This will bring all cells to the same state of charge and "balance" the pack. Otherwise the cell that is not fully charged will be the limiting cell on the next discharge. This continues until there is a major unbalance in the pack and one cell can be driven into reverse (if you don't crash first).

JOKES

Press Release from Pillsbury:

The Pillsbury Doughboy died yesterday of a yeast infection and complications from repeated belly pokes. He was 71. Doughboy was buried in a lightly greased coffin. Dozens of celebrities turned out to pay their respects, including Mrs. Butterworth, Hungry Jack, the California Raisins, Betty Crocker, the Hostess Twinkies, and Captain Crunch. The gravesite was piled high with flours. Aunt Jemima delivered the eulogy and lovingly described Doughboy as a man who never knew how much he was kneaded. Doughboy rose quickly in show business, but his later life was filled with turnovers. He was not considered a very smart cookie, wasting much of his dough on half-baked schemes. Despite being a little flaky at times, he still was a crusty old man and was considered a roll model for millions. Doughboy is survived by his wife, Play Dough, two children, John and Jane Dough, plus they had one in the oven. He is also survived by his elderly dad, Pop Tart. The funeral was held at 350 for about 20 minutes.

Great Bumper Sticker:

Honk If You've Never Seen An Uzi Fired From A Car Window.