

HYPERION CAP 232 2008 .10 SIZE

REVIEW BY BEN GRACEWOOD—SEPTEMBER 2007

Call me indecisive, but merely weeks after investing in a [new helicopter](#), I've gone and got another new plane. My reasoning? The stress of learning to fly a helicopter needs to be broken up by pleasurable, relaxed fixed-wing time. And quite frankly, there's no better way to relax than to fly the new [2008 Hyperion Cap 232](#) !

The Cap 232 is a real sweetheart. It looks fantastic, and flies even better. To put this in context, my last plane was a GWS Formosa running a hot brushless motor and dual wing servos. The Formosa is highly aerobatic, fast, and extremely forgiving. The Formosa handled any number of hard landings, dings, and general average flying over a couple of years. The Cap 232 on the other hand is my first almost-scale balsa ARF, which is quite scary after flying foam. Read on for my full review.



The build:

Totally easy, and completed over about 3 hours of on-and-off work. The model quality is flawless, with plenty of ply reinforcing around the firewall and landing gear mount, and even glass reinforcing on the motor mount and wing joiner. It goes together like a jigsaw, with the only fiddly bit being the hinges. If anyone has a trick on how to get CA hinges in place and lined up before the glue dries, *please* let me know! Next time I'll definitely get some slower glue.

I used GWS Naro+ BB servos for the tail, and Waypoint metal gear micros for the wing. With the tail servos mounted under the canopy, I had to cut a couple of slots in the top of the wing for the bottom of the GWS servos to fit into. An alternative would be to raise the servo tray up by about 10mm.

I had only two concerns during the build:

1. There was no mention that the fibreglass cowl needs trimming to fit around the landing gear. No drama, but I had to cut two slots in the back of the cowl so that it would slide over the landing gear legs.

The 3 screws fixing the landing gear to the ply mount seemed very small (M3x8 if I recall correctly). More on that later...

The setup:

Nothing difficult. I installed the receiver at the rear of the battery tray, and ended up having to mount the battery right hard up against the firewall to get the centre of gravity anywhere near correct. The result was a CoG about 60mm back from the leading edge of the wing, versus the recommended 50mm, and decided that was close enough for a reasonably experienced flyer. In fact, the plane flies perfectly with this CoG.

I set up the surface travel as recommended, which was actually about 60-65% travel on most of the servos. I also added about 30% exponential on ailerons and elevator. Because of the extra room for travel, I set dual rates on all surfaces, with hi-rates being 100% travel and no exponential. More in the flight report.

I used the suggested power system: a Hyperion Z2213-16 motor spinning a APC 9x4.5 prop, Titan 20 speed control, and 3S 1500 LiPo battery. This setup provided a very nice blend of speed and thrust.



The maiden:

Early on the morning after the build, I did a full pre-flight, including a 150m range test with the help of my lovely wife. Wanting to keep the scale look of the plane, I did the trick of wrapping the long 72MHz aerial wire around a drinking straw and stowing this inside the fuselage, which worked perfectly despite my worry.

Being too keen is *always* a mistake. The southern hemisphere winter sports season has finished, but the grass hasn't yet been mown for the cricket season. No problem: I lined the Cap up on the astroturf cricket pitch, throttled up, and she rolled off beautifully with a tiny bit of rudder correction. A couple of clicks of left aileron trim, and she was flying along perfectly, and looking the part.

The maiden flight consisted of a few lazy circuits to get a feel, a nice big scale-looking loop, and a hammer-head turn to test rudder authority. She performed admirably, and the balsa airframe seemed massively more responsive and positive than the foam Formosa. I believe the exponential and low rates made for a very docile bird.

The landing was the bad part. I brought her around a few times to test the landing approach, and was very surprised by how much she wanted to float. I had read that the previous .10 size Hyperions like to land hot, but this new model with added wing area is a real glider. I really had to push her down onto the deck, and it was this approach, coupled by a bad line-up and the long grass that ended up with the landing gear beside the plane, rather than under it. Bummer.

The fix:

A skim of epoxy on the landing mount, and the landing gear shifted 5mm forward (should help with the CG too!) and the landing gear was back on firmly. I worry that a hot landing will now damage the airframe rather than just pull the small screws out, but time will tell.

The better flights:

After the slightly rushed maiden, I fixed the landing gear and headed out to a real flying field at [PMAC](#). The much larger, rolled and mowed landing strip made me feel much more confident, as did a spotter. Again, the rollout under 3/4 throttle was lovely, and away she went, already trimmed and responsive.

Lots of circuits, some lazy aerobatics, and I decided to try a brief run at hi-rates and zero exponential. WOW - the Cap 232 totally different plane. Hot, twitchy, responsive, and with a *killer* roll rate. Just perfect. This is like having two planes: a lovely, almost-scale trainer, and a fantastic responsive almost 3D aerobat. I'm in love.

The landing was still crazy-floaty. I had to go around 3 times, each time at a lower throttle and height, but she was almost repelled from the ground, just floating on by at head height, refusing to drop. On the final attempt I just cut the throttle completely on late approach, and she glided in smooth as butter, a tiny bounce and a short rollout. Throttle, a bit of up elevator, and she taxied quite happily on the short grass despite the tiny tires.

The Summary:

Ok, so I've only flown 3 powered planes, and a bunch of gliders, but I can happily say this is the *best plane I have owned*. Totally gorgeous, a pleasure to build and fly, and most importantly: a thousand times more relaxing than a helicopter!

