

With competition this close, everybody wins!

Competition is a big part of the RC boating hobby, and it takes many forms. For some, organized events provide an outlet for their competitive impulses—a chance to heat-race head to head or have their best craftsmanship judged alongside the works of their peers. Competing is a great way to enjoy the hobby, but not every boater has an opportunity to do so. Maybe there aren't any events in your area, or perhaps your budget doesn't allow for top-of-the-line racing hardware. Maybe you just don't think your driving or tuning skills are quite up to speed. Whatever the reason, just because you can't participate in an organized event doesn't mean you can't feel the thrill of RC boating competition.



As any race fan knows, the key to an exciting event is having close competition. In full-size motorsports of all types, one of the best ways to ensure side-by-side racing on a reasonable budget is to establish a "spec" class in which everyone uses exactly the same hardware and the number of allowed tuning tricks is minimized. In RC, the proliferation of high-quality, nearly ready-to-race and ready-to-race boats provides ample opportunity for a class for those of us who have modest budgets and limited building and tuning experience. To illustrate how easy this can be, we grabbed four identical examples of the new Hobbico AquaCraft Air Force ready-to-run (RTR) and set up our own spec race.



THE BOATS

AquaCraft is Hobbico's new line of nitro-powered, fiberglass-hull RTR boats for all ability levels. That these boats come with a radio installed and are just a few screws and decals away from being race ready made them perfect candidates for our spec race. Though we did not know it when we selected them, the Air Force's design and the driving style it requires also lent itself perfectly to action-packed side-by-side racing. The boat has a relatively flat bottom, and the big Tower .46 engine mounted way up high produces a healthy dose of thrust. All this adds up to a

boat that is more than willing to kick out its tail and drift through corners. Automobile racers might describe the driving technique as "dirt-tracking." Strictly speaking, it might not be the fastest technique, but it's hugely entertaining, and going through turns side by side is quite an adventure. We knocked "door handles" several times, but once we had established that the hulls were wide enough to ensure that the props wouldn't tangle and tough enough to bounce off one another without damage, we became progressively bolder with our passing.

Unlike conventional airboats, the Air Force does have a submerged rudder, so you retain turning authority while off-throttle. The rudder is relatively small, however, and the .46 spinning an 11x8-inch APC prop resists sharp changes of direction, so last-minute emergency maneuvers may not meet with expected results (more on that later). We felt that a prop with a little less pitch might allow the engine to unload a bit more and respond faster.

As I said before, the key to a good spec race is equality. Because there is so little to do to get these boats race-ready, there is likewise little to tinker with to give one boat an advantage over the others. Assuming the throttle cables and needle settings have been set in the same way for all of the boats, you can expect very consistent performance with the Air Force. We had all four running nearly identically, even though two of the engines had been broken in and two were still green.

THE RULES

The rules for a spec race can be whatever you want them to be, but I recommend that you keep it simple.

- **The start.** If your boats have decent slow-speed performance, you might try a standing, or "Le Mans," start. If they don't, a conventional "flying" start is the way to go. Have the lead boat set a pace speed that allows decent maneuverability, and then have the other boats creep up from behind and match its speed in something that approximates a straight line. If a couple of boats lag behind, no problem; equally prepared boats should be close enough to make up two or three boat-lengths in the course of a lap. The races can be any length you like, but I recommend that you start with relatively short races—maybe five laps—and work your way up to more if you want to.



Above: RC Car Action editor Paul Onorato readies the yellow boat for another round after clearing the engine of water it ingested during a roll-over, oiling everything down and inspecting the radio gear.

Right: the most challenging part of the race was starting and staging all the boats at once. Because of the large, high-speed prop, it was safest to have one

person start and transport the boat while another worked the throttle.

- **The course.** Ideally, you'll have some way to mark your racecourse. Ovals are the standard and are easiest to set up. If you don't have buoys or floating markers, use shoreline landmarks to mark the turn entrances; this is what we did, and it worked fine. Something as simple as, "Don't start your turn until you pass that oak tree on the far bank" can work fine as long as your fellow racers cooperate. In case you run into trouble, have somebody who isn't racing that round serve as a corner judge. You can decide what you want the penalty to be; it can be something as mild as requiring the offender to back off and drop to his pre-corner position or as severe as a lap penalty.

- **No hop-ups.** Keep the amount of "wrenching" allowed to a minimum—at least, to start with. RTR boats are equal only as long as they retain their factory configuration. Definitely require stock mufflers and props, and if you want to be really fair, have everyone use the same fuel (we used Wildcat 15% nitro 2-stroke fuel) and glow plugs, too. We checked the props' rpm with a hand-held tachometer to make sure they were evenly matched, and we took it a step further by swapping boats after each run.

THE RACE

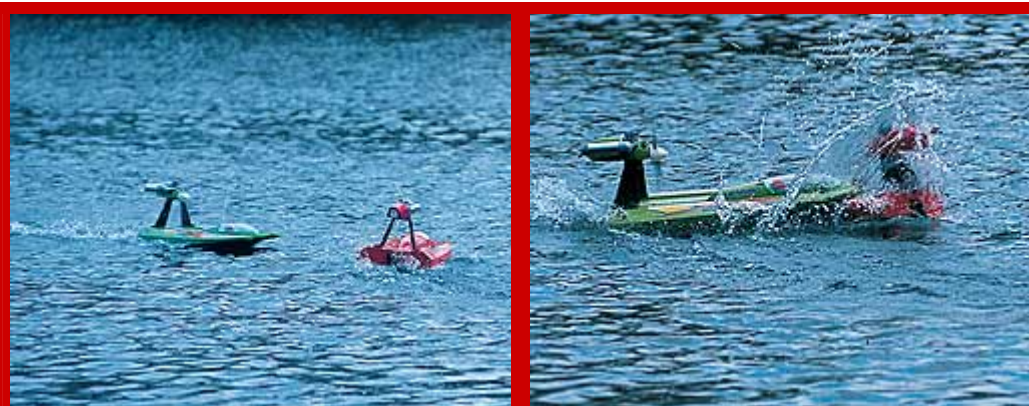
Most of our starts had all three boats (notice I said three, not four; more on that later) within a boat-length or so as they passed the start/finish line. The boats surged forward under full throttle; whoever was in the lead tended to run wide in turns and allow the pursuers to cut inside for a pass. Just as we had hoped, the boats were very evenly matched; this made passing as much a matter of nerve as all-out speed. As I mentioned, the Air Forces like to slide in the turns; my favorite technique was to cut under the lead boat and put a "slide-job" on him as we exited the corner. This works great as long as your boat is clearly in the lead by the time it drifts wide and into your opponent's lane. It didn't always work out that way for us, and we tested out the strength of the freeboard fiberglass quite a few times (we're happy to report that it stands up to abuse quite well).

By the end of our photo shoot, we were having so much fun dicing back and forth and perfecting our passing techniques that we stopped counting laps. No boat was ever in danger of losing a lap, and we traded the lead so many times that winning came down to luck of the draw. If you led at the beginning of the last lap, chances are, you wouldn't be in the lead as you came down the homestretch.

No good race would be complete without a couple of crashes, and we had our share. Of the four boats we took to the pond, three flipped over at least once. With the engines way up high, the boats' CG is well above the water line. Add to that a very shallow, flat-bottom hull design, and you have the makings of a barrel roll or two. The boats are stable, but when they turn crosswind and get into rougher water, they can and do flip. The good news is that two of the three that ended up wet side up were towed in, shaken out, oiled up and back on the water in a matter of minutes. The radios stayed dry and the engines fired right back up once they had spit out the water they had swallowed and been given a healthy dose of after-run oil to chase away any lingering moisture. The only DNF of the day was the green boat; it suffered an unfortunate incident with the red boat during a warmup session. I contend that it was entirely the fault of the red boat's driver (who shall remain nameless!) and that I, the driver of the green boat, was a hapless victim (check "The Wreck" sidebar and judge for yourself).

THE FUN

It was no surprise to us that staging our own impromptu spec race would turn out to be so much fun. What did surprise us was how little it mattered who actually won. The competition was great, but we had the most fun just dicing back and forth—making passes or getting passed; it didn't much matter. As the boats slid around and banged into one another our hearts slid up into our throats, but the boats kept right on going and our smiles widened. The best part is that our race day didn't require any special equipment or setup; all you'll need are a handful of willing drivers and a few equally prepared boats. We used AquaCraft's exciting Air Force, but the concept will work just as well with electric monos and gas-powered hydros. No matter which you choose, you'll have a great time, even if you forget to keep track of who wins!



THE WRECK

What race would be complete without at least one crash? Actually, we had more than our share, and that we sidelined only one Air Force (and that one only temporarily) is a testament to the boats' durability. As you can see in the photos, the green boat and the red boat came together on a warmup lap and green went over. The impact looked pretty severe from the shore, so we were amazed at how little damage actually resulted, despite the fact that red's prop struck green quite a blow as it slid over the top of red's left sponson. Red suffered a broken engine support, and green sported a "convertible" canopy and a small crack in the front of its left sponson (courtesy of red's prop). A quick tally of parts told us we had enough to get one of these boats back into action. Red got the nod, as its damaged component was a bolt-on. We took the engine upright off green and—just like that!—red was ready to race. Fortunately, all the parts we needed to get green back into action were available from Hobbico; the total repair bill was \$20 plus a dab of epoxy for the cracked sponson; it probably didn't need the epoxy, but better safe than sorry—especially the way we drive!

