

The Maxi Yacht Rolex Cup Is a Regatta of Heart-Stopping Challenges

In Bomb Alley, the winds can change in an instant. And then there are the rocks.

By David Schmidt

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Sailors call it Bomb Alley for good reason.

This notorious, roughly 15-mile stretch of water separates northeast Sardinia from the Maddalena archipelago and is an important feature of the Maxi Yacht Rolex Cup, which will be held Sept. 5-11. During the strong northwesterly winds that blow from southern France across the northern Mediterranean Sea, this narrow passage has a reputation for unpredictability.

“You can be sailing in five knots, round a corner, and it’s blowing 25 knots,” said Jonathan McKee, a two-time Olympic medalist and a Maxi Cup veteran.

Those lively conditions are caused by the Venturi Effect, in which winds moving through constrained passages increase in velocity and decrease in pressure.

But that is just one of the problems that these huge yachts, with their deep drafts, face. Along with Bomb Alley, there are the rocks.

“The rocks are the nightmare,” said Andrea Caracci, an aeronautical engineer and a highly experienced sailor who is navigating the 100-foot ARCA sgr in the regatta. “It’s a fast boat — we can sail at 12 or 13 knots upwind and 20 knots downwind, so there’s little time to avoid damage.”

McKee called the rocks unnerving: “Because the water is so clear, you can actually see the rocks beneath the keel.”



The narrow passage of Bomb Alley on the course of the Maxi Yacht Rolex Cup features strong northwesterly winds that blow from southern France across the northern Mediterranean Sea. Carlo Borlenghi/Rolex

These obstacles are compounded by the giant boats, which are what the race attracts; hence the name maxi. The regatta, which will be hosted by the Yacht Club Costa Smeralda in Sardinia, is open to yachts 60 feet or longer, with the largest contenders sometimes exceeding 200 feet. This year’s largest competitor is the J Class yacht Topaz, which measures just over 140 feet.

Topaz requires more than 15 feet of draft, or underwater clearance, from the waterline to the bottom of the keel, while other boats, such as the Rambler 88 and the 100-foot Comanche, require 23 feet of water. The boat Caracci requires just over 20 feet.

The regatta features two types of racing: shorter maneuver-intensive races around inflatable markers, which typically take place off Porto Cervo, and the coastal races in which the boats predominantly use the area’s northern islands as natural turning marks. This year, the regatta’s biggest boats and the smaller maxi classes will contest a maximum of five of these competitions while the smaller classes will contest five coastal races or a mix that includes four coastal races and two of the shorter ones.

While all crews need to be sharp for the maneuver-intensive windward-leeward racing, navigators, in particular, need to know exactly where the rocks are on the coastal courses. They will be threading multimillion-dollar needles that weigh tens of thousands of tons, and that are sometimes traveling at over 20 knots, through rock gardens that might grant only a few feet of keel clearance. Provided, of course, that the navigator perfectly positions the boat relative to the rocks.

While Caracci said that the rocks near the Isolotto Monaci Lighthouse were well known, others were more elusive.

For high-level teams, often with the biggest boats, the deepest keels and the biggest budgets, one tactic involves taking prerogative water-depth measurements at critical turns, adding yacht-specific information to their charts, and sometimes even donning scuba equipment to take a closer look.

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“Some of the navigators check the rocks and measure their position and depths,” Caracci said. “The charts say the rocks are in one place, but we check anyway. The risk is too high — there could be big damage to the boat.”

Stu Bannatyne, a four-time winner of the Ocean Race and a Maxi Yacht Rolex Cup veteran, said it was challenging navigation.

“There are gains to be made by cutting between rocks where the charts say you can’t sail,” he said. “Many boats have run aground.”

Caracci has seen this happen on these waters. Twice. “Once was dramatic,” he said. “The boat was 100 meters in front of us, and its keel was one meter deeper than ours. It hit rocks that the charts said shouldn’t be there.”



The Costa Smeralda coastline in Sardinia serves as a backdrop for the race. Carlo Borlenghi/Rolox

Navigators also have access to information from their boat's networked navigation instruments, including water depth, wind speed and direction, compass, and — critically — GPS. "Some [GPS] antennas can show you what the accuracy of the information is," Caracci said. "There can be a differential based on the number of tracked satellites. If you've only got a precision of one meter, you need to stay away from the rocks."

Another consideration is that the boat's draft and leeway requirements can change depending on its underwater appendages. Maxi yachts commonly have heavy, torpedolike keel bulbs that are hung from skinny struts to keep the boat from capsizing. On some boats, these keels can be swung from side to side using hydraulic rams to keep the boat sailing flat and fast.

"Sometimes the maximum risk is when you're heeled over with a canting keel that's out to the side, so you need to make a calculation," Caracci said about deciding when it is safe to sail over the rocks.

"When you're heeled over, the boat might only draw four meters, but you might pass over water that's only six meters deep. I really hate that."

Another challenge for navigators, Caracci said, involves working closely with the boat's senior crew members to make the best decisions. "The tactician always pushes, so the navigator needs to manage their aggressive approach," he said, adding that racing over dense and sometimes unmarked hazards requires accepting risks that could give a boat an advantage.

While the regatta's shorter races require rapid and highly choreographed maneuvers, the coastal races — for which the regatta's organizers have more than 50 courses to choose from, depending on the wind's strength and direction — are the most complex.

"This is definitely one of the events where local knowledge is tremendously important," said Peter Holmberg, an Olympic silver medalist and the helmsman of Topaz at this regatta. "Although conditions change every day, there are definitely characteristics that are consistent and reward previous experience.

"Since you're rounding islands and rocks, and not an anchored buoy in open water, one's local knowledge and level of risk-taking determines how close they can round that mark and shave valuable distance with an inside track," he said.

The complexities can be further compounded by the winds. In early September, racers can usually expect either 10- to 15-knot winds, or the stiffer northwesterly breezes — called the mistral winds — which typically hit 18 to 25 knots.

Winning, of course, requires actually finishing the regatta without a race-ending mistake.

"In mistral conditions, getting around the track isn't trivial," McKee said, pointing to the necessity of proper seamanship and tightly choreographed crew work, especially in Bomb Alley. "You can go for hours and, at the finish, only have 10 seconds separating the first and second boat. It comes down to the precision of the navigator's routing."