— CHILLIN' WITH THE 1%

down."

"'Zactly!" Lee acknowledged. "We now have roll control. And, like, this will compensate for the roll-yaw coupling from the rudders, if the linkage is done right. But more importantly, we have hydrodynamic roll force to resist heeling. I mean, since they decided to use only the big wings in all wind speeds up to 30, with no small wing option, to get real speed we'll need more than just weight and buoyancy to keep these beasts powered up."

"Three-axis control," noted the surgeon. "You could fly it through the water with a stick and rudder."

"In theory, at least," said Lee. "It's a good example of how they thought they'd keep the boats simple by allowing just one daggerboard and one rudder per hull, but the result is going to be a very complicated work-around."

"I watched the YouTube of Oracle's 72 on its early trials," said the stockbroker. "What's that vestigial center hull for?"

"I figured it was a big instrument pod of some sort," said the skipper. "It's where they keep the beer," suggested one of the football fans.

"Maybe it has something to do with stabilizing the boat when it's up on foils," added the software entrepre-

"It's, like, a flow fence," stated Lee.
"The deck is permeable by air, so it's

For a second, it looked as if we were about to witness a terrible crash.

as if the wing ends a few feet above the water with no endplate. The ventral fin essentially extends the wing right down to within inches of the water surface, so no air spills around the bottom. Otherwise there would be strong root vortex that would suppress upwash into the wing and add induced drag."

The next race started right after lunch, and this time it was a very close one.

Again, we were thrilled by the close proximity to the action as the boats rounded our mark, as well as impressed by dessert: Watsonville strawberry shortcake, a marzipan candy fruit sampler, and North Berkeley creme brûlée with M&Ms.

Alternating between the view out the windows and the TV screen, we were on the edge of our seats watching the last beat, as the two leaders converged in a close port-starboard crossing situation. For a second, it looked as if we were about to witness a terrible crash, but the port-tack boat flew its hull high enough to go right over the leeward stern of the starboard tacker. The umpires still called a foul on the port-tacker, though.

"No!" I shouted at the TV screen. "What do you mean, port didn't keep clear? Starboard didn't alter course an inch, and port had complete control! Idiots!"

"Looks like we have a new sports fan," said the guys in the football jerseys.

- max ebb

