

ON THE TRAIL OF THE 55+ KNOT SPORTFISH

Or Making a weapon for the Serious Tournament Fishing Team

Over the past couple of years we have been studying the sport fishing boats on the water and we are convinced that the 55+ knot boat is simply waiting for the right Owner. The technology is in place to build the boat, the engines are available to drive the boat and the design is in place to shape the hull. The Owner needs only to stamp the complete package with his individual requirements.

When we built the 50' offshore catamaran "POPEYES" for Al Copeland in 1986 I was struck by one salient fact: Hull construction technology could transform these boats. We built a boat of the same general shape and surface area as Copeland's previous boat and the hull weight differences were enormous. The original hull, deck and structure weighed over 11,000 pounds. The boat we built weighed 6800 pounds. What a saving! Think of the tactical advantages gained on the race course, faster speed than the competition with the same engine package running at equal rpm or equal speed but more range and greater reliability and reserve with less rpm.

Of course for tournament sport fishing the advantages of light weight, high tech, modern construction are similar, speed to the fishing grounds, greater reliability at speed due to the ability to run with less rpm's and greater range because of the lower rpm's needed to run at speed. Obviously faster travel times make for more time fishing or access to farther fishing grounds and thus greater chance of catching the tournament winner.

In our search for information on the requirements for a high tech sport fishing boat, we talked to several prominent designers, some of whom we had worked with in the past. We talked to John Deknatel at the Hunt office and Penn Edmonds from Boston, Robert Ullberg and Michael Peters from Florida and the Blount's from Virginia.

The consensus was that a winning high tech tournament boat needs to be about 60-63 feet. Most boats of that size on the market today displace about 55-60,000 pounds. When we mentioned a target of 35,000 pounds, with exact control of vertical and horizontal centers of gravity, fitted out and ready to fish, all were immediately psyched. The fact is that we built a 60-foot cruising boat with twin Yanmar 425 hp engines and Hamilton jets at 23,000 pounds. This family cruiser topped out at 38 knots without any hesitation and 18 people aboard.

All the designers were enthused and all were helpful with suggestions and comments. The bottom line is that a high-speed sportfish needs to be light, it needs to be strong and it needs to be reliable. In order to accomplish those seemingly conflicting requirements, it needs to be very carefully designed and engineered.

This care naturally refers to the hull and structure. A light boat will be slightly narrower than the norm for a given length. A lightly built deck, superstructure and tower will cause the center of gravity to be lower, thus increasing stability both underway and while still. Narrow boats are more easily driven and more economical, both good things. Because we will be trying to squeeze out the weight, the structure will have to be very efficiently designed and carefully built. There cannot be any forgiveness for over engineering, sloppy construction, extra resin or extra material.

However, care, consideration, design and engineering must also be given to other areas of the boat, both above and below the waterline. The shapes of cabins, windshields, composite airfoil towers and outriggers will need careful scrutiny. The higher the speed, the greater the drag imposed by these elements.

We have spoken to several of the designers about shafts, p-brackets and rudders. These can cause huge underwater drag. In our striving to reduce drag in sailboat construction we have gone to high strength steels for some of our components. Imagine the saving in frontal area [think drag] when we begin to employ steels whose yield strengths are over 100,000 psi or almost triple that of stainless steel.

So what is it that is in my mind's eye when I see the tournament winner of the near future?

I see a boat which is about 63 feet and slightly narrower than the norm today. I see a boat whose hull shape and running gear underwater is a refinement of what is on the water today. I see higher tech materials, both composite and metal, which are stronger, lighter and safer than the materials used today.

Under the hood I see powerful, reliable diesels [rather than some exotic engines needed on heavy boats] which do not have to work at maximum load in order to drive the boat at 55+ knots.

I see a normal payload of icemakers, generator, electrical system, galley, bunks and navigational equipment, all built with light foam/glass panels used to build the purpose built ultimate tournament sportfisher.