Sanyo to Uprate 1000 SCR Cells

by Steve Neu
from: Peak Charge, of the Silent Electric Flyers of San Diego - October 1995
Editor: Steve Manganelli

"1000 SCR cells will soon be a thing of the past" said Joe Carcone, manager of Sanyo Energy in Tijuana, Mexico. In an October 3rd phone conversation seeking information about new products, I was informed that some time in the next year the 1250 SCR cell will replace the widely used 1000 SCR cell raising the nominal capacity by 250 mAh. It seems that Sanyo can't leave well enough alone. The new cell will be the same size and about 2 grams heavier than the 1000s, but (here is the bad news) have a higher internal resistance. Joe is sending me some samples to test to see how they work in our R/C Electric application. I will keep you posted as to the results. The U.S. F5B team is getting a box of the "old cells" in case the new cells don't work as well in the high current F5B models.

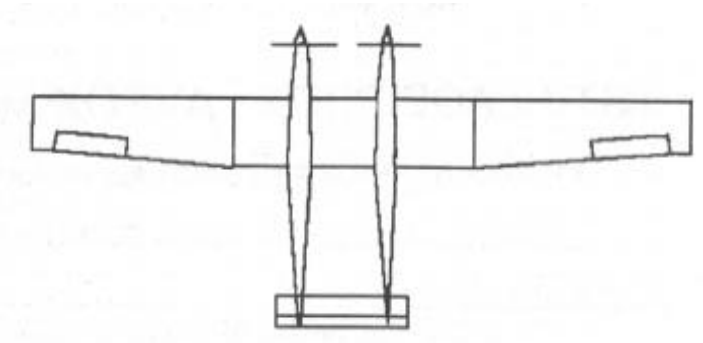
I think this change will eventually effect the 1400 mAh cells also. We will see!!
(Remember where you heard about this first, folks! - S.M.)

Congrats to San Diego!

The Silent Electric Flyers garnered a first place in 7-cell cargo, at the Astro Champs, lifting 15lbs. 11oz. Great job gentlemen! Check up coming model magazines for pictures of this unusual plane.

To get a very good report on this plane and how they did it, write to Steve Manganelli, 3296 Martinez St., San Diego, CA 92106-2959 or e-mail MANGANELLI_S@nadepni.navy.mil

Ask him how you can get hold of a copy of the October 1995 issue of the newsletter.



Crude sketch of the SEFSD Cargo Lifer a.k.a. MISS MADONNA!

WHY I LIKE THE KYOSHO DCM 2OBB MOTOR

by Bob Canada
(This appears to be from the DEAF newsletter, based on the comments at the end, but I've lost the exact source. I apologize.)

Electric flyers are cynical about 20 to 50 watt motors. Rightly so because most small electrics require a lot of compromises, and expensive, exotic methods resulting in borderline flights, and crash prone flights. We are practically guaranteed less performance the smaller the motor. Ninety percent of commercially sold small motors are merely adaptations from other industry use. The Peck Silver Streak, Hyline's Elf, 50 watter, and Imp 30 watter, as well as Hobby Lobby's 400 have that familiar Mabuchi look in construction.

They also have another basic compromise, in my opinion. They all run with 3 to 4 cells and will not run much above 10,000 RPM. Note that the Kyosho 20BB runs on 6 cells and has (no load) 25000 max RPM. So what? I'll explain later.

This is not to say good models can't be built and flown with these other motors. There is plenty of challenge and reward for designing with these motors. I'm simply asserting that the power to weight ratios of these motors does not match the Kyosho 20BB.

Ironically, the Kyosho falls at the bottom of the power spectrum, 20 or so watts, which requires the lightest practical construction. Here is the rub. We are forced to build as light and strong as possible to realize the power potential of the Kyosho 20BB motor. Truthfully, I have been unable to find a 50 watt motor with the Kyosho's power to weight ratio.

Tom Davis found one once, but has never been able to find a purchase source. He called it the AYK Magnum AP racing motor. If anyone knows who can supply this motor, or its equivalent, please call me collect at 1 (901) 377-0877.

The motor in question turned 50,000 RPM no load, and weighed 1.9 ounces with ballbearing races. It measured 24mm and has a 2mm shaft. Japan is supposed to be loaded with them.

Once you have set up to build your first set of gears for the Kyosho 20BB motor there is a tremendous bonus. With conventional electrics we are all dependent pretty much on props, gearing, and motors off the shelf. Certainly this is fine, but because 25 to 50 watt motors are so small, we modelers can design our own props and gearing in a much wider range than those on the market today.

I guess that I'm trying to get across