

BY DAVE REED

The Winners Cir-

What does it take to win under IRC? The undisputed advice from these top three teams is: Make the boat easier and more efficient to sail.

Four Stars New York YC Race Week Presented by Rolex, IRC 4

For a case study of a bona fide cruiser turned into a blazing fast IRC racer, Timothy McAdam's Beneteau 44.7 *Four Stars* is the perfect candidate. After a substantial performance-oriented rehab, *Four Stars* won the Gibbs Hill Lighthouse Division under IRC in the 2006 Newport Bermuda Race, as well as its division at New York YC's Race Week Presented by Rolex.

Timothy McAdams' Beneteau 44.7 *Four Stars* tackled its IRC makeover with zeal, and top results quickly followed, offshore and around the bouys.

"Tim was strictly into cruising, but had gotten the racing bug through the Marion Bermuda Race [for performance cruisers]," says project manager Rob

MacMillan, who owns the Quantum Newport (R.I.) loft. "The 44.7 he bought came with the full cruising package."

When McAdams, a dentist from

SCORPIO	
Type:	CUSTOM WYLIE 42
Designer:	TOM WYLIE
Year built:	1991, BETTS ENTERPRISES
IRC Rating:	1.099
Sails:	North 3DL
Owner:	JOHN SIEGEL

Brewster, Mass., approached MacMillan about turning the boat into a competitive entry for the centennial Bermuda Race, the transformation was set into mo-

tion. Among other improvements to the boat, says MacMillan, they replaced "every piece of rigging," switched to "massively oversized" carbon pole (picked up used from a TP 52), built a new bow pulpit to accommodate asymmetric sails, added a pad eye for a combination genoa/staysail, replaced every block and clutch on the boat, reworked the entire pit area, added Lewmar Speed Rings to the cabin-top winches, and improved the traveler arrangement.

In anticipation of a light-air Bermuda Race, MacMillan also maximized the boat's sail area, in the process submitting six trial certificates, the maximum allowed. "The kites ended up being

30 square meters bigger than the standard IRC sizing, which was important because the boat has a shoal draft [keel], and it made it incredibly faster downwind," says MacMillan. "For headsails, the boat was rated with a 135-percent [overlapping], but we went with a 145; the rating penalty was well worth it."

In the process of the refit, McAdams also decided to participate in New York YC's summer IRC events, partly as practice, partly because he wanted to try his hand at IRC buoy racing. For this, MacMillan added two symmetric kites to the inventory. "You can't race this boat with A-sails," he says, "because, unless it's blowing 6 knots, you lose 30 seconds with every jibe."

Having taken full advantage of IRC's trial-certificate allotment, MacMillan suggests one thing: "When trying to figure out an improvement, don't have too many things change at once or too soon. It only costs \$20 to do the certificates, so it's better to do as many as you can with minimal changes on each. Take each number you're happy with and play with it."

In addition to trial certificates, MacMillan says they also researched IRC numbers of other existing 44.7s, globally. "It really helps to buy other people certificates to see where you're starting from. From these we picked a number that we wanted to hit, in this case 1.111 or 1.112. We didn't want to be any faster than that so



we said, 'Let's get to that point because that seems to be the magic number for the 44.7.'"

All told, the improvements transformed the boat into an IRC wolf in sheep's clothing, and as the biggest boat in its division at NYYC's Race Week, they used the newfound speed to their advantage, stepping away from the fleet at the start and sticking it to the little boats whenever they could. "As long as we could get to the mark first and let the little boats beat up on each other we were fine," says MacMillan. "If I were one of the little boats, I would've tried to stay away from the bigger boats at the start at all costs. If you end up sitting in bad air for

the first minute, you'll never get that time back."

Scorpio 2006 Rolex Big Boat Series IRC B

Ten months before its decisive division win at the 2006 Rolex Big Boat Series in San Francisco, owner John Siegel nearly sent his seasoned Wylie 42 *Scorpio* to the scrap heap. Late in 2005, after thousands of Pacific Ocean miles under its keel, and countless races on the Bay, Siegel discovered severe corrosion in numerous places on *Scorpio's* aluminum hull. The three options that were put on the table were to scrap the boat entirely, re-plate affected areas of

A steady diet of improvements to *Scorpio's* deck layout has resulted in a boat that's easier to sail. And on the race-course, owner John Siegel practices what he preaches: "Although we don't take ourselves seriously, we do take the program seriously."

the hull, or build a new composite hull from a mold taken from the boat in the '90s.

The boat had rated well under any and all handicap systems over the past three decades, a fact that underpinned Siegel dismissing option No. 1. Having consulted with designer Tom Wylie, Siegel ran IRC trial certificates to determine what kind of hit his 1.099 rating would sustain. A new, 800-pound lighter hull (and salvaged deck) bumped it to 1.114, a number Siegel didn't like. The boat traveled north to its builder James Betts Enterprises in Anacortes, Wash., in February 2006 for extensive re-plating and re-fairing. The boat returned with a new lease on life three months later, and Team

FOUR STARS	
Type:	BENETEAU 44.7
Designer:	BENETEAU
Year built:	TK
IRC Rating:	1.112 (CHK)
Sails:	QUANTUM
Owner:	TIMOTHY MCADAMS

Scorpio was back in business, gunning for its eventual fourth consecutive Big Boat Series win, it's second under IRC.

"IRC seems to like the design," says Siegel, 61, a retired software developer from San Francisco, who also serves on St. Francis YC's executive race committee, which brought IRC to the Bay area in 2005. "IRC seems to be a reasonable system for most boats. It's fairly predictable in that if you sail well, you do well, and if you don't, you get punished, and that's the way it ought to be. It seems to work fine with the current we have here."

Local conditions aside, says Siegel, there is more to winning under IRC than having a boat that fits well within the rule's parameters. "A lot of it is the way the

boats are prepared. When we went with IRC, I went to Tom [Wylie] and we talked about different things we might do to the boat. It turns out the boat was pretty well set up for it, so there wasn't a whole lot we could do. For some of the other guys that have exposed knuckles and things that IRC doesn't look favorably upon, we need to figure out what to do to improve their rating. Eliminating overlapping jibs, which are rarely needed on San Francisco Bay, might be one way to go for some teams."

For owners new to IRC, he says overcoming the measurement process is simply a matter of being committed to it and understanding the planning and scheduling that needs to take place. In addition, offers Siegel, consulting with a naval architect to get ideas of how a boat could be optimized is money very well spent. "Be aware," he says, "that small changes can make a difference."

That said, Siegel has been diligent about making numerous, small improvements to the boat that aren't necessarily IRC optimizations, but do make a difference of the overall performance of the boat. On *Scorpio*, for example, Siegel moved its hydraulics to the middle of the boat so they could play the backstay from the rail and ran the leech cord and cunningham to the mainsail trimmer, eliminating the need for crew to leave the rail all the time.

At Big Boat Series, newly plated hull and all, Team Scorpio won five of seven races, sailing most of the series out ahead of the fleet. As the fastest boat in his division, Siegel says clear air and knowing the current was always important, but the true advantage was his talented, long-standing crew, which is one speed advantage IRC won't penalize.

Tupelo Honey **Rolex Big Boat Series** **IRC C**

The largest IRC division split at the 2006 Rolex Big Boat Series was not the grand-prix big boats of A division, but rather the eclectic 10-boat mid-sized racer/cruisers of division C. Gerard Sheridan's *Tupelo Honey*, a Croatian-built Elan 40, won all but one of its races at BBS.

"They [Elan 40s] do well under IRC in Europe," says Sheridan, who moved from Ireland to San Francisco in 1997 and campaigned a Baltic 52 before buying the 40-footer in 2004. "The boat hasn't been successful from a sales point of view internationally, but from a performance standpoint, it's right up there. For me, the whole motivation behind buying the boat was the Big Boat Series."

Sheridan says he's more than an IRC winner—he's a staunch supporter of the Rule and part of a small but growing core of owners committed to seeing the it grow inside and outside the Bay. "I'm glad St. Francis [YC] made it happen because there are a lot of owners of 35-foot-plus boats that are looking for a better rule. I think IRC provides it and I'd like to see other clubs at least give the option of dual scoring for the larger-boat classes. A lot of the boats here have their certificates, most of them fully endorsed, but there needs to be more events. IRC events do attract some of the more competitive racers, but three events per year isn't enough to justify people owning IRC boats out here."

Sheridan, like many others across the country, says the hurdle, initially, is the certification. In his case, he says, he needed an endorsed certificate, and there were no Elan 40s in the states. "Most owners don't want to go through



There are no secrets to the success of Gerard Sheridan's Tupelo Honey. Prep the boat well, get a good crew, sail clean, and get to the windward mark first.

the hassle of pulling the boat to be weighed," he says, "but having said that, I eventually did and it was the right thing to do because it gave a true weight as opposed to having a derived number from a European IMS certificate, for example." The process can be slow, he says, but once you have the endorsed, moving forward is easy. "The revalidation is fairly simple," he says. "You just stay on top of it and see it through. Being able to do trial certificates and figuring out where to compromise is pretty neat—you can't do that under PHRF."

Out of the box, Sheridan did very little to optimize it for IRC, instead sticking to the configurations they use in Europe. For the second season, he says he gave it far more thought and considered the conditions commonly encountered on the Bay. "Carrying around a No. 1 headsail down below is not really very smart," says Sheridan.

Not even bothering with a trial certificate, they went for non-overlapping headsails—a new North 3DL No. 3—and a mainsail with more roach. "The change went from 1.043 to 1.038 and we were amazed at our upwind performance with the new sails."

In addition to the sails, Sheridan followed a fundamental rule of handicap racing: A boat that's

TUPELO HONEY

Type:	ELAN 40
Designer:	ROB HUMPHRIES
Builder:	ELAN
Year built:	TK
IRC Rating:	
Sails:	NORTH 3DL
Owner:	GERARD SHERIDAN

easy to sail, sails to its rating. In the first year, local rigger Scott Easom (Easom Racing and Rigging) stripped all the boat's factory-supplied running rigging. "I'm a firm believer in quality lines," says Sheridan, "and Scott's work made a significant difference." Sheridan switched to a carbon spin pole and found ways to improve the deck layout. This year, the back-

stay system was replaced with an electric pump-based hydraulic backstay. Two buttons on either side now give his main trimmer fast, easy control of the backstay. "All these things come back to making the control and tuning of the boat easy," says Sheridan. "When you get a standard racer/cruiser these things don't get addressed."

The result of his improvements is better results on the water, and as one of the faster boats in its division BBS, *Tupelo Honey* was virtually untouchable. "One of our biggest concerns early on was the J/109; it goes well and has a rating that's in a sweet spot," says Sheridan. "A different 109 came up from Southern California last year [2005] and cleaned our clocks, so we were watching it this year. As it turns out we were out in front all the time so it wasn't an issue. Because we were one of the faster boats, the key was to not get buried in the start because it's my feeling that if you don't reach the top mark first you've probably lost. We spent time practicing our starting maneuvers so we could