

The Mission: Building a Scale Hydro

by Don Mock, edited by Geoffry Grembowski in 2014

I continue to get lots of questions about getting info (photos, drawings, videos etc) of the full sized unlimiteds both past and present. We're lucky here in Seattle to be surrounded by the race teams and the Hydroplane Museum. It's also great to have several experts around like Roger Newton to talk to.

But what do you do if you live in an isolated area of the county where people think "hydroplane" is what you do on the highway when it rains? Fortunately, today the Internet and many people and organizations are there to help. Photos can be instantly E-mailed and several websites, including the race-team's, have good photos.

But it's still up to the person to do the research necessary to build a good scale hydro. First, you have to choose a boat. Then get as familiar with the boat as you can. Find photos and programs, track down videos of it running. Nearly every unlimited race over the past 50 years has been broadcast by either a major network, ESPN or various local stations. Check around and try to find a tape with your boat on it. (Nearly every race from the 1980s on has been put on YouTube – ed.) It can't hurt to even learn the boats history, designer, driver, etc. The more you know about your boat, chances are you will do a better job building and detailing it. If you want to build a model of a current hydro, go see it race in person if possible. It's not hard to talk your way close to the boat in the pits so you can take photos or even grab a few measurements. The unlimited owners know that model boaters are some of their most loyal fans, and are happy to help you as long as you give them their space if they're busy running or working on the boat.

Next, decide on scratch building from plans or going with a fiberglass hull. If you intend to scratch build, Roger Newton is your best bet for plans (www.newtonmarine.com –ed.). Just understand that he is very busy nowadays being Crew Chief for Ken Muscatel's U-25 unlimited team. He's at the boat shop most of the time. (they set the straightaway record of 205mph April,2000). He'll still send plans out, just be patient. (Roger passed away in 2009, his son David still runs Newton Marine –ed.)

Although he has over 300 sets of plans, not even Roger can keep up with all the new boats that have hit the water in the past few years. You may have to modify a set of plans of a similar boat to match yours. One thing virtually all unlimiteds today have in common is the non-symmetrical "Ron Jones" style sponsons. So any plans of a "Jones" sponsoned boat can be a starting place. The differences between modern boats, which can be substantial, is in the center sections, canards and transom areas. Cowls also vary from boat to boat and you might have to check around to find a glass cowl for your hull. Or, you may, at worse,

have to mold your own. The good news is wings. There are really only two or three popular wing styles shared by modern hydros and 1/8th scale versions are usually available from the main fiberglass scale boat producers.

Finding a fiberglass hull of your boat may be simple or difficult. It's nearly impossible for fiberglass builders to have molds for every unlimited that comes along. As with plans, you may have to make some modifications to a glass hull to make it replicate your boat. This is a common undertaking for modelers of many of the modern hydros. (A common source now for fiberglass boats now is www.rcboatcompany.com –ed.)

Constructing a model using a combination of fiberglass and scratch-built parts has become a popular approach. Several modelers have used scale fiberglass "Ron Jones" sponson "canoes" with a framed up center section. My current 1984 Atlas Van Lines model is built with molded carbon fiber sponsons and bottom, along with a wood and glass center section. When the time comes to paint and detail the boat, do your homework. Let's not have anymore "Tide" or "Winston" models that are painted plain red because the modeler, who copied a photo, didn't know that "day glow" red doesn't reproduce on film. After you get the colors right, the search is on for decals or vinyl graphics. In today's computer age, it's fairly easy to have graphics made. Names and logos can be scanned and printed out in vinyl or other materials that can be applied.

This is a quick overview of what it takes to build a scale hydro. There's lots more to it as you know.

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