

DRAG BOAT RACING'S

LIQUID

Quarter Mile

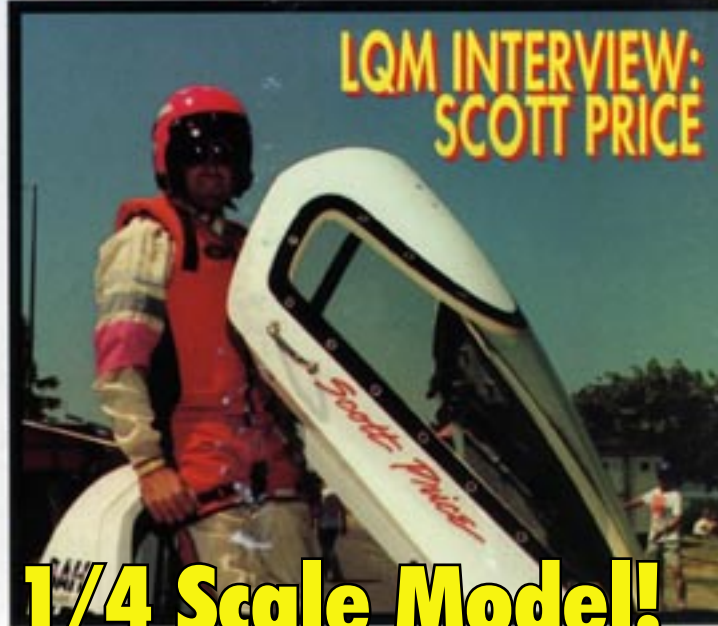


IHBA WORLD FINALS



PREVIEW

LQM INTERVIEW: SCOTT PRICE



1/4 Scale Model!

LIFELINE'S 30 YEAR SAFETY SAFARI



High Point Hijinks



Kurtis Kraft V-Drive Installation



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Top Fuel For X-mas

Looks like a Top Fuel Hydro that's ready to go racing doesn't it? Actually, it's 1/5-scale model, built by master model builder Bob Gregory of Westminster, California. Its powerplant is a 1/4-scale Conley V8, complete with working supercharger and dual carburetors.



The boat's owner, Casey Moir, of Costa Mesa, California holds his model hydro, giving an idea of the size of this mini monster drag race boat. The boat is on display at the Kenny Youngblood motorsports gallery, which features quite a few beautiful renderings of race boats, including Eddie Hill's 129 mph record run.

So you've always wanted to run a fueler, but have been a little short on the funds needed? Now there's a way that you can hear the cackle of burning nitro and get your fix of the pungent smell of maximum performance for mere pennies. Well, pennies compared to the real thing at any rate. Considering the cost

of a real fuel boat, Santa should have no problem springing for this most excellent Christmas toy.

This Conley-powered hydro is fitted with a genuine nitro-burning, supercharged 1/4-scale Conley V8 that has to be seen to be believed. Built by master model builder Bob Gregory of Westminster, California, this 48" flyer is owned by Casey Moir, of Costa Mesa, California.

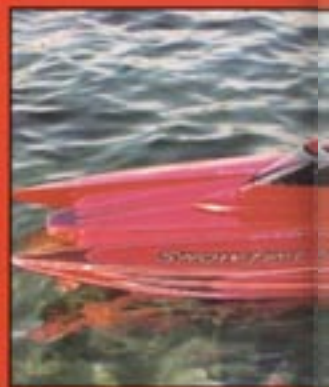
The hull is a 1/5-scale Kurtis Kraft that Bob measured and observed at GS Marine, in Corona, builders of the IHBA regulation-sized Kurtis Kraft hydros. Bob scratch built the hull, duplicating all the stringers,



For tuning and dyno testing the motor, this test stand was assembled and equipped with battery power for the starter motor and electronic controls. The engine produced 5.75 horsepower from 3.6 cubic inches!

bulkheads and construction details from the real thing. The entire hull was hand made with hardwood, plywood and birch, instead of fiberglass or carbon fiber like the genuine article. Even the skin of the hull was made of wood, and finished with the bright red paint job and graphics by Dave Braman.

You can't run a fuel boat without a capsule and a cage, and this model has both. Over 5 feet of 1/8" brass tubing was used constructing the cage which even has a tiny little driver's seat and 1/5-scale driver. The canopy was fashioned from a model of a North American Rockwell P51 World War II fighter. An authentic looking triple axle trailer was made to use displaying the boat. Future plans call for a radio controlled 1/5-scale dually pickup powered by another Conley V8. With an eye



While not equipped with all of the boat fully operational, the model has an excess of 5 horsepower on the 3.6

Now, (almost) Anyone Can Afford To Race A Nitro-Powered Hydro!



towards practicality, the duo intends to use a single, 4-barrel carb version of the Conley. After all, a good tow vehicle must exhibit docile towing drivability.

The Conley V-8 powering this drag boat is a 3.6 cubic inch version of the miniature motor. Stock Conleys come with only 3.0 cubic inches of displacement, so the optional stroker crankshaft was used to increase the stroke from .625" to .750" while the bore remains stock at .875". In case you were wondering, this is a true four cycle motor, complete with tiny little intake and exhaust valves,

solid lifters and a cam with .059" lift and .280-degree duration. Glow plugs light the charge in conjunction with a computer controlled ignition system.

An electric fuel pump gets the fuel

to the two carbs sitting atop a real Roots style supercharger fitted with twin lob, straight cut impellers. The Conley factory recommends running it at 12 pounds of boost, but Casey has bumped it to 14 pounds of boost with 10% overdrive on the blower and gotten 5.75 horsepower at 15,500 rpm. The fuel mixture was 80% alcohol and 20% nitro when the little motor was dyno tested for that output. It's been on the dyno about 100 times, according to Casey, who also admitted that they banged the blower once while trying to dial in the fuel system. It's now fitted with fuel restrictors and by-passes to fatten up the mixture without hydraulicing the motor. Fuel is pumped to the fuel block, then to the carbs, with the excess being diverted back to the fuel tank.

A marvel of miniature machining, the Conley V8 comes with an investment cast 4140 steel crankshaft that is blueprinted and balanced and spins in Torrington roller bearings. The rods are 2024 T4 alu-

minum and are fitted with precision ground, skirted pistons. A dry-sump oil system keeps all the lubrication going throughout the motor.

All that power has to get into the water, and a V-drive was fashioned for that job. Similar in appearance to a real Casale V-drive it's actually cast and machined by Skellenger Engineering in Santa Ana, California. They used one of their 1/4-scale sprint car quick-change rear ends as the basis of the V-drive, and modified it for use on the model drag boat. A 1:1 ratio gear set is currently fitted to the V-drive.



the radio controls needed to make the motor does run, and has produced in 1/4 scale.



The Conley V8 is available as a pre-machined kit that includes block, heads, crankshaft, pistons, etc. needed to build a running 1/4-scale V8. Standard fuel system is a single carb, options allow for two or three carbs and the supercharger as fitted to SHOWTIME.

Top Fuel For X-mas

What's it like to "drive" the 1/5-scale top fuel hydro? Well, no one really knows yet. You see, building a boat like this is a very expensive, and time consuming, project. The total cost involved in the boat, motor and trailer could buy a new sub-compact car, including high-risk-driver insurance. While it may be the kind of toy that some guys would go out and take a chance on destroying, Casey isn't that kind of guy. He sees it, as many do, as a genuine work of art. In fact, some of the photographs were taken at the art gallery that showcases premier motorsports artist Kenny Youngblood's fantastic paintings and



A miniature V-drive was fabricated from the quick change rear end of a 1/4-scale sprint car by Skellenger Engineering. Gears inside are 1:1 ratio.

posters. The boat's on display there for an indefinite stay, and if you're in the neighborhood of the Anaheim Stadium in southern California, drop by to take a look at it in person. (Youngblood



This installation shot shows the fuel system and electric starter. The entire model is quite authentic looking and represents weeks of work scratch-building the hull.



The crankshaft rides on roller bearings that allow for the 12,000+ rpm range. A stroker crankshaft allows upping the displacement from the stock 3.0 cubic inches to a powerful 3.6 cubic inches.

Motorsport Gallery, 1030 N. Main St. Unit D, Orange, CA 92668. 714/532-5077) And in the meantime, if you're a good little boy, or girl, maybe Santa will leave you your very own 1/5-scale top fuel hydro under the Christmas tree. But you'd better be really, really, REALLY good to make this Christmas wish happen! 