NATURAL HISTORY

$2

The 80-foot sloop Condor *competes in the 1982 Pan Am Clipper Cup race in Hawaii.*
Dan Nerney

High Price for a Quick Sail

According to yacht racers, a yacht is a hole in the water into which one throws money

by Patricia Ensworth

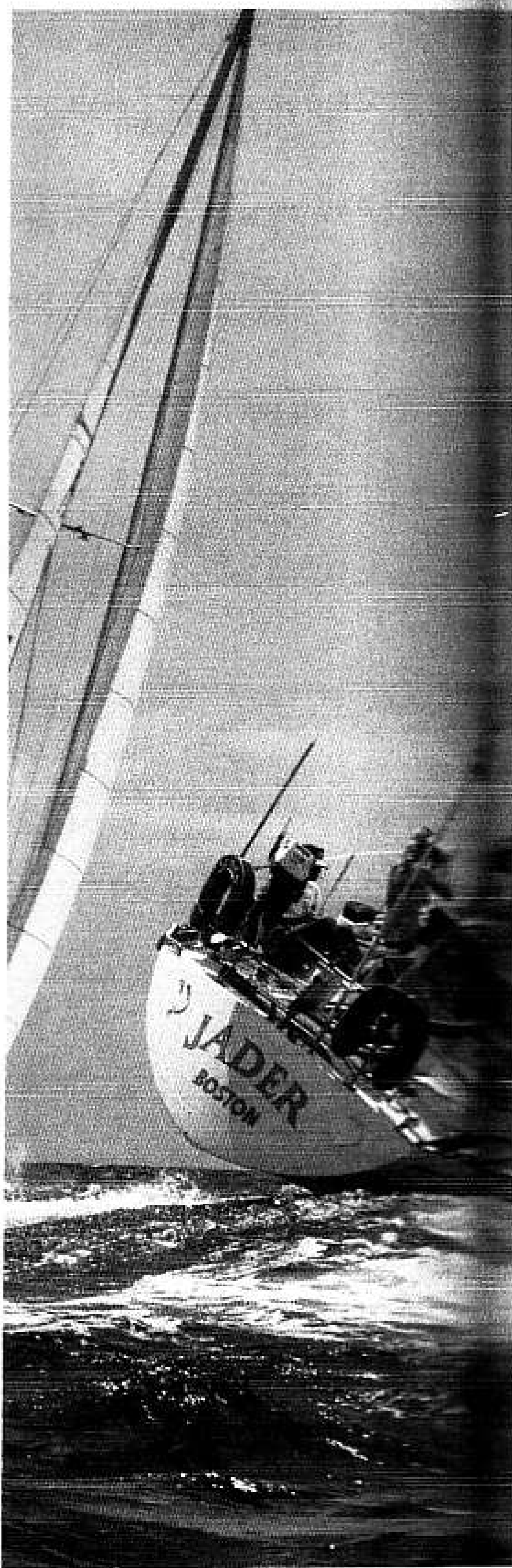
This June, in the waters off Newport, Rhode Island, several of the most technologically advanced sailing craft ever designed will begin competing for the honor of representing the United States in September's international race for the America's Cup. Large sums of money, months of preparation, and an incalculable amount of scientific creativity will be invested—as they have been twenty-five times since 1851—in the quest for speed under sail, a pursuit of little practical value in modern society. Yet the people who devote so much of their lives to this highly publicized series of races are by no means eccentric members of a dwindling, anachronistic cult. Despite its roots in a bygone era of maritime empires, competitive sailing continues to grow in popularity.

Technically, the word "yacht" means any vessel used solely for recreation. The term encompasses everything from a canoe to a buoyant vacation home powered by an engine or the wind. When participants speak of "yacht racing," however, they are almost invariably referring to sailboats. Derived from the Dutch verb *jagen*, meaning to hunt or chase, the noun yacht first appeared in English in 1642 in a book describing vessels built by the Dutch East India Company. About this time the company presented a fifty-two-foot ship to King Charles I of England, who found it amusing to sail his yacht on the Thames. Once a sufficient number of British noblemen had picked up the fashion to form a racing fleet, the sport was born.

Meanwhile, on the other side of the Atlantic, settlers along the East Coast discovered that the large quantity of timber available enabled them to build ships more cheaply than the European colonial nations. As early as 1650, American-built ships were carrying a significant portion of the Caribbean trade. At first, American trading vessels, like the other commercial craft of the period, were designed essentially like miniature warships. Since they sailed in convoys protected by the British navy, however, they did not need to be fast or armed. As the colonies faced increasingly burdensome taxes, a demand grew for ships that could outrun navy patrols and smuggle tax-free goods.

From the American Revolution to the mid-nineteenth century, the United States acquired a reputation for producing the fastest, most seaworthy ships in the world. This accomplishment was due to the abundance of timber and to three varieties of greed. First, the Revenue Marine, founded by Alexander Hamilton and later reorganized into the Coast Guard, successfully suppressed smuggling and piracy and collected import and export duties for the federal treasury with a fleet of pilot schooners, sailing craft that for decades were considered state-of-the-art examples of naval architecture. Second, enterprising adventurers in ships called privateers captured and plundered commercial vessels sailing under the flag of any nation that had been officially declared an enemy of the United States. Although they resembled pirate ships, these privateers were not hunted down by the Revenue Marine because they held licenses from the American government sanctioning their raids. Naturally, the size of their booty was directly related to their speed and maneuverability. And third, owners of slave ships sought to achieve maximum speed. Owing to overcrowding and disease, the human cargo perished rapidly, so any delay reduced profits.

In an oil painting by FitzHugh Lane, the America *sails toward a historic victory in the Royal Yacht Squadron's 1851 race around the Isle of Wight. The trophy she won came to be called the America's Cup, and was given to the New York Yacht Club under the condition that it be placed perpetually in international competition.*
photo by Mark Sexton; Peabody Museum of Salem



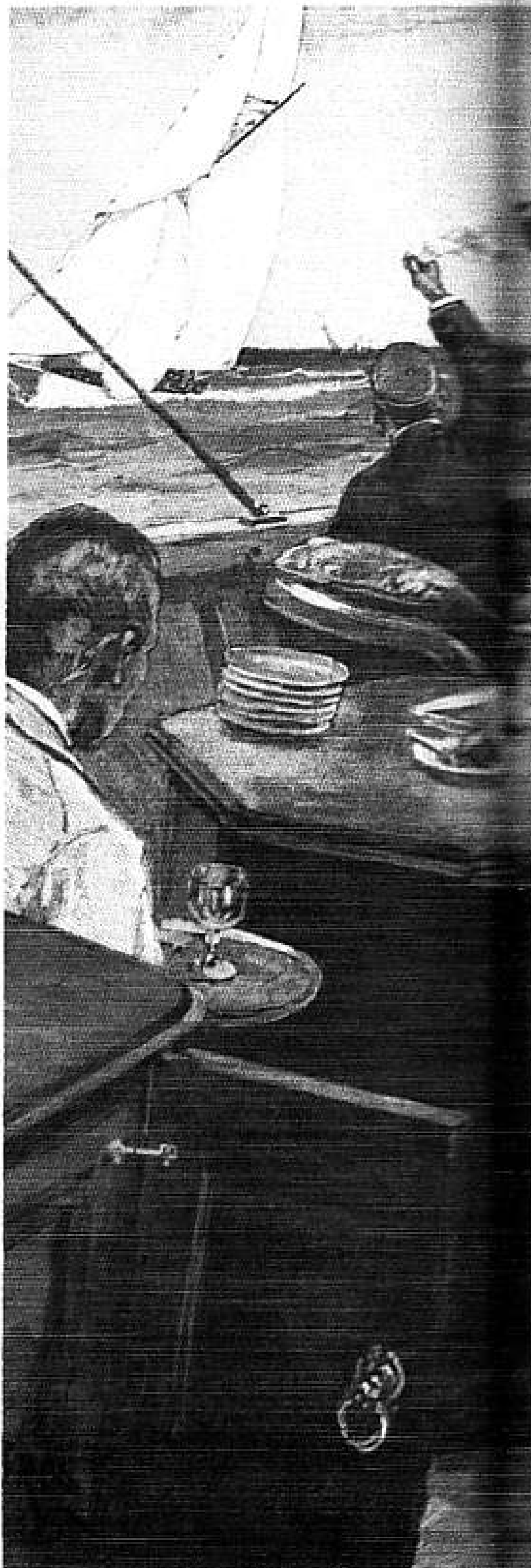
The preeminence of the American sailing ship was short-lived. The first regularly scheduled commercial steamboat in the United States was launched for river trade in 1790, and gradually steamboats became larger and sturdier until they could store enough coal for an ocean passage. On long voyages steamships demonstrated several advantages over sailing ships. Steamships could maintain a constant speed and travel a straight course, while sailing ships, although faster in a good breeze, were often becalmed and had to change course unpredictably in response to wind conditions. Steamships could also carry heavier loads, and they required smaller crews and less maintenance. By the 1850s, steamships had captured most of the transatlantic cargo and passenger traffic.

The best steam-powered vessels were constructed not of wood but of iron. America's timber resources had no value in this new industry, whereas England's foundries and factories were already turning out inexpensive, high-quality iron products. American shipbuilders in the middle of the nineteenth century felt toward their British competitors much as today's managers in the automobile and electronics industries feel toward the Japanese.

Amid this climate of political and economic competition, the America's Cup races began. In 1851 Great Britain organized the first world's fair and included yacht racing among the events. The sport had been adopted in the United States a short time before—the New York Yacht Club was founded in 1844, and at its first regatta huge crowds of spectators displayed the sort of awe-struck enthusiasm one sees now at rocket launchings. Despite their relative inexperience, members of the New York Yacht Club formed a syndicate, built a 101′9″ schooner, and entered the race. To everyone's astonishment, the *America* easily defeated all other contenders. The trophy won by the boat came to be called the America's Cup; the syndicate gave it to the New York Yacht Club on the condition that it be placed perpetually in international competition. Subsequently, yachts representing such countries as Great Britain, Australia, France, Sweden, and Canada have made twenty-four attempts to capture the America's Cup, but the trophy has remained at the New York Yacht Club.

After the Civil War the use of sailing vessels for commercial purposes declined rapidly. Realizing their craft would survive only if they found a new clientele, naval architects skilled at wood-and-canvas technology began creating smaller-scale

The New York Yacht Club's America's Cup Committee announces that the yacht Courageous *has been selected to defend the America's Cup in the 1977 races. Foreign contenders hold their own competitions to select the strongest challenger.*
Christopher Cunningham



designs, and sailboats became increasingly associated with recreation rather than commerce. Soon the sport of yacht racing evolved, encompassing a wide variety of participants and craft.

The most popular type of yacht racing involves boats known as sandbaggers in the late nineteenth century and now described as daysailers. Into this category fall yachts having no cabin and no overnight accommodation for crew; the boats are so light that the distribution of weight has a strong effect upon speed. A hundred years ago, bags of sand were used as ballast and shifted every time a boat tacked. If no sandbags were available, sacks of potatoes might be used. Today, the shifting ballast consists solely of the crew's bodies. Both then and now, the sandbagger class has allowed people of comparatively modest means to enjoy yacht racing.

At the opposite extreme is the offshore ocean race attracting large yachts, generally forty to eighty feet in length, built specifically for racing and often for testing new designs or materials. These vessels have plenty of space below to accommodate crew and are sturdy and heavy enough that shifting ballast has less influence upon their speed, but because of their stripped-down character they can be uncomfortable. The races they enter draw competitors from around the world, and sometimes the race courses go around the world too—generally with stops in Rio de Janeiro, Cape Town, and Sydney. Most global races are sailed with full crew, but a few single-handed contests exist for those particularly daring souls who relish the experience of navigating past Cape Horn and through other treacherous waters alone. Less geographically ambitious, but equally prestigious, offshore races have courses that cross one ocean or shorter distances, such as the Atlantic between Newport and Bermuda. Ocean racing yachts also frequently enter "closed course" or "round-the-buoy" races to show they can sail efficiently and precisely for twenty-five to thirty miles on different tacks. The most famous of these races is the America's Cup. Over time, the ocean racing yachts designed for this event have become so specialized that they are too fragile to make offshore passages.

From the late nineteenth century through the first two decades of the twentieth, ocean racing yachts were usually sailed by a professional captain and paid crew and owned by business tycoons who stayed ashore. Today, the situation is somewhat more complicated, but the underlying social organization is not all that different. Yachts participating in most

The opulent model room of the New York Yacht Club, in midtown Manhattan, displays hundreds of yacht designs. The club's landmark building, built at the turn of the century, also houses the America's Cup, the coveted symbol of yacht racing superiority.

Stanley Rosenfeld

races held in the United States must be sailed by amateurs, that is, by people who derive their personal income from sources other than yacht racing. This custom has encouraged many owners of ocean racing yachts to take an active role in sailing their own craft. It has also made "volunteer" experts popular as crew aboard the top-rated contenders in the most prestigious races. A list of the occupations of the crew on the 1980 America's Cup winner, *Freedom*, illustrates this phenomenon. Aside from the captain, Dennis Conner, who officially runs a drapery business in San Diego although he spends far more time on the water than in the office, and disregarding a couple of burly "deck apes" whose task was to grind winches, on the eleven-man team there were a yacht caretaker, an executive of a boatbuilding company, a naval architect, the owner of a rigging business, two presidents of sailmaking companies, and the manager of a marine supply store. Thus the majority of the crew received valuable publicity for their businesses.

The owners of American ocean racing yachts continue to be drawn from the ranks of wealthy corporate businessmen, usually presidents or senior executives. As *Fortune* magazine observed, "The qualities needed to win in ocean racing—a fierce competitive drive, an acute sense of timing, and the ability to organize effectively—are precisely those needed to triumph in business." Once involved primarily in manufacturing industries, these yachtsmen today direct companies that engage in a wide variety of businesses, such as computers, cable television, electronic publishing, energy extraction, real estate development, and diversified financial services. Although no longer exclusively WASPs, most resemble their predecessors in being conservatives and believers in laissez-faire capitalism. Generally excluded from this elite are women and members of minority groups.

Because these yacht owners are fluently conversant with investment strategies and regulatory mechanisms, they have developed several creative financial and legal schemes for shifting the burden of ownership from themselves to other entities. The most imaginative approach—conceived in 1974 by a retired vice-chairman of the Bache brokerage house—is a plan at present employed for America's Cup yachts but potentially applicable to other boats and races: a syndicated "educational" tax shelter. Since 1974, some syndicates formed to defend the America's Cup from foreign challengers have been organized as educational foundations for

the benefit of the U.S. Merchant Marine Academy at Kings Point, New York, and the State of New York Maritime College at Fort Schuyler. Theoretically, once the America's Cup yachts have served their purpose they are presented to the schools and then used to help the students develop nautical expertise. Contributions to the syndicates can thus be considered tax-deductible gifts. A less restrictive tax shelter has been discovered in the People to People Sports Committee, an agency established to promote international good will through sporting events.

Corporate sponsorship of the America's Cup races has risen too. In 1980 thirty-three companies provided products, services, or funds. Many of the sponsors manufactured sailing equipment, such as foul-weather gear or deck shoes, and generated sales by purchasing the right to call their products official America's Cup items—but then there was also an official America's Cup beer. Outside the United States, racing yachts may be owned directly by commercial businesses, have crews composed of salaried company employees, and display corporate logos. In the United States, however, the requirements concerning amateur crews and the refusal of the Internal Revenue Service to consider yacht racing a deductible business expense limit American companies to indirect sponsorship.

The America's Cup competition has always been such a staggeringly expensive undertaking that no one individual or business could sustain it. In 1980 the backers of the four major contenders—the American yachts *Freedom*, *Courageous*, and *Clipper* and the Australian challenger *Australia*—collectively spent close to $5.5 million. Except for *Courageous*, which had successfully defended the Cup in 1977, the boats demanded the largest share of this investment. There were on-board computers, sails made of the lightest cellophanelike film ever invented, and hydraulic devices to control the angle and tension of the mast and boom. One of the boats had an electronic link between its on-board computer and a larger computer on shore that enabled its performance to be monitored in detail; following each practice race, the crew could study print-outs containing data on thirty different factors measured at half-second intervals. Another boat had a keel whose shape could be changed by raising and lowering "trim tabs."

After the yachts were built, they had to be brought to Newport. Many offshore racers are content to sail their boats or to pay a yacht delivery service to sail them from their homes to race areas. The America's Cup yachts were carefully placed aboard container ships, offloaded in Providence, and towed to Newport. There, from May through September, the crew and support staff of each boat had to be housed and fed. The owners of *Freedom*, the vessel that triumphed over the other U.S. contenders and defended America's honor, were also obliged to donate a scale model of their victorious yacht to the New York Yacht Club for the club's opulent model room. Ultimately, the sole purpose of these tremendous investments of time, effort, and money was to assure the continued presence of a trophy in a landmark building that only club members and their guests are allowed to enter. A few America's Cup yachts have been lucky enough to compete twice, but most have become obsolete after a single defense.

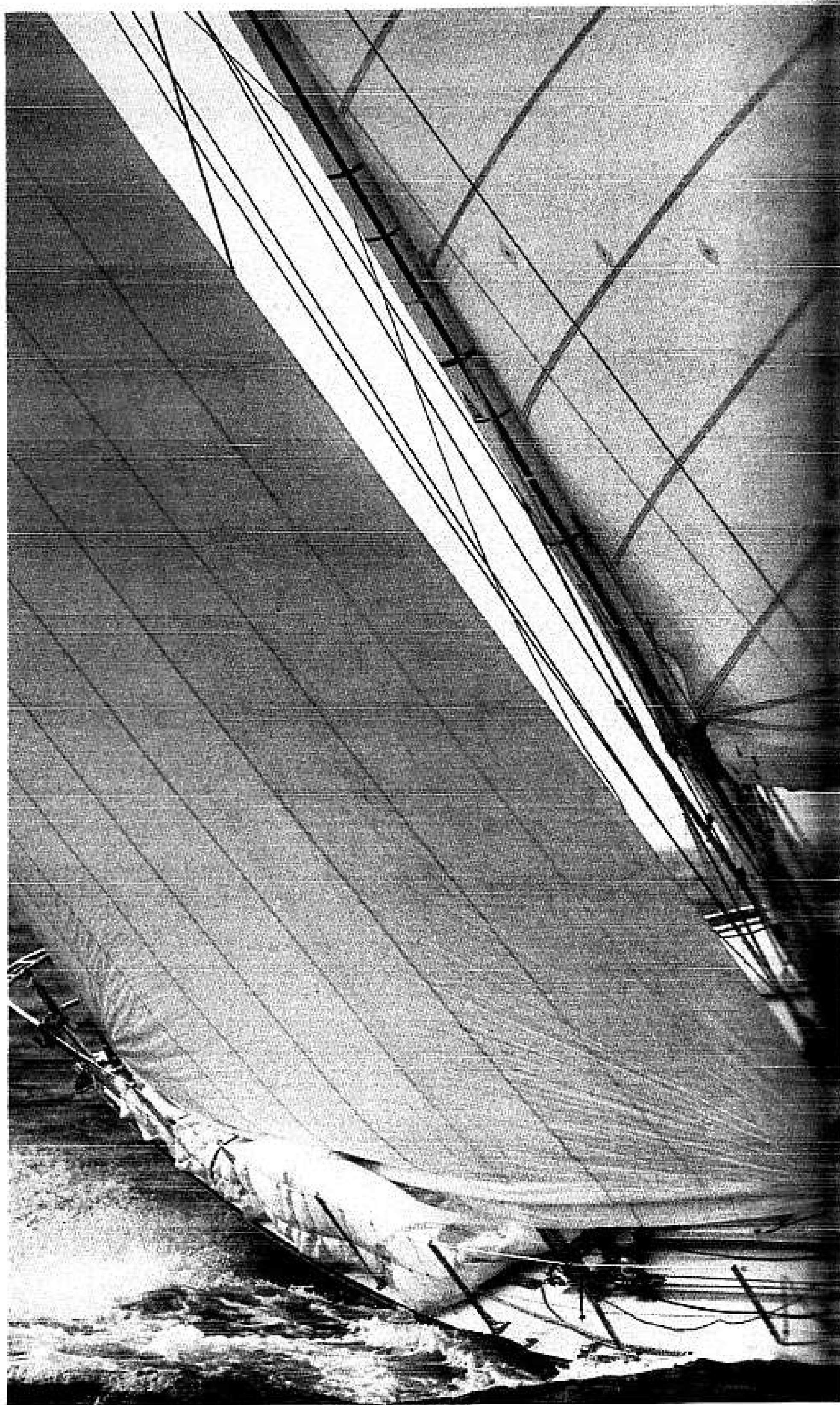
Daysailers and offshore ocean racing yachts mark the extremes of the sport of yacht racing. In between are the boats not quite seaworthy enough to make many ocean passages and not quite glamorous enough to attract experts as crew, but which nevertheless sail in heavy weather and comfortably accommodate crew overnight. These "cruising yachts" were relatively rare until the internal combustion engine was adapted for boats in the 1930s, providing insurance against the danger and inconvenience of being caught miles offshore at the mercy of either a howling storm or a dead calm. Currently, cruising yachts tend to be both sailed and owned by doctors, lawyers, stockbrokers, directors of independent medium-sized companies, people employed in highly skilled technical jobs, and sometimes by do-it-yourselfers who construct their boats in their backyards. These yachtsmen represent a wider range of ethnic backgrounds

than do the owners of offshore racing boats and politically they are often less conservative. Although the proportion of women owners remains small, women are frequently involved in races as crew.

Racers of cruising yachts form the backbone of local yacht clubs and racing associations and consequently have a substantial influence upon the customs and values of the sport. As a group they generally strive to maintain a tradition they call "Corinthian." Dictionary definitions of Corinthian note that the ancient Greek city of Corinth was famous for its luxury and licentiousness. In the late nineteenth century, the word became fashionable neoclassical slang to describe a wealthy sophisticate, particularly a well-bred sportsman. Yacht racers began using it to signify a person who sailed his own boat with a crew of friends—as opposed to a person who stayed ashore and let hired hands do the work. The Seawanhaka Corinthian Yacht Club of Oyster Bay, Long Island, founded in 1871, was the first American yacht club to limit participation in its races to boats with amateur crews. More than a century later, the Corinthian spirit is alive and vigorously defended by the United States Yacht Racing Union (USYRU), the governing body atop a pyramidal network of individual racers, yacht clubs, and regional associations.

The USYRU upholds Corinthian standards by enforcing three main regulations: (1) certain key members of racing crews (the helmsman, for example) must be amateur volunteers; (2) displays of commercial advertising are forbidden; and (3) winners of races receive no large cash prizes, only token trophies. These restrictions insure that the sport remains nonprofessional and inherently unprofitable. In the United States most races are held under the auspices of clubs and associations that belong to the USYRU, are run according to USYRU rules, and involve boats measured using the organization's handicapping systems.

Handicapping promotes the ideal of nonmaterialistic sportsmanship by equalizing the odds among participants in races involving different types of yachts. In accordance with USYRU formulas, yachts



To promote the sport of dinghy racing, an Australian fleet of 18-foot dinghies carries out a demonstration race at Newport, Rhode Island. The craft display the logos of commercial sponsors—something not seen on American racing yachts because the U.S. Yacht Racing Union vigorously defends the amateur status of the sport.
Dan Nerney

are "taxed" according to such factors as hull shape, length, sail area, and weight, so that faster boats owe slower ones a specified number of seconds per mile. Of course, no yacht racer believes his boat has been measured accurately and assigned a fair rating. The USYRU also publishes a booklet of nearly one hundred pages listing yacht racing rules, which many racers complain have grown too complicated. The process of getting a yacht disqualified from a race for committing a foul can now sometimes involve elaborate postrace judicial procedures. As with most forms of taxation and regulation, people who benefit praise the system and people who suffer gripe about it. Whatever one's opinion, the nature of the sport has gradually changed from a laissez-faire competition, in which handicaps could be figured through arithmetic scribbled on the back of an envelope and disputes resolved with a handshake, to a structured, equal-opportunity confrontation in which it helps to have an accountant and a lawyer on board.

A popular form of competition is the "one-design" race, a concept developed in the 1890s. In one-design races all of the yachts are built to the same specifications: the hulls have the same dimensions, the masts are the same height, the sails are the same shape, the weights fall within specified limits. Theoretically, victory depends not upon how much a boat owner has invested to improve the speed of his vessel but upon the strategic and athletic talents of the captain and crew. In practice, many one-design yacht owners do improve their boats as much as permissible. At present there are about one hundred internationally recognized one-design classes. Yacht racing in the Olympics, as befits a competition that emphasizes human skill, is conducted in several types of one-design boats. Essentially, the America's Cup races today are a special kind of competition in the twelve-meter class, regulated by the International Yacht Racing Union.

Despite efforts to base competition exclusively on sailing ability, in yacht racing there is an ideal of upward mobility. One often hears that the best way to learn how to race is to buy a small boat that can be handled by a single person: a crew member only takes orders and masters specialized tasks, whereas the captain of even a ten-foot craft soon develops an awareness of wind and water conditions and a sense of responsibility necessary for delegating activities wisely. After this expertise has been developed the aspiring racer trades up as fast as he can.

Even when a racer has acquired the largest boat he can manage, the pressure to consume continues. Yachts built for the America's Cup and offshore ocean races constantly introduce new materials and architectural configurations, inventions that are then adopted and modified by sailors who race on a smaller scale. At its worst, this phenomenon leads to a floating fashion show, but many new gadgets have in fact helped make yacht racing easier and safer. Most racing-yacht owners invest an enormous proportion of their time, energy, and money in keeping their boats competitive. They regard their labor as a form of self-expression and will sacrifice a great deal so that their creations are everything they want them to be.

Although daysailers and cruising boats that enter races sometimes also provide their owners with exercise and relaxation, the most expensive racing yachts only satisfy their owners' desire to participate in yacht races. To the nonracer, this may all seem an exercise in futility. Racing yachts never last very long. Rapidly worn out by the forces of wind and sea, subjected to the demand for constant high performance, yacht racing equipment must frequently be repaired or replaced. Owners of older boats almost always feel they are at a disadvantage and long for newer models. But people who race yachts are not rational about their sport. To quote one captain, "I don't think most people who race boats keep a budget, because if you did it would make you ill." A favorite bit of folk wisdom is a proverb that says, "The definition of a yacht is a hole in the water into which one throws money."

Some racers undoubtedly enjoy letting the world know that they have resources to squander; others make peace with the pressures of conspicuous consumption and decide that it is more useful to master the age-old art of navigation under different conditions of wind and current than to buy the latest Mylar sails. Everyone who races yachts, however, agrees on the fundamental attractions: the open vistas of sky and sea, the beauty of a well-trimmed sail, the complicated choreography involved in rounding a mark, and the camaraderie of a team on which everyone is trying to do his or her best. □