

SORC '84

It's *Diva* and *Allegiance* in a dazzling finish

By Charles Mason

Bernie Beilken's *Diva*, the overall winner of this year's Southern Ocean Racing Conference, and Bill Ostermiller's *Allegiance*, runner-up by the narrowest of margins, are safely tied up alongside each other after the sixth and final race of the Circuit. There are the usual beers, cheers, and handshakes all around. After all, that's traditional ocean-racing stuff.

But then someone on *Diva* takes off his red racing shirt and passes it over to a crewmember on *Allegiance*, who, as it happens, is doing precisely the same thing with his own, white shirt. Then it snowballs. And as the two crews mix white and red shirts together, it becomes impossible to tell who has been sailing on which boat. It doesn't matter anyway because 10 seconds later everyone involved, and you can count in a few enthusiastic but unsuspecting friends, is happily swimming in the sun-flecked Bahamian water off Nassau's Yacht Haven Marina.

Such a display of mutual respect for each other's sailing abilities is, given the events of the previous three weeks, completely understandable. Both *Diva* and *Allegiance* are fractionally rigged, both are 39 feet overall, and both have ratings of 30.4 feet.

And more to the point, after the two had battled it out over nearly a thousand miles of water, sailing through gales and calms, each had managed to beat the other three times. Include in that score the Miami-Nassau Race, when, after 26 hours of hard reaching, beating, and countless sail changes made in darkness, *Diva* managed to dive across the Nassau finish line just 3 seconds in front of *Allegiance*. Blink or sneeze at the wrong time and you wouldn't have been able to tell who had won.

So, with no quarter asked or given by either boat, it was inevitable that the two would push each other to the front of the glamorous 70-boat SORC fleet. But within their own Class E, *Allegiance* came home first with *Diva* right behind. If you care to leave the mathematicians out of it all, you can count the whole show as a dead-even tie.

Still, for better or worse, the history of the SORC is written around the overall fleet winner. And this year Beilken and *Diva* added several historical footnotes to that book. *Diva* is not only the first European boat ever to win the coveted Governor's Cup for

overall honors in this premier U.S. yachting event, it is also the first fractionally rigged boat to do so. *Diva*, in short, is the *prima donna* of this year's SORC. But then *Diva* has become used to starring roles. Last summer, sailing under the tricolor of France with Olympian Yves Pajot at the helm, *Diva* was by far the highest-scoring Admiral's Cup boat.

Christopher Cunningham

SAILS & RIGS

David Hulse: President, Hulse-Chrisman Spars

"When you talk about spars, the first thing to decide is whether you want an aerodynamic section that is small but heavy or a larger section that is less aerodynamic but much lighter. An aerodynamic section is good for flat water where pitching is not a factor, and a lighter, fuller section is the answer offshore where you are bouncing around. Discontinuous rigging seems to be the way to go if you have good fittings. In six months you'll see many fittings that are light and aerodynamic at the spreader tips. Rod, incidentally, rarely breaks in the middle. It breaks from fatigue wherever it is trying to toggle, and that is where rigs get into trouble. That is why we've been shortening our rigging every two years or so. We cut it off to get rid of the fatigue zone. We are seeing higher headstay loads being generated from the running backstays—the loads have almost doubled from three years ago, so the trick is to have a stiff boat you can hang the rig on. Shroud bases have moved in—and spreaders have shortened—to improve sheeting the #2. While some booms are going to maximum draft I'm not convinced that such a boom is anything more than a psychological advantage. It is more expensive and heavier."

Dee Smith: Loft Manager, Horizon Sails, San Francisco

"The main thing that is going on right now in racing sails are the radial heads and clews, which obviously are more complicated constructions. I started working on Kevlar radial clews several

Allegiance (top right) was swift in a breeze while *Diva* danced just as well in lighter air.

Christopher Cunningham





Trends for '84: Discontinuous rigging; light and aerodynamic fittings at spreader tips; radial heads



David Hulse



Dee Smith



Tom McLaughlin



Tom Whidden

Photographs by Roger Kennedy

years ago, but I stopped because it was very expensive. That seems to have changed now that people see that the radial system works. There are a lot of good sails here, and people don't seem to mind spending to have them. On Bro-vura we've got a new type of cloth in our #2, and it seems to be working well. This material will, perhaps, be the key for sailors in Europe because at the moment they are not allowed to use Kevlar. One other clear trend is the move toward discontinuous rod rigging. It is a good idea as long as the weight of the end fittings at the spreaders can be kept down."

Tom McLaughlin: Sales Manager, North Sails

"Sails are still going through a lot of development. Mylar seemed to be a good cure-all because it is omnidirectional in its stretch properties. But now with the move toward radial and triradial panel constructions, the trend is to use less Mylar and add more filament constructions. Kevlar is a fine filament for reduc-

ing stretch, and prestretched Dacron should be another evolution. If everyone can go for a year with no mainsail failures, the 'powers that be' will say, 'Hey, Kevlar is actually pretty rugged.' Then perhaps we'll see it in genoas. Mylar thickness is being reduced because of better construction methods. It's coming down from three mils to two mils and is heading toward one mil. The development is going to use materials that are softer and easier to handle but still have the same strength and shape-holding characteristics."

Tom Whidden: Vice President, Sobstad Sails

"The IOR is equating boats pretty well now, and there is really no such thing as a breakthrough anymore. The breakthrough comes in your preparation. Sails here are more conservative than you saw on the 12-Meters because people have to go ocean racing with them and use them day and night. The biggest gain this year has been in the weight of the sails, which are lighter than they have ever been. Of

course, a lot depends on what happens to Kevlar. If Kevlar is allowed in the United States by the national authorities, I think you'll continue to see good progress. Is Kevlar a transitional material? If you look at it from the perspective of history, it's fair to say that nothing is here to stay forever, so it probably is transitional. But right now it is pretty tough to beat in sails. I suppose you could get away with fewer headsails, but I still think it is advantageous to have lighter sails rather than fewer sails and have different shapes put in each. I think it's a good idea to have a light, a medium, and a heavy #1, each with a different shape for the expected wind strength. The reason you can do this now is that with Kevlar leeches and radiating panels you can design a fuller shape that won't elongate in the upper end of the sail's wind range. In the old days you designed a Dacron sail to be good in the middle of its wind range, but it was always a little full at the upper end and a little flat at the low end. You don't have that now because stretch is no longer a problem."



Secret Love and Scaramouche battled it out while Dazzler (left) sailed to a third-place finish ahead of Alethea, Motivation, and a rejuvenated Quest



Christopher Cunningham



Robert D. Hagan



Christopher Cunningham

Bernie Beilken hasn't exactly dropped out of the sky onto the ocean-racing stage, either. The younger brother of Hans, who manages the family sailmaking business in Bremen, West Germany, Beilken, now 43, has been helming Half-, Three-Quarter-, One-, and Two-Tonners since he was big enough to get his hand around the tiller. In the mid-seventies Beilken took the Peterson-designed Gumboats to the World One-Ton Championships off Newport, Rhode Island, and finished second. And in 1977 he steered another Peterson design, the 42-foot Champagne, to a respectable finish in that year's SORC.

Last summer for the first time in years, he found himself without a boat. He decided to become the coach, manager, resident comedian, and morale officer for the West German Admiral's Cup team. They took his advice and listened to his jokes and went on to win. But when he was out on the water in a rubber boat, doing routine tide and wind checks, he would watch Diva as it sailed by, and it is an understatement to say that he became attracted by this spirited little boat from the board of the French design team of Bernard Nivelt and Michel Joubert. As Beilken says, "The history of Diva is that we bought the boat in August, the rig went over the side in September, and it wasn't until December that we were able to get in a few good sailing days on the North Sea before we had to ship the boat to Florida." Even though the time spent on the boat was short, experience can count for a lot, and Beilken had packed Diva's exuberant German chorus line with nothing but ocean-racing and small-boat champions for this SORC effort.

In contrast, Allegiance is owned by Bill Ostermiller, a mild-mannered heart surgeon from Newport Beach, California. Although he is a veteran Transpac skipper and southern California ocean racer, he doesn't mind telling you that until now it's been pretty local stuff. And yes, this is his first SORC. Much of the same applies to Allegiance's youthful designer, Alan Andrews, who at 28 is crewing aboard his first design under the

Jon Eickert

Christopher Cunningham



HULLS Trends for '84: Lighter and stiffer; core and monocoque construction

Gary Carlin: President, Kiwi Boats

"The advantage of a lightweight hull is very simple. A designer designs a hull, and he puts a point on it that he calls the center of gravity. If the whole boat were made out of air except for that point, the boat would go through the waves without rocking. You are trying to make the boat, from bow to stern and from the top of the mast to the bottom of the keel, all mass at one point so all the weight is there. Most people think the center of gravity is pretty far down in a boat, but actually it is only about six inches below the waterline. That is why you want the ends of the boat, the mast, and the deck all to be light. You want to lower that mass. In hull construction, the two key words are strong and stiff, but keeping things stiff is the hard part. A boat can be strong but not stiff. A light piece of carbon steel is very stiff, but bend it just so far and it snaps. Other steel can be very strong but flexible. Designers for the most part can do engineering, but they don't know plastic, and that is what we are dealing with in hull construction. A stiff hull that doesn't flex is going to be faster. You get a stiff hull in one of two ways. You either do a single-skin hull and put quite a lot of framing inside, or you do a cored hull with not as much framing inside. It is a matter of personal building techniques, but I like to use a core, though picking the right core is a problem because of the variation in the strength of the matching laminates. You try to make everything match up so they all break at once instead of shearing at different loads. If you use a thick core, you wind up with more weight. If you don't want weight, you use lighter laminate materials, and then the trick is to avoid delamination."

John Heinemann: President, Hi-Tech Boats

"Though designers have individual preferences about hull shape, the IOR sort of dictates that shape. So, the building pro-



Gary Carlin



John Heinemann



Tom Dreyfus

Photographs by Roger Kennedy

cess is directed toward concentrating the weight as much as possible to reduce pitching moment, and the pressure is on the builder. A light hull is no good if it is flexible. It has to be stiff, and that is where the technology comes in. You want good stiffness relative to weight—this is where shear testing of core materials and laminates becomes so important. I feel we are all in the beginning stages of weight-to-strength technology. It's easy to get weight down, but strength isn't always there. Then boats can twist as they go off a wave, and the headstay curves. There's a lot of talk about composite hull structures, but if the fibers in that construction are oriented in the wrong direction, strength isn't there. I like a cored structure because stiffness goes up by the cube of the thickness. You can use a thin skin with a high modulus and a core to increase panel strength, although here is where the importance of having no shear between skin and core comes in. Though it is more expensive to get an additional ten percent of weight out of a hull, the added performance is worth it."

Tom Dreyfus: President, New Orleans Marine

"You can't get away from this fact: glass that is one-eighth inch thick by one foot square weighs one pound. My hulls are three-sixteenths inch thick, which is a

pound and a half. I don't think you can beat that after you put stringers inside a thin-skinned cored boat. I use a single-skin monocoque structure because you get good panel stiffness, which I think is safer in the event the boat hits a submerged object. If a cored boat doesn't use thin skins, it is back up to more weight, and that defeats the purpose of a core. Sure, lightness has some relevancy in a race boat, but IOR racing is different from either airplanes or racing cars where, if you remove weight, you increase your power-to-weight ratio. In IOR racing, every pound you take out of the hull has to go back in as ballast so your power-to-weight ratio doesn't change. So now what? We don't worry about weight in the middle of the boat because that is the neutral axis of the boat anyway. We don't worry about the back of the boat because we have eight people sitting back there. So saving weight in the stern is stupid except for rating purposes to get the bow down. That leaves you with the one-third of the boat up in front. On a forty-footer what do you have—perhaps a hundred square feet of hull? How many pounds can you save? Maybe ten percent. If you can do that, I think you are doing pretty well. And it is going to be pretty darn expensive. People spend all this money, but I don't think they are really any better off than anyone else."

International Offshore Rule (IOR). Although Andrews has produced champions before—he drew the lines for the Midget Ocean Racing Club (MORC) winner *Details—Allegiance* is his first boat to get out on the grand-prix course. The rest of the crew includes Soling Olympic veterans Robbie Haines and Ed Trevelyan along with Dave Webster and a number of other ocean-racing specialists. On paper, they are every bit the equal of Beilken's merry men.

The differences between the two boats are subtle. *Allegiance* is a bit heavier but carries more sail. *Diva* is light but is also a bit fuller in the stern sections than *Allegiance* who has been deliberately programmed to be strong upwind.

The first race of this SORC series was the 135-mile St. Petersburg–Boca Grande. It earned a minor spot in SORC history since the start was postponed some 2 hours because of no wind, something even the longest-toothed campaigner can't recall ever happening before. But there was plenty of breeze for the next one, the 365-mile St. Petersburg–Fort Lauderdale Race, which also went into the SORC record book. Cold and blustery winds tossed down by someone somewhere north in the Dakotas scared the daylight out of the orange growers. But as the cold winds gradually backed into the east, they produced a new elapsed time record of 39 hours, 14 minutes, 31 seconds for Bill Johnson's maxi, *Windward Passage*. Now in its sixteenth year of competitive racing, *Passage* blasted around the course often at sustained speeds in excess of 16 knots. In the record run *Passage* left Jim Kilroy's *Kialoa* a full 15 minutes astern at the Fort Lauderdale finish line.

Although the windy ride produced exultation among the maxi-boat crews, there were bumps, bruises, and broken gear throughout the fleet astern. And there were crumpled reputations as well after 11 boats, over 10 percent of the fleet, pulled off the course with breakdowns. Three of the new 50-footers, William Ziegler's Scott Kaufman-designed *Gem*, Dave Chatham and Tom Whidden's Frers-designed *Retaliation*, and Larry Harvey's Nelson/Marek-designed *Brooke Ann*, caved in early with broken rudders. Before it was all over, four more rudders had packed up, and there were a clutch of broken

booms as well as an inverted mast to round out the injury list. Tom Dreyfus, co-owner with fellow Louisianan Julien Richards of the 42-foot *Détente*, would later remind some of his red-faced competitors about the two Rs of ocean racing. "You need to have two things in this game," he said, "your rig and your rudder. And if you lose either one you can't finish, and you can't win."

But others reveled in the squalls and the swells, and among the happiest was *Dazzler*, a new 41-foot, masthead-rigged design from the J Boat drawing board of Rod Johnstone. Sailed by Bill Shore and Perry Harris, *Dazzler*, rating just 0.1 foot over *Diva* and *Allegiance*, breezed home in the Lauderdale race ahead of *Diva*, *Allegiance*, and *Alethea*, another fractionally rigged J/41, sailed by John Holstein. With the heavy weighting given to the Lauderdale race, *Dazzler* moved into the lead in overall standings and held on to it for two more races; in fact, it was all *Dazzler* until *Diva* and *Allegiance* had their memorable 3-second boat race at the end of the Miami–Nassau race. *Dazzler* packs just a bit more ballast than *Alethea*, while *Alethea* utilizes a bit larger jib and a slightly smaller main than the other fractionally rigged boats of that size.

Interestingly, the new Mark Soverel-designed *The Shadow*, a 15/16ths fractional-rigged 55-footer, did use a big mainsail and a small jib and in so doing took first place in five of six races and breezed to an easy class win in Class A. "If *The Shadow* had had a masthead rig, I would have had to shift down to the #2 genoa as the wind came up," Soverel explained. "But with a fractional rig like this one, you have the flexibility to power the mainsail up or down. With a fixed foretriangle area you have no flexibility. You've got to change your headsails."

In Class B, John Ambrose's new 50-foot, German Frers-designed *Morning Star*, with John Kolius in charge of the "patio crew" at the back of the boat and a team of 12-Metermen from the *Courageous* and *Freedom* camps up forward, made it almost look easy as they sailed away from the rest of the class and also earned an impressive fourth overall in fleet. Built of preimpregnated glass sections with balsa and Nomex cores and then baked in a huge oven at Lazzara

Marine in Tampa, Florida, *Morning Star* kept going as the other boats fell by the wayside.

In Class C, Brad and Barbara Herman's 45-foot, Peterson-designed *Secret Love* returned this year for a second try with a lighter keel and more internal ballast and managed to come from behind in the last race to narrowly beat Jack Batts's reworked *Scaramouche* to take first in class. Both earned a spot on the three-boat Sardinia Cup team for their efforts. (*Allegiance* is the third boat.) The semicustom Beneteau 456 *Lady Be* finished with a convincing third in class.

Détente, the 41-foot New Orleans Design Group effort, prevailed in Class D over *Container*, the highly regarded Judel/Vrolijk Admiral's Cupper, which finished second. A

Morning Star is behind *Artemis* here, but led at the finish

Christopher Cunningham

THE FUTURE

Ted Hood: President, Hood Enterprises

"This level of competition has produced fast boats, but it has sent a lot of people out of the sport, and that's too bad. What would bring them back? You could limit headsails to perhaps two jibs, one of which would be a spare, and the other would be set on a furling headstay. Obviously it wouldn't have a perfect shape, but you could roll it in and survive with it. That would result in even better furling systems and jibs, and that would be great for cruising later on. You could have an option on the mainsail and it could either furl in the mast, in the boom, or in the regular way. But you would get a credit for having a main with no roach. The IOR already recognizes this, but rules like MHS don't, which is a bit backwards because they are supposed to be the cruising boat's rule. You would be allowed one spinnaker, which would have to be pretty heavy to handle all conditions, and it would be set in a turtle. These and some other changes would help bring back the big cruiser-racers."

Rod Johnstone: Vice President, J Boats, Inc.

"The IOR doesn't measure stability; it's as simple as that. What should happen is that there ought to be a form-stability factor, or why not just have a simple rule like the 12-Meter Rule? That's a lot harder to beat than the IOR. The more complicated the rule, the easier it is to beat it. It's too bad the IOR doesn't allow you to design a boat that is also a cruising boat."



Trends? Headsails limit; hull construction restrictions; new rudder and keel designs



Ted Hood



Rod Johnstone



Gary Mull



Mark Soverel

Photographs by Roger Kennedy

There's nothing wrong with the designers; the Rule forces them to go the way they are going. Everything else down here is high-tech, but the designs themselves are not. These boats are not optimized to go fast for their size. I think that's too bad because the Rule forces you to a boat that is fairly heavy for its length, or at least heavy enough so you don't really get top-end performance off the wind. And on the wind the Rule doesn't penalize you very heavily for rated sail area. So what you should do is put as much sail on as you think the boat can handle with its #1 genoa, a full main, and twenty-two knots of apparent wind."

Gary Mull: President, Gary W. Mull, Naval Architects
"People talk about the arms race in IOR racing. The reason that has come about is

that the Rule has become stable. And once any rule does a really good job of fairly rating boats as far as their shape is concerned, the race goes into any area that is not measured. It goes into Kevlar sails, for example. As for the hull, two things are not measured. The planform of the keel is not measured, only the draft. And the polar moment of inertia, or pitching moment, is not measured either; this is why people are really trying to cut down on pitching moment. They know that it makes a boat faster."

Mark Soverel: Vice President, Soverel Marine

"Builders are going to continue to go further with refinements until there is some kind of restriction put on the construction of hulls, but no one is quite sure how that should be handled at this point. Owners probably aren't getting their

money's worth when it comes to lighter hulls, primarily because the weight has to go back on board as ballast. Certainly the boats are faster in certain conditions, but that's a lot of money to spend to reduce pitching moment. I think you are going to see a lot more design emphasis in the coming year on rudders and keels. We are going to see more vertical leading edges on keels and a return to slightly fuller sections having less wetted surface. I think we got off on a tangent two or three years ago with keels that were big at the top and had very narrow sections—some were as low as six or seven percent. As for rudders, the elliptical shape is creating a lot of interest because it reduces the vortex action at the bottom. To keep the expense of racing down, why go after Kevlar? It's more cost efficient just to reduce the number of jibs you can have, even though they are made with Kevlar."

SORC final results

CLASS A

Class Position	Boat	Master	Design & LOA/Rig	Rating	Fleet Position
1.	THE SHADOW	Richard Rogers	Soverel 55ft	45.8	26
2.	KIALOA	John B. Kirby	Holland 81m	70.0	47
3.	WINDWARD PASSAGE	William B. Johnson	Gurney 73m	69.3	45
4.	CONGERE	Bevin D. Koepfel	Fiers 61m	51.7	51
5.	SORCERY	Jacob D. Wood	Mull 83m	70.0	49
6.	HUASO	Mike Perkins	Fiers 81m	70.0	50
7.	SAUDADE	Albert Bull	Jude/Volk 63m	51.8	56
8.	RUNNING TIDE	A. G. Van Metre	S&S 60m	45.2	61
9.	ONDINE	Russell Long	Migram 79m	69.8	58
10.	BOOMERANG	George S. Courantance	Fiers 81m	70.0	63

CLASS B

Position	Boat	Master	Design & LOA/Rig	Rating	Position
1.	MORNING STAR	John R. Ambrose, Jr.	Fiers 50m	40.0	4
2.	ARTEMIS	Arthur D. Emli	Peterson 51m	40.7	17
3.	RETALIATION	D. Chatham/T. Widdens/D. Fenix	Fiers 51m	40.5	25
4.	BROOKE ANN	Larry B. Harvey	Nelson/Marek 49m	39.1	27
5.	JUBILATION	Jack S. James	Fiers 55m	42.5	29
6.	CARAT	Victor Forsa	Fiers 50m	40.2	40
7.	ICHIBAN	Steve O'Connell	Peterson 50m	39.6	37
8.	INFINITY	John B. Thomson, Jr.	Holland 47m	36.1	42
9.	GOLDEN EAGLE	Stephen Nichols	S&S 52m	40.3	46
10.	GEM	William Ziegler	Kaufman 47m	37.3	48
11.	VICTORY	Victor Cribb	Fiers 48m	37.3	60
12.	FORCE	James Bissell	Mull 52m	43.7	67

CLASS C

Position	Boat	Master	Design & LOA/Rig	Rating	Position
1.	SECRET LOVE	B. Herman/L. North	Peterson 45m	34.7	8
2.	SCARAMOUCHE	John H. Batts	Fiers 45m	34.2	11
3.	LADY BE	Francois Chalein	Fiers 46m	35.3	14
4.	INVICTUS	John Molec	G&S 45m	34.9	13
5.	DYNAMO	Graham W. Moog	Peterson 45m	34.4	21
6.	DAWN PATROL	Dawn Patrol Syndicate	Soverel 43m	33.7	33
7.	MORNING STAR IV	Bruce Macleod	Fiers 46m	35.3	28
8.	BRAWURA	Irving Loube	Fiers 46m	35.4	34
9.	GAUNTLET	G.S. Friedrichs	Kaufman 45m	34.6	31
10.	MERRYTHOUGHT	John W. King	Fiers 45m	34.6	15
11.	ROBIN	T. Hood/B. Koch	Hood 51m	33.7	52

CLASS D

Position	Boat	Master	Design & LOA/Rig	Rating	Position
1.	DETENTE	J. Richards/T. Dryfus	New Orleans Marine 41m	32.8	10
2.	CONTAINER	Udo Schutz	Jude/Volk 43ft	32.4	6
3.	QUEST	Robert B. Lynds	Rodgers 43m	31.9	9
4.	PIED PIPER	Richard E. Jennings	Peterson 42m	33.1	19
5.	THUNDERBOLT	Rodney Wallace	Nelson/Marek 41m	32.1	22
6.	MURPHY'S LAW	Michael S. Greenwald	Nelson/Marek 41m	32.2	23
7.	RAMPAGE	Randolph G. Richmond	Nelson/Marek 41m	32.2	36
8.	PINTA	Willi Ilbrich	Jude/Volk 43ft	32.6	24
9.	MICHIGAN CRUISE	J. Altman/U. Uzma	Peterson 42m	32.5	32
10.	JUBILATION	Willard Emery	Cook 41m	32.1	35
11.	PIPE DREAM	S. Piper/D. Weaver	Holland 42m	32.2	40
12.	IMMIGRANT	William McAlister	Dubois 41ft	32.7	57
13.	INTUITION	Patrick E. Malloy	Peterson 42m	32.7	66
14.	CELEBRITY	J.D. Shields	Fiers 42m	32.3	70

CLASS E

Position	Boat	Master	Design & LOA/Rig	Rating	Position
1.	ALLEGIANCE	William Ostermiller	Andrews 39ft	30.4	2
2.	DIVA	Bernard Beilken	Joubert/Nivet 39ft	30.4	1
3.	DAZZLER	P. Harris/W. Shore	Johnstone 41m	30.3	3
4.	ALETHEA	John Holstein	Johnstone 41ft	30.3	5
5.	BIG FOOT	Per Save	Norlin 40m	31.0	12
6.	RAZZLE DAZZLE	Ted Irwin	Irwin 43m	31.6	16
7.	OUTSIDER	Albert Hildebrandt	Jude/Volk 40ft	30.1	44
8.	CELEBRATION	Bruce Clark/Pat Clark	Cook 40ft	30.9	30
9.	CHRISTOPHER DRAGON	Stephen Weiss	C&C 41m	31.1	41
10.	BLACK STAR	Mark Wood	Cook 40ft	30.3	56
11.	CARRO CHEFE	Laurits von Lachmann	Fiers 41m	31.1	53
12.	JACK KNIFE	Jack Greenberg	Holland 41m	31.5	59

CLASS F

Position	Boat	Master	Design & LOA/Rig	Rating	Position
1.	MOTIVATION	R. Bahmann/K. von Wendi	Van de Stadt 33ft	24.5	7
2.	HOT TUB	Bernard Blum	Fier 37ft	28.6	18
3.	BREAKAWAY	J. Randall Burwell	Tripp 37m	28.6	20
4.	MOMENTUM	Peter Tong	Fiers 38m	30.0	38
5.	AGAPE TOO II	Terry Kohler	Hood 37m	25.5	43
6.	FLIRT OF PAGET	deForest Trimmingham	Holland 40m	30.0	54
7.	INTENTION 2	Joel Auerbach	Tanton 39ft	28.7	62

m = masthead rig; f = fractional rig

greatly improved Quest, the 43-foot O.H. Rodgers design owned by Bob Lynds that was well off the pace last year, finished third. And in the smallest class, F, where courage, an iron stomach, and an enthusiasm for dampness and deprivation rank high among the requisite skills, Ralf Bahrmann's 33-foot, Van de Stadt DBII, Motivation, dominated Bernard Blum's 37-foot, Bruce Farr-designed Hot Tub (which sailed last year as Freefall) and Randall Burwell's 37-foot, Bill Tripp-designed Breakaway.

As for the maxis, Kialoa edged out Windward Passage for the second year in a row, although after some 101 hours of total racing time, the margin between the two was only 9 minutes. On a maxi you can chew that up in one bad tack, one bum sail change, or even a little daydreaming on the helm.

This year's SORC winner came out of pure boat-for-boat competition of the sort that inspired Diva to perform the sailing aria that led to the winner's circle. Still, Rod Johnstone was pleased with the results that Dazzler, which finished third overall, had turned in, as well as those of Alethea, which finished right behind Morning Star in fifth. Is the fractional rig faster than the masthead rig? "Let's just say," he replied, "that from the sailor's point of view, the fractional rig is faster during the day when you can see and tune it, and the masthead rig probably is faster at night."

Still soaking wet, but safely back on board Diva, Bernie Beilken is clearly ecstatic. "You know," he says, waving a beer for added emphasis, "when I was in the sailing business full time I would sail seven days a week trying to please all my customers. This time I'm here all on my own, and now I really know what it is like to have some fun."

Next door on Allegiance Alan Andrews is sitting in the cockpit, also savoring the moment as the warm Nassau sun dries out his Diva T-shirt, which just happens to fit him perfectly. Someone asks him about those 3 seconds at the end of the Miami-Nassau. "You know," he answers, "we all like to talk about high technology and go-fast items in ocean racing. But when you come down to it, what counts and what makes the difference are all those things you learn to do when you are sailing dinghies."