

Sound Waves

By LEE SCUPPERS

THE American contingent preparing to embark for Bermuda to engage the colonial representatives in the annual April series for the Prince of Wales Six-Metre Trophy will be a formidable group. Two of the boats will be brand new, three of them were rated at the top of the class heap in 1937, their first year, and the sixth will be the outstanding "Six" of two years ago.

Furthermore, these boats will be manned by tiller, sheet and spinnaker experts worthy of the steel of the Trimingham's, Friths, Millers, Dills, Darrells and Pearmans who will operate in the cockpits of the Onion Patch hopes, *Solenta* and *Viking*.

The series is scheduled to begin in Great Sound on April 20th and will be followed by a team race for the Cubitt Cup and a match for the golden King Edward VII Cup, a most imposing piece of yachting bric-a-brac. At the moment, the American delegation will include:

A new boat designed by Sparkman & Stephens and built by Nevins for Henry S. Morgan, former commodore of the Seawanhaka Corinthian Yacht Club and owner last year of *Indian Scout*.

A new boat designed by himself and built by Luders for Herman F. Whiton, who turned out *Indian Scout* in 1936 and *Light Scout* last season.

Lulu, Briggs S. Cunningham, winner of the Prince of Wales Trophy, King Edward VII Cup and sundry other prizes in Bermuda last spring, to say nothing of having defended the Scandinavian Gold Cup on the Sound later in the summer.

Rebel, Paul V. Shields, defender of the Seawanhaka Challenge Cup against the Norwegian challenger *Buri*, last September.

Fun, Fred T. Bedford, a yacht that reached her peak late and closed her campaign by winning the Six-Metre race week on the Sound.

Indian Scout, Gold Cup victor in 1936 and champion of all Europe that year. Her new owner is J. Sherwood Miller, of Gibson Island, Md.

If the Trimingham's new *Solenta* or Bill Miller's battle-scarred *Viking* can prevail against this array, no one will begrudge them their laurels.

* * *

The big offshore cruising yawl which Harkness Edwards is having built at Jakobson & Peterson's, in Brooklyn, for the Bermuda Race will be named *Wakiva*, after the steam yacht once owned by Harky's grandfather, Harry H. Harkness. The original *Wakiva* was one of the many steam yachts turned over to the Navy during the world war (the 1914-18 unpleasantness) for anti-submarine patrol in European waters. A torpedo sent her to the bottom in March of 1918 when she was convoying merchantmen into Brest.

* * *

George P. Granbery, the ancient mariner of New Rochelle and one of the most consistent harvesters of yachting prizes on Long Island Sound, is the new president of the Handicap Class. He succeeds the late Walter Sullivan.

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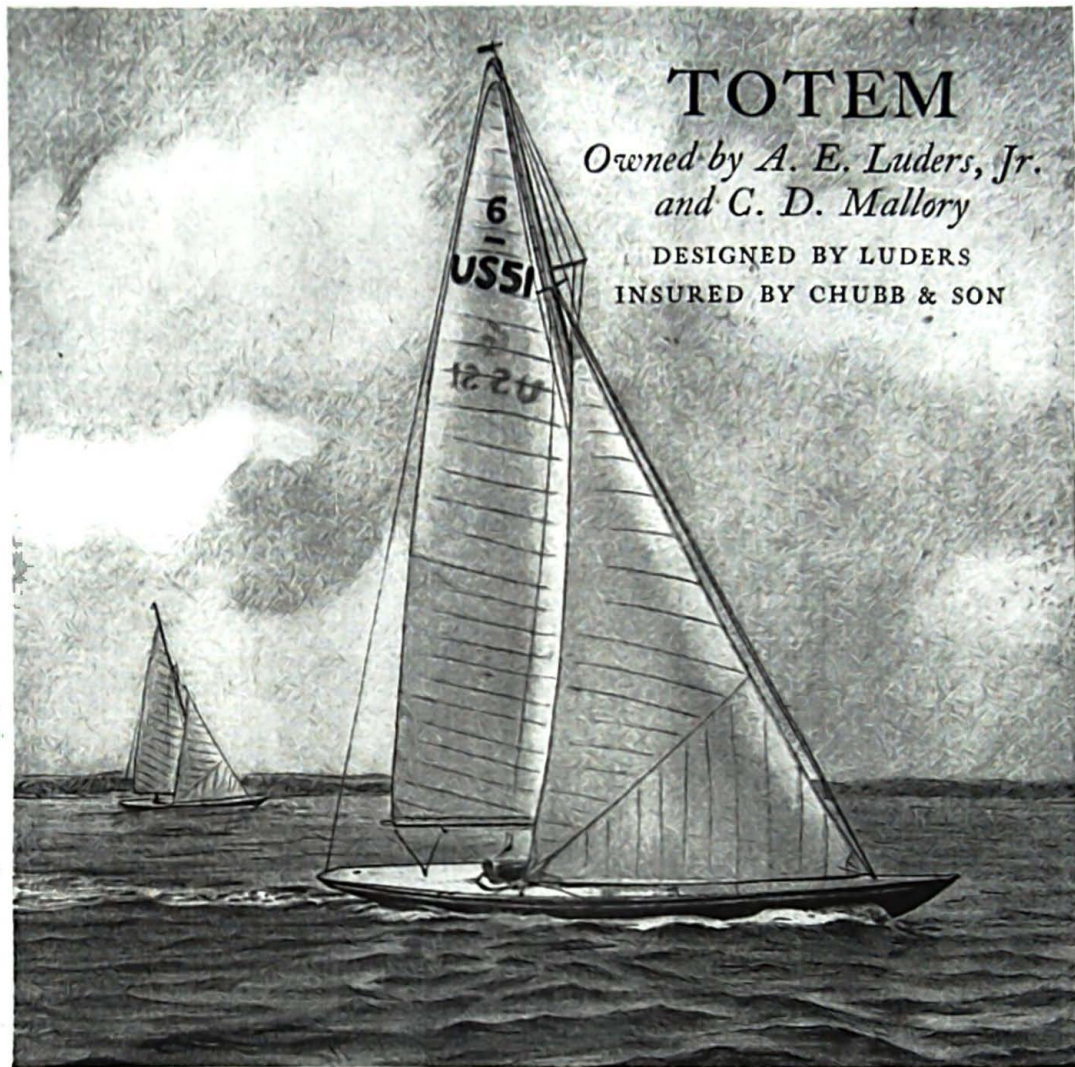
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TOTEM

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Above, "Djinn" (No. 80), designed by Sparkman & Stephens for H. S. Morgan; "Solenta" (No. 56) and William Miller's "Viking." Upper left, "Djinn" is a stiff, powerful boat with exceptional weatherly qualities. Left, "Star Wagon" is a new boat designed by her owner, Herman F. Whiton. Below, "Indian Scout," a 1936 boat chartered by Ray Hunt, of Marblehead, took first place in the series for the Prince of Wales Challenge Cup.

them being able to win twice. In view of this scrambled state of affairs, it is all the more notable that Hunt was able to give a consistently sound performance at the helm of a chartered yacht whose sail equipment was, to employ an understatement, something less than distinguished.

Scout took the Prince of Wales Cup (she is the third American victor in seven years) with a total of $27\frac{1}{4}$ points, the fruits of one first place, a second and two thirds. Second place in the series went to the flighty old *Viking*, two notches astern of *Scout*. Smartly handled by a Nova Scotian-Bermudian crew commanded by Bill Miller with Bayard Dill as first mate, the veteran campaigner gave a good account of herself in the light, fluky breezes that prevailed for three of the four races. She had a first, a second and two fourths, thereby finishing a point and a quarter ahead of *Fun*, sailed by Briggs Cunningham, who won the trophy a year ago with *Lulu*.

Solenta, the new Nicholson-designed "Six" that now flies the Trimmingham colors, was fourth with $20\frac{1}{4}$ points and *Djinn*, Henry S. Morgan's new Sparkman & Stephens boat, stood fifth in the final standing after winning the first race. *Lulu*, defending the prize she won last year, was sixth and then came Herman F. Whiton's new *Star Wagon* and George U. Vetlesen's Norwegian entry, *Vema IV*, a fast boat that sailed in bad luck.

The first race was sailed in a moderate to fresh southwester

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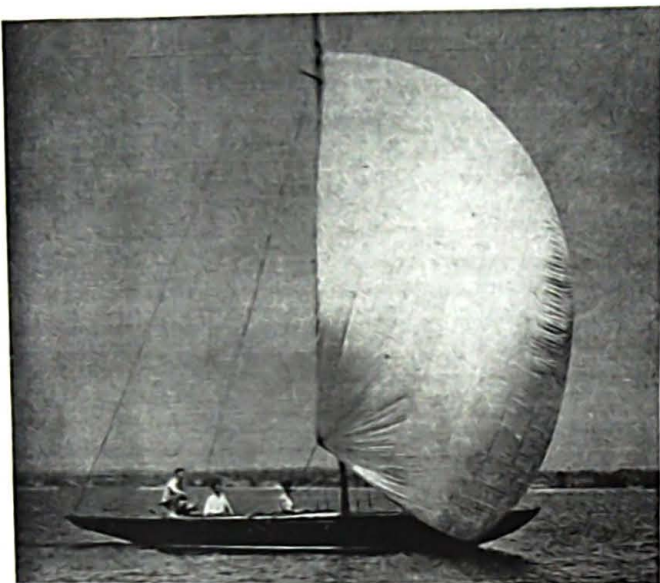
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The Choice of Champions

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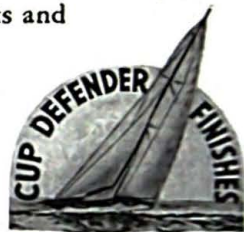
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Pictured is the Luders Six Metre boat "Totem," eight years old, placed thirty-three times out of forty-eight starts. Like so many champions in every class, "Totem" has always been protected from masthead to keel by Smith paints and varnishes.

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Week-Enders Owners Form Class

WITH over twenty of the 35-foot one-design Week-Enders building, the class was organized on Long Island Sound a meeting held in New York City on April 5th, attended by most of the eleven owners who will sail on Long Island Sound.

A class committee was formed with Warren D. Brewster, owner of *Blue Sky*, as chairman, Donald B. Abbott, secretary-treasurer, and D. H. Sparkman. A number of rules as to light sails allowed when racing as a separate class, number of haulouts per season, etc., were formulated.

The following is a list of the owners of Week-Enders, the names of their boats and the numbers:

Number	Owner	Yacht	Hailing Port
1.	Drake H. Sparkman	<i>Southerly</i>	Larchmont, N. Y.
2.	Warren D. Brewster	<i>Blue Sky</i>	Glen Cove, N. Y.
3.	Robert Ayer	<i>Hurrying Angel</i>	Cold Spring, N. Y.
4.	William P. Fisher	<i>Alls Well</i>	Detroit
5.	John Morse Elliott	<i>Balek</i>	Mattapoisett, Mass.
6.	Phelps Barnum	<i>Ala</i>	Greenwich, Conn.
7.	Francis H. McAdoo, Jr.	<i>Windoon</i>	Narragansett Pier, R. I.
8.	Edgar B. Tolman, Jr.	<i>Keewadin</i>	Pentwater, Mich.
9.	Francis Robinson	<i>Lillemor</i>	Oyster Bay, N. Y.
10.	James S. Eyre	<i>Neap Tide</i>	Northport, N. Y.
11.	Wally Frank	<i>Old Salt</i>	City Island, N. Y.
12.	Julius George Forstmann	<i>Snooky Belle</i>	Greenwich, Conn.
13.	G. Stafford Bucknall	<i>Alaris</i>	Glen Cove, N. Y.
14.	James M. Hunnewell	<i>Morning Star</i>	Marblehead, Mass.
15.	Charles Spalsbury and Richard B. Mann	<i>Mary Frances</i>	Mamaroneck, N. Y.
16.	John B. Paine	<i>Gumbo</i>	Manchester, Mass.
17.	Melville Weston	<i>Handy</i>	Marblehead, Mass.
18.	E. Stuart Peck	<i>Day Dream</i>	Quisset, Mass.
19.	John Parkinson		Boston
21.	Donald B. Abbott	<i>Scalawag</i>	City Island, N. Y.

Henry S. Morgan's new Six-Metre yacht "Djinn" in her cradle at Henry B. Nevins' yard, City Island, N. Y. She was designed by Sparkman & Stephens, Inc., and was one of the team of "Sixes" which raced in Bermuda in April

The Coastwise Cruiser Class

AN organization meeting of the Coastwise Cruiser One-Design Class was held on March 30th in New York. A set of class rules and regulations was approved and the following were appointed to the Class Committee:

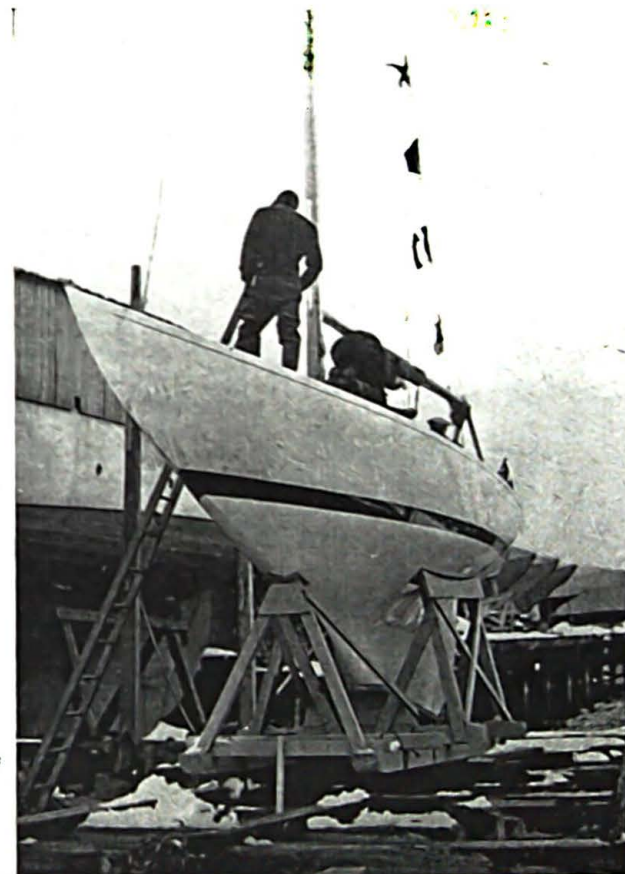
R. O. H. Hill, chairman, Larchmont Y. C., or 270 Lafayette St., New York; Edward S. Flash, representative for Staten Island waters, Richmond County Y. C. or Edie & Co., 20 Exchange Place, New York; Irving G. Ammen, representative for Buzzards Bay waters, 38 Highland St., Hopedale, Mass.; Harold C. McNulty, representative for Central Long Island Sound waters, Norwalk Y. C. or Norwalk, Conn.; Harold M. Scott, representative for Western Long Island

waters, American Y. C. or Scarsdale, N. Y.

There are at present ten of these boats on order for delivery prior to August 1st. Arrangements are being made for building additional boats. It is hoped and expected that fleets will be actively racing in several sections along the North Atlantic Coast by the end of the 1938 season.

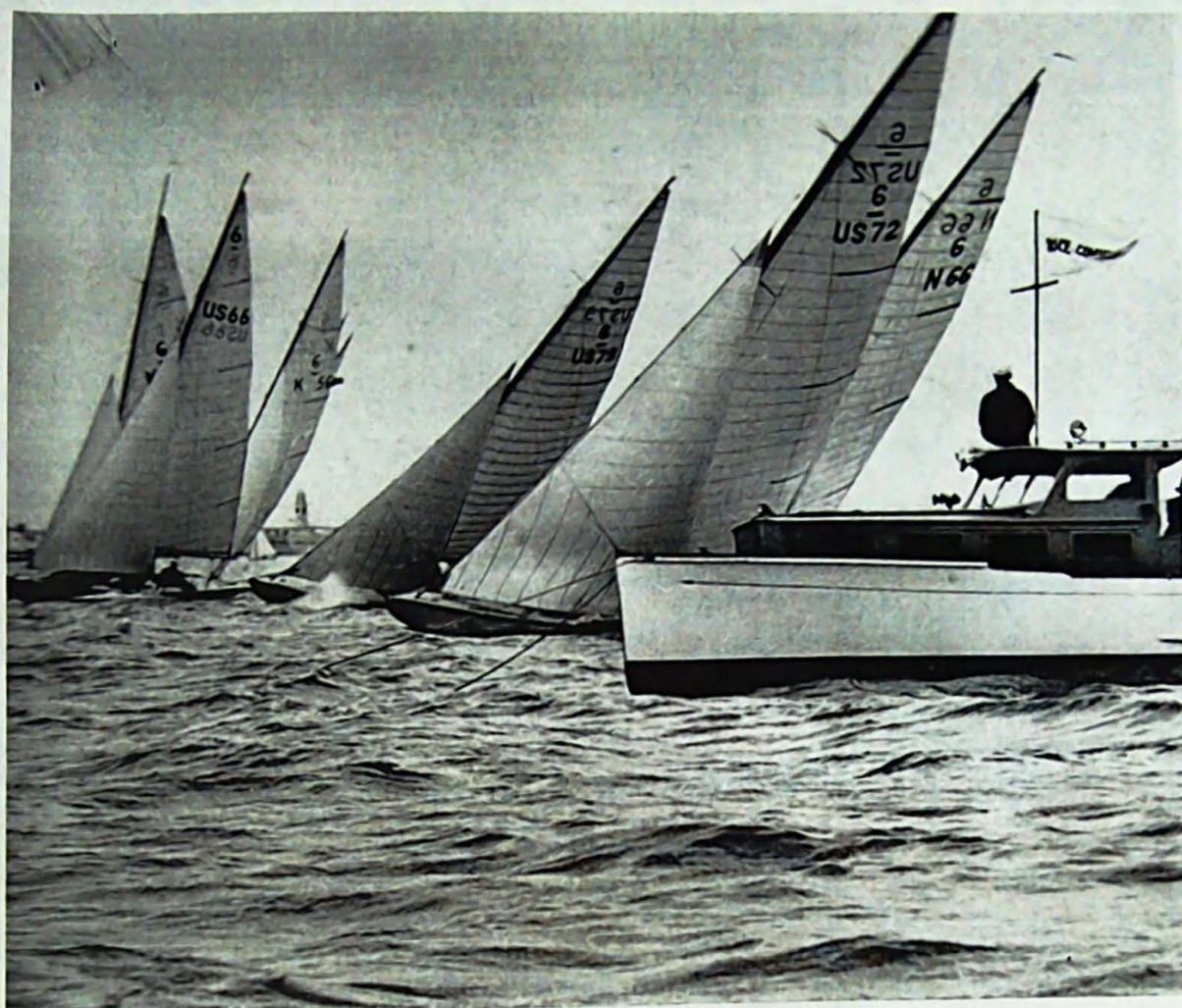
The first three to be completed have been entered in the Off Soundings Club Races on May 28th. Application is being made to the Y.R.A. for a separate start at all Y.R.A. regattas this summer.

Everything has been done to assure equitable racing at a moderate cost, limitations being placed on the number of suits of sails and haul-outs during the year and other restrictions found so successful in the management of other one-design classes.



E. Lerick

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The "Sixes" get away in a good start in a lively breeze, crossing the line closely bunched

Below, "Solenta," the new boat designed by Charles E. Nicholson and built by Camper & Nicholson for Eldon and Kenneth Trimmingham

Photos by M. Rosenfeld

OLDER "SIXES" TOPS IN BERMUDA RACING

By EVERETT B. MORRIS

WHAT with "unusual" weather prevailing for the Royal Bermuda Yacht Club's annual Six-Metre racing carnival and three of the eight contestants being new and virtually untried boats, it is rather difficult to draw any definite conclusions from the results of the races sailed off Hamilton late in April for the Prince of Wales, King Edward VII and Cubitt Cups.

Avoiding for the moment the controversial points, it is possible to report without incurring too violent contradiction that:

1. Marblehead's Ray Hunt did a grand job in sailing *Indian Scout* to first place in the four-race series for the Prince of Wales Trophy.
2. *Viking*, now in her ninth racing season, has few if any peers in the class when it comes to moving rapidly in light weather.
3. Bermuda's yacht racing weather is not immune from the plague of unpredictable shifts, flat spots and wind streaks.
4. Owen Darrell, chairman of the R.B.Y.C. race committee, is a miracle man. In eight days of thoroughly cockeyed winds, he never failed to provide a windward leg.

So much for generalities. As for the competition itself, let it be recorded that it was interesting if somewhat nerve-racking. Two boats stood out in the proceedings, *Indian Scout* and *Viking*, but all of the others had their moments.



Older "Sixes" Tops in Bermuda Racing

(Continued from page 51)

and *Djinn*, a stiff, powerful boat with exceptional weatherly qualities, simply beat the daylights out of all her opponents on the wind. She piled up such an advantage on the windward legs that questionable light sail trimming on the leeward laps did not prove a serious handicap. *Scout* was second and *Fun* third. The others weren't in the running. *Viking* came up from nowhere and got fourth place by nipping her Bermudian colleague, *Solenta*, by the length of her foredeck on the last spinnaker run. That was the last anyone saw of a spanking sailing breeze until the series was over. From now on we deal with winds of the light and variable variety.

Came the second race of the series and a nice, polite westerly of never more than ten miles' velocity and usually less than that. *Solenta*, footing like a racehorse, established an early lead and held it throughout although closely pressed by *Indian Scout*. *Solenta* just ate up the smooth going and brought smiles of joy to the faces of Eldon and Kenneth Trimmingham, who hope to do something with their new boat in the international contests off Oyster Bay late this summer. *Scout* didn't get second after all because in the fading breeze she was outrun on the last leg by the nimble *Viking*. *Djinn* fell heir to fourth place when *Fun* threw that spot away by making an unnecessary jibe close to the finish.

These results left the five boats just named involved in a dogfight for the lead, but the third race

changed all this. The wind was even lighter and funnier than on the previous day and the race was keen and exciting for one round. *Solenta* appeared to be well on her way to another victory, although *Scout* and *Fun* were giving her all she could handle. Halfway down the last leg of the first triangle—a broad reach on which spinnakers could be carried well forward—*Solenta* blew herself out of the race and the series. Her spinnaker would not trim satisfactorily, so, after sagging well to leeward of the course to keep it filled, *Solenta* finally handed the kite, set her Genoa and reached up to the line of the others. This maneuver completed, *Solenta* found herself a distant fourth. On the second round, she went from bad to worse and she actually finished next to last, gaining a point when *Vema*, third across the line, withdrew for a port tack foul on *Viking*. *Scout* won the race with *Fun* second, *Star Wagon* third and *Viking* fourth after a bad first round. *Vema* was really traveling but, what with premature starts, being in the wrong places when the wind shifted and fouling boats, she was not going anywhere.

Hunt carried a four-and-a-quarter point lead into the final race with *Fun* and *Viking* tied for second with 17 points and *Solenta* and *Djinn* next with 15¼ each. So he attended strictly to his knitting, covered both halves of the fleet which split widely in the softest of going and came home in third place astern of *Viking* and *Fun* and ahead of *Solenta*. *Viking*, ghosting like a



The skippers of the American "Sixes" which raced at Bermuda in April. Left to right, Georg U. Vetlesen, Briggs S. Cunningham, Herman F. Whiton, Henry S. Morgan, Olin J. Stephens and C. Raymond Hunt

green wealth, won by six minutes. *Djinn*, the last to finish after *Star Wagon* withdrew, was nearly a full leg of the course astern of the winner.

How Hunt made *Indian Scout* go so well in the light stuff no one seems to know. But the blue boat was right up there all the time, her mainsail flapping like Monday's wash and apparently serving merely as something on which to display racing numbers.

Now for a few guesses about the new boats:

Djinn is potentially a fast boat, particularly in a breeze. She goes to windward like a little *Ranger*.

Solenta still has a few rigging wrinkles to iron out but is fast in light going and will be tough to beat on Long Island Sound.

Star Wagon went well in streaks. She is a big boat with lots of lateral plane and a mainsail that was none too good.

After the Prince of Wales series, *Scout* and *Viking* were paired for a two-out-of-three match series for the huge King Edward VII Cup that C. Sherman Hoyt presented to the Royal Bermuda Yacht Club last year. *Viking* won in two straight races. She took the first because the wind lightened on the second round and she was able to reduce *Scout's* first round lead on the next turn to windward and outrun the American to the finish. She won the second because *Scout* handed it to her on a platter at the outset and ignored subsequent opportunities to reclaim it. The weather for the second contest was more to *Scout's* liking than *Viking's*

and apparently everyone aboard *Scout* failed to watch the committee boat signals and consequently, when *Viking* started, *Scout* was dubbing around with eased sheets well to leeward of the line, apparently mistaking the starting gun for the preparatory.

With the match series out of the way except for the formality of draining the huge jug of 24 quarts of champagne (actual capacity), the fleet split up into United States and Bermuda teams to race for the Cubitt Cup. Aggregate points for three races decided the winner, which turned out to be the "Bermudian" quartet of *Viking*, *Solenta*, *Fun* and *Lulu*. *Scout* led the Americans to a 19¼ to 16 victory in the first race sailed immediately after her debacle with *Viking*, and the Bermudians scored, 19 to 17¼, the next day in a race which *Star Wagon* won by dint of successful wind hunting on the second round. The third race was a walkover for the Bermudians, who placed one, two, five and seven for a 21¼ to 15 margin and a total advantage of 56¼ to 51½. *Solenta* won the last race with *Fun* in second place. Team racing tactics were indulged in at a minimum, probably because attempting them under the fluky conditions was too risky, but at any rate the matches didn't look anything like the old knockdown fights the Bermudians used to have with the Sound Interclub stalwarts. *Fun* was the most consistent boat in the team racing, getting a second and two thirds.

It was quite a series in many ways and it was good fun even if, like one bilgeboy, you watched it through the topside seams in *Indian Scout*.



Sound Waves

By LEE SCUPPERS

THE Seawanhaka Corinthian Yacht Club, sponsor of International Six-Metre yacht racing in this country, has completed its plans for American defense of the British-American, Scandinavian and Seawanhaka Challenge Cups against European invasions this summer. What with informal tune-ups, observation and trial races and then the international tests themselves, Oyster Bay will be alive with Six-Metre boats from Memorial Day to well into September.

Formal trials to select four yachts for the United States team which will meet the Britons in the biennial team match for the British-American Cup, which isn't a cup at all but a beautiful silver model of a Six-Metre yacht under sail, will begin on July 28th and continue until Seawanhaka's selection committee is satisfied that it has the best possible quartet.

Then these four boats will race among themselves under conditions similar to those of the Scandinavian Gold Cup series — which Clinton H. Crane describes as a process of taking the cream off the top rather than throwing the skimmed milk away from the bottom — to decide which of them will defend the golden periwinkle that *Indian Scout* brought here from Hanko in 1936 and *Lulu* kept here last summer.

Selection of a defender for the Seawanhaka Challenge Cup to meet the Royal Northern Yacht Club's challenger will not be made until after the British-American Cup matches. This is to give the committee further opportunity to observe the abilities of yachts, skippers and crews under competitive conditions.

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It looks now as though there will be at least seven boats representing as many different countries striving for the Gold Cup. The Royal Danish Yacht Club is the latest challenger, adding its entry to those of Great Britain, Norway, Italy, Sweden and Finland. The Europeans apparently are bent on getting the Six-Metre championship back to the other side of the Atlantic. Seawanhaka is just as anxious to keep it over here and, by way of making certain that the American defender is a truly representative yacht, has invited Pacific Coast, Great Lakes and Chesapeake "Sixes" to participate in the trials.

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The eight-year-old *Totem*, black menace of the Six-Metre Class last season, is coming out again to scrap for a place on the international team. Billy Luders, her designer-skipper, has made some alterations in the lively old hooker which he hopes will increase her speed. He has increased the size of her fore triangle and dropped her lead a little lower. *Rebel*, the Luders-designed "Six" which defended the Seawanhaka Cup last year, has undergone some minor alterations, too, and will be out there in the thick of things.

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One change has been made in the Y. R. A. championship schedule adopted at the March meeting. American and Horseshoe Harbor have swapped dates, the latter taking American's August 6th date and the Milton Point club assuming the season wind-up on September 24th. The

Streamline Rod Rigging for Racing Boats

Just about a year has passed since *Ranger* established herself as one of the outstanding yachts of all time by sweeping the America's Cup Series and practically every other Class J event of the 1937 season. Rod rigging was one of the highly publicized features which helped make her go and also made conversation among yachtsmen. It's advantages of greater rigidity, and reduced wind resistance are not difficult to comprehend but we, and we'll wager nine out of ten other yachtsmen, were distinctly of the impression that *Ranger's* rigging was tremendously costly, and that anything along that line would be far out of reach of all but a very few yachtsmen.

The cost of *Ranger's* rigging is not part of this story, but among our most interesting recent discoveries is the fact that streamline rod rigging can be had in sizes suitable for smaller boats at a cost little, if any, higher than that of stainless steel wire. We also note that three of the most successful racing boats of the year have been rigged with streamline rod rigging. Outstanding among these boats is George Nichols' Six-metre *Goose* designed by Sparkman and Stephens which, as this appears in print will be going about the job of defending the Scandinavian Gold Cup against several European challengers. The other new boats with rod rigging are Miss Nancy Leiter's fast stepping Eight-metre *Venture*, designed by E. Arthur Shuman in association with C. Padgett Hodson and the Star Class boat *Foo* owned by Durbin Hunter, which has been doing unusually well on Long Island Sound.

The Pennsylvania Aircraft Syndicate has developed this streamline rod rig-

ging for sailing craft from existing types of streamline aviation rigging. Briefly, it consists of lengths of rod of streamline cross section rounded out and threaded at each end to screw into a fitting. Each section is cut to length from the rigging plan of the boat on which it is to be used. In effect, the usual wire plus

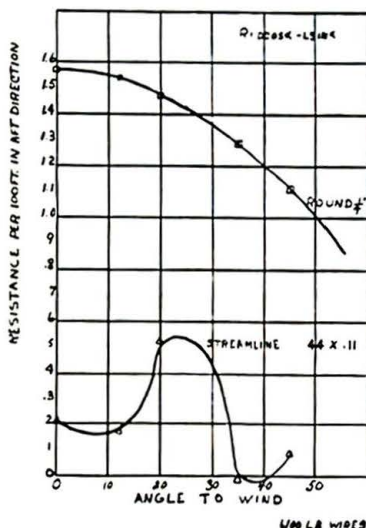


Fig. 1

turnbuckle is replaced by a single long turnbuckle which just fits the distance from chain plates to spreader, spreader to mast, or spreader to next spreader. The ends of the various sections fasten to the chain plates, to tangs on the mast or to special fittings on the ends of the spreaders.

But, you may ask, why do all that when the ordinary plow steel or stainless steel wire keeps the rig in your boat and keeps the mast standing fairly straight? *Fairly straight*—is the answer. If you are content with a mast that stands only fairly straight you won't need streamline rod rigging for its rigidity is far and away its principal advantage.

Rigid mast makes boat point well

But if, like most of the best Six-metre and other skippers, you are in the habit of varying the tension of the shrouds according to the strength of the wind in order to offset the excessive stretch in the longer, lighter topshrouds, or agree with the conclusions derived from recent experiments that a mast which remains absolutely in the center of the boat all the way up (or better still, leans to windward) makes a boat point considerably better, then, streamline rod rigging will aid and simplify the

problem of keeping your boat in proper tune at all times.

The marvelous performance recorded by the German Star, *Pimm* last year in winning four straight races by wide margins in the World Championship of the Star Class opened the eyes of many American yachtsmen to the fact that slight differences, often imperceptible to the eye, can make a tremendous improvement in the speed of a boat. Wind tunnel and other research along this line will undoubtedly contribute considerably to our knowledge of how to develop the greatest driving force from our rigs.

Streamline rod rigging has been thoroughly tested in the wind tunnel by the Pennsylvania Aircraft Syndicate in order to learn as much as possible about its application to sailing craft. Figure 1, made up as a result of some of these tests, compares the resistance to the boat's forward motion of 1 x 19 round cable and streamline rod rigging of the same strength. Summarizing this figure, it will be noted that in the close hauled position of the average boat when the apparent wind is at an angle of from 20 to 30 degrees, the resistance of the streamline rod is approximately one-third that of the cable. At higher angles, the resistance of the streamline rods decreases rapidly to zero and at about 40 degrees (wind abeam) the rods give some slight propulsive effort to the boat, in effect adding to the sail area.

Wind resistance one-third that of wire

Briefly stated, the results of the tests shown in Figure 1 bear out the assumption that since the streamline rigging is one-half the thickness of cable, and streamlining reduces the drag to one-quarter, therefore, the total drag is reduced to one-eighth at zero degrees angle, and in the worst possible angle, the resistance to forward motion never exceeds one-third that of cable.

It might be said that rigging which offered so much less in the way of wind resistance must add materially to the speed of the boat. Unfortunately, however, the resistance of the rigging is only a very, very small part of the total

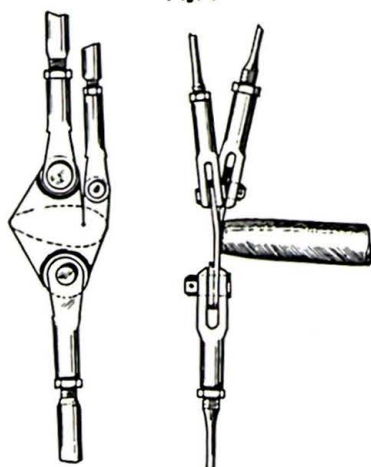


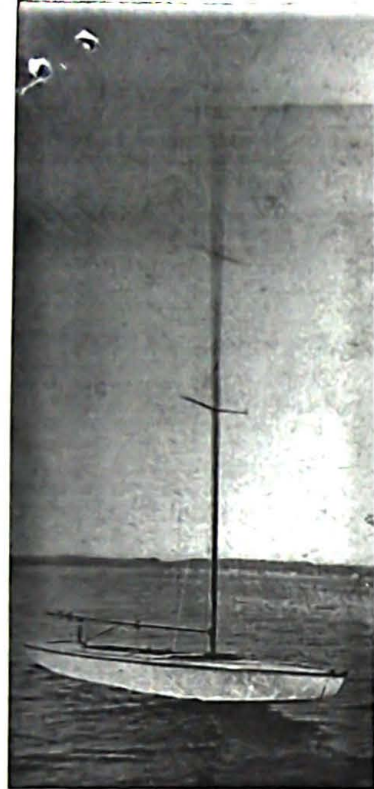
"Venture," Nancy Leiter's new 8-Metre, one of the outstanding new boats at Marblehead, is equipped with streamline rod rigging

A close-up of the rods on the new six-metre "Goose"



Fig. 2





Hunter's Star, "Foo." Her rod rigging costs no more than the conventional wire plus turnbuckles

istance to forward motion. The other factors, wave making action of the hull, skin friction of the hull and wind resistance of the hull and spars, are so much more important that if streamline rod rigging had no other virtues we would forget it without sacrificing more than a very few seconds per race.

But, wind resistance of streamline rod rigging is further reduced by eliminating some of the members. With wire cable (except on a very few boats) all masts continue down to the chain plates after passing over spreaders even though there may be two, three or more with exactly the same lead paralleling each other. With streamline rod rigging this multiplicity of wind resistance is greatly reduced by substituting a single length of rod and attaching the various leads above it with special

fittings at the ends of the spreaders. Figure 2 shows a typical fitting of this type and the details of the connections. In all bays between spreaders only one stay is necessary for each lead and each is adjusted by unloosening lock nuts at each end and turning the rod. *Endeavour* used turnbuckles at the deck with her rod rigging but *Ranger* did not — and never needed them, for very little adjustment was required.

Sizes equivalent to $3/32''$ to $11/16''$ wire

Streamline rod rigging is obtainable in either cadmium plated nickel steel or in stainless steel. The former is somewhat lighter. The available sizes are equivalent in strength to 1 x 19 stainless steel wire from $3/32$ to $11/16$ inch in diameter (1000 to 35,000 lbs. tensile strength) or sufficient to care for the requirements of everything from a Comet to a Twelve-metre. In rod rigging the well-known tendency of stainless steel to creep or stretch can be disregarded for the actual amount of such stretch is measurable only in thousandths of an inch.

That question of stretch, as already stated, is all important. Wire cable stretches in two ways, first there is a certain amount of stretch in each strand of wire; and second, and more important, under stress the various strands are compressed tighter together and the wire thereby lengthened. In order to minimize stretch with wire cable rigging it is usually necessary to use larger diameter wires for the upper shrouds than the desirable factor of safety alone would require. Even then headstays, jibstays and everything else move enough to throw the mast and the luffs of headsails well out of their most efficient position.

The modulus of elasticity of rod rigging (its resistance to stretch), however, is three times that of cable so that the stretch at the same intensity of stress is only one-third, and that is far and away its principal advantage. Rod Stephens reports that on the Six-metre *Goose* they have hardly touched the rigging since all preliminary stretch

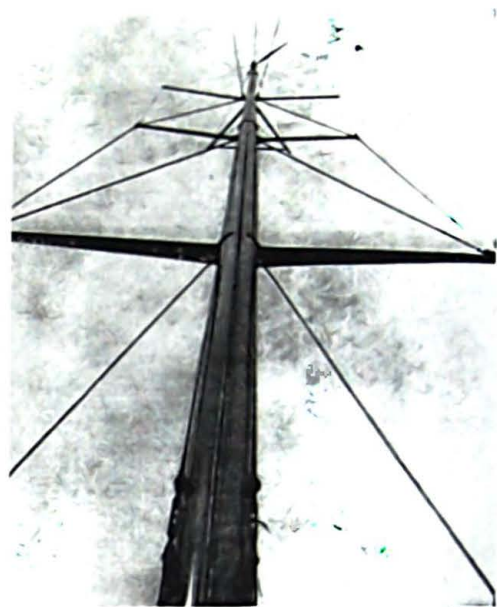
and give had been worked out of it. On other Sixes the upper shrouds must be continually fussed with and adjusted. For to have them tight enough for breezy days means they are too tight for light airs and daily or more frequent adjustments are required.

Goose has done particularly well on the wind and whereas her streamline rod rigging is not entirely responsible for this performance it certainly can't have hurt her much. Her first series was Larchmont Race week where she took second. During the trials for the American team and the right to defend the Scandinavian Gold Cup she was way ahead of the others. Since the trials and preparatory to the International Team races, *Djinn*, owned by Henry S. Morgan has been re-rigged with streamline rod rigging. Any improvement in her performance will be most interesting.

Piano wire for headstays and backstays

Streamline rigging, of course, is not particularly appropriate for use on jibstays, headstays or backstays for several reasons. In those places piano wire and round rod are recommended. The former is suitable for loads up to 4000 lbs., and the latter for heavier loads. In each case a gain in modulus of elasticity as well as a saving in wind resistance is effected.

There is no saving in weight, in fact, in some cases the streamline rod rigging will be heavier than wire cable. It is estimated that the rig of *Goose* weighs about 6 pounds more as it is than if she had been rigged with 1 x 19 wire. The materials used in her rigging wire are: Top shrouds and jumper shrouds — Piano wire; Jibstay — round rod, backstays — 1 x 19, Plow steel (less stretch than stainless) — All the rest — streamline rods.



Streamline rod rigging on "Goose" — from below

Venture's rig is about the same, although the lower ends at the rods are fastened below deck.

Durbin Hunter's Star, *Foo*, was launched about the middle of July. Fred Huntington of Sparkman & Stephens played with the Star lines a bit and wrote her specifications. She was built as lightly as possible and has never been sailed with anything but her present rig, so that it would be difficult to say just how much the streamline rod rigging has contributed to her remarkable record which at this writing stands at 5 firsts, 2 seconds and a fifth in eight starts in the hotly contested races of the Western Long Island Sound Star Fleet. The average number of starters in these races was twenty-three. *Foo* uses a piano wire headstay, 1 x 19 stainless steel backstays, and sets her jib flying. All the rest is streamline rod. The total cost of all wire, rod, and fittings was only a little over \$100 which is about what wire, splicing and turnbuckles cost on the Stars.

An Airplane Designer Builds A Boat: "Q.E.D."

One of the favorite subjects of modern artists and designers is the "Yacht of the Future." Many are drawn, many are painted, and although few of them have been built, one of the favorite diversions of yachtsmen is to pick out their obviously impractical features and gloat over the inexperience of their designers. But since the "yachts of the future" have progressed beyond the most elementary stages that's about as far as things have ever gone in the past.

This year, however, a very unusual air-modern yacht has been built by a prominent figure in one of the most progressive industries in the modern world: the airplane industry. The boat is the *Q.E.D.*, a 112-footer conceived and developed by Anthony Fokker in con-

been devoted to everything from intelligent discussion of her features to the spread of idle rumors about what the boat is like inside. Regardless of whether they admire the boat and the idea behind it, are merely tolerant regarding it, or take pleasure in condemning everything about it, yachtsmen seem to be greatly interested in *Q.E.D.*

She is a big boat, a very big boat as compared to most experimental yachts. Her dimensions are 112 feet overall, 100 feet on the waterline, and 18 feet beam. Anyone who does his experimenting on such a grand scale must know pretty well what he is doing, and also must be having a very enjoyable time doing it.

And that, incidentally, is our impression of Mr. Fokker.

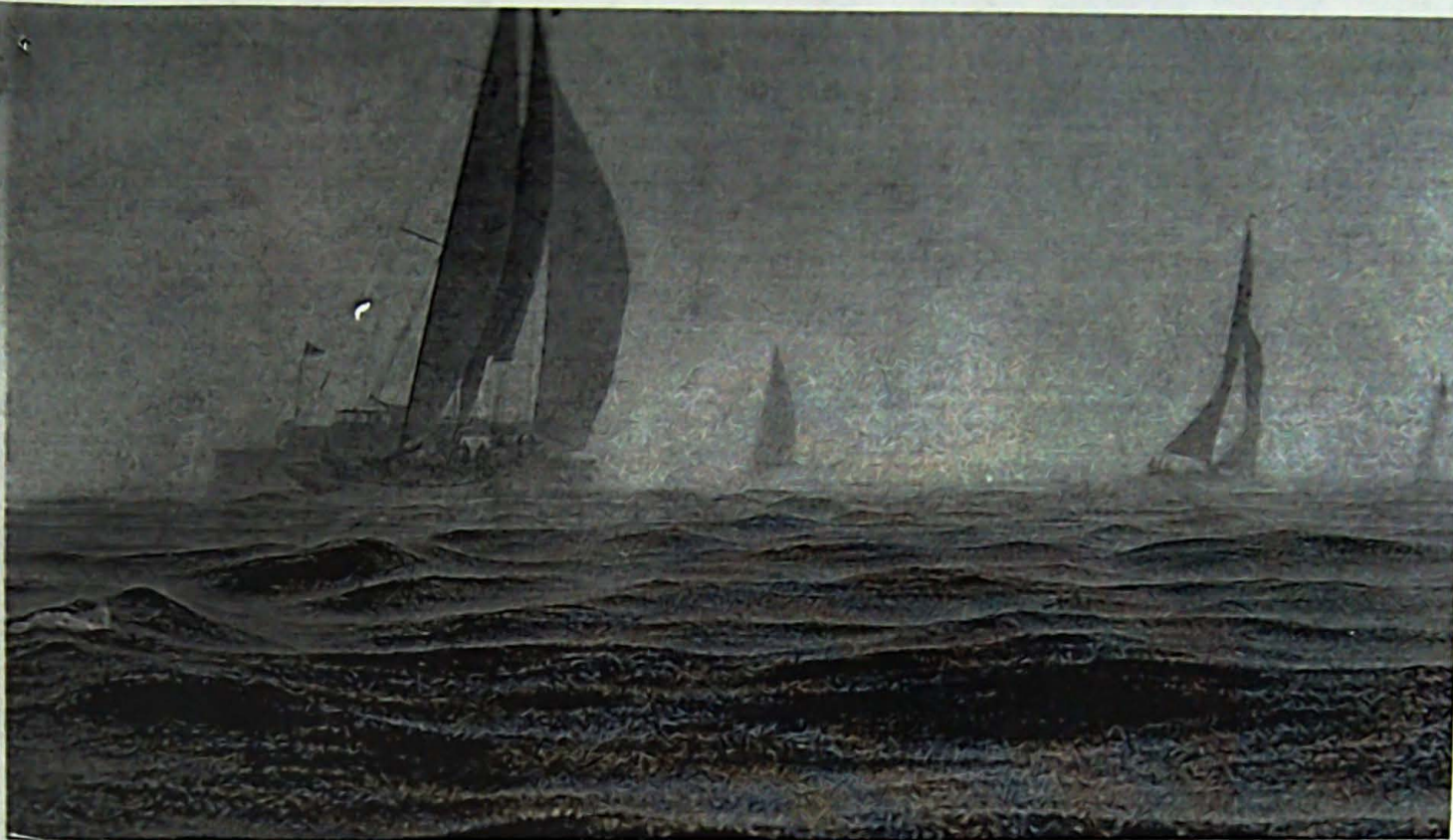
Previous Conceptions Put Aside

Inside the big streamlined hoods above decks, on deck, on the bridge, in the engine room, and down below, things are just as unusual as *Q.E.D.*'s outward appearance. Fokker is not a newcomer to boating, in fact he has had considerable experience on the water both here and abroad. Aviation, however, is his big interest and something he knows a lot about. So that in working out the details of *Q.E.D.*, he has attempted to put aside all previous conceptions of how things should be done

on a boat and start from scratch just as if neither he nor anybody else had ever before seen a boat. He has developed his own solution to many problems, not by varying or improving on existing equipment, but by working out his own answer from the ground up.

Fokker commenced his description of his own boat by pointing out in other nearby craft examples of the things he wanted to avoid. He thinks that there is nowhere near the deck space there should be on most of our boats. Too many cabin trunks, too many hatches, too many deck openings of all kinds cut the deck space up into small bits, none of which are particularly useful. Portlights, skylights, windows should all be larger, says Fokker. With modern materials and good workmanship he feels that much better visibility and a





LARCHMONT'S FORTIETH RACE WEEK

Two Records Set—One Gratifying, the Other Not

By ROBERT N. BAVIER, JR.

ON JULY 16th the Larchmont Yacht Club opened its fortieth annual Race Week, one of the important yachting events of the season to those who do their sailing south and west of Cape Cod. This year Race Week set two records, one for a new high number of starters, and an unofficial one for the worst weather ever experienced in the history of the famous event. On the first Saturday of the week no less than 368 boats crossed the starting line, six more than last year's record, and the largest fleet of boats ever to gather for a race on Long Island Sound.

A record like this is enjoyed by everyone, but the unprecedented bad weather not only dampened the enthusiasm, but everything else connected with the boats or persons of the yachtsmen. On five of the six days there was rain, and on only one day was there a good racing breeze which held true throughout the afternoon, without petering out or shifting all around the compass before the finish.

In spite of this bad fortune, there was the usual keen racing, and judging by past records most of the winning skippers gained their victories through good sailing, and not because of the fluky breezes.

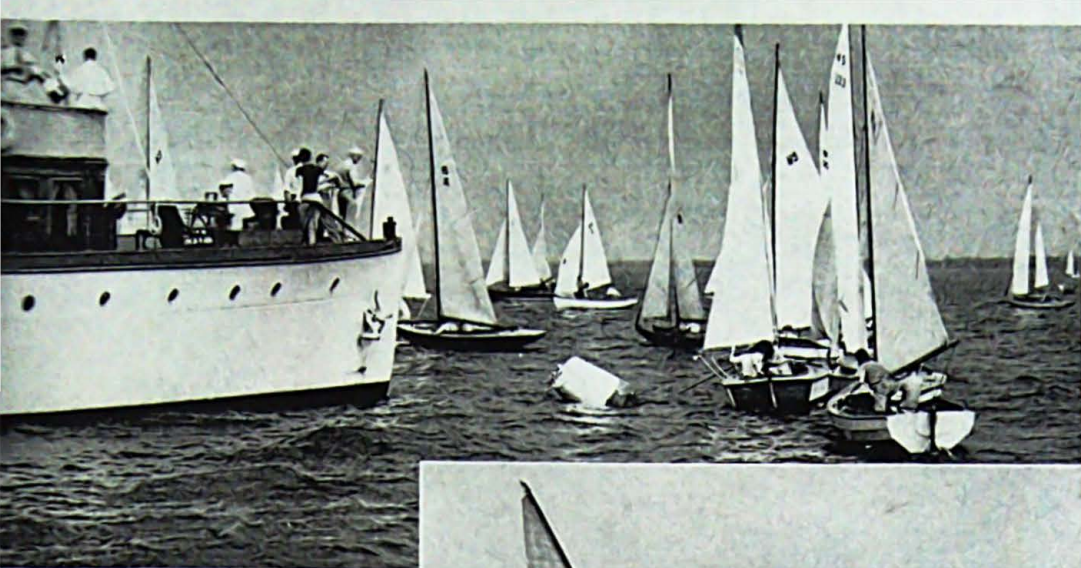
The Twelve-Metres are enjoying the keenest sort of racing this year, and put on one of the best shows of the week with the closest competition of any class, each one of the five entrants winning at least one of the six races. Alfred Loomis' *Northern Light* was disqualified in the first race, but came through to win the series from F. T. Bedford's *Nyala*,

(Continued on page 100)

Week-Enders rounding the mark. Drake H. Sparkman's "Southerly" was the series winner, taking every race but one

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Left, it rained every day but one of Larchmont Race Week. Here are a few of the fleet finishing in the worst downpour of the last day

Above, the juniors were out in force during Race Week, sailing the smaller types of boat and scrapping as earnestly as did their elders

Below, the Six-Metre "Fun," owned and sailed by Briggs Cunningham, worked out a one-point victory over George Nichols' new "Goose"



In the Stars, "Stan" Ogilvy cleaned up with "Jay" without using the new gadgets with which some of his competitors have been experimenting

Left, the new "Northern Light," owned by A. L. Loomis, won the series in the Twelve-Metre Class despite a disqualification on the first day

Below, H. M. Scott, Jr.'s "Dawnell" won in the Coastwise Cruiser Class. She also captured the "Yachting" Trophy in the Bayside-Block Island Race



Left, Frank Campbell's "Rascal" won top honors in the International One-Designs by a wide margin

and Clinton Crane's *Gleam* on the last day. *Northern Light* had been trailing all week because of her unfortunate beginning, and before the last race she was still in third place. But she finished first in that encounter while *Gleam*, the former leader, was last, and *Nyala* third. As a result, the two new boats, *Northern Light* and *Nyala*, tied for first place with 19 points. *Gleam* was a single point behind. On the basis of having scored the greatest number of firsts, *Northern Light* was awarded the series.

In the Thirty-Two Foot Class, Jack Shethar snatched the title from Ralph Manny's *Swell* after trailing most of the week, and finally came out on top by three points.

The outstanding performance of the week, however, was turned in by Frank Campbell's *Rascal* in the International Class. This is probably the keenest class in existence, and numbers more than twenty starters, but Campbell took all the honors in spite of the tricky sailing conditions, scoring two firsts, three seconds, and a third to take the series by a wide margin from Corny Shields in *Aileen*, and Bud Moxham in *Maid of Honour*, who finished second and third, respectively.

The "Sixes" have been spending most of the season at Seawanhaka, but attended Race Week along with the other boats. Briggs Cunningham sailed *Fun* to a one-point victory over George Nichols' *Goose*, a new boat which appears to be very fast in a true breeze.

The Stars were again dominated by "Stan" Ogilvy who has been going great guns this year in his *Jay*, and it was *Jay*, *Mad Cap*, and *Astrid*, in that order, in the final score.

So many classes were present that some of them must go without mention, but the showing turned in by Muzzey King of New Rochelle in the Long Island One-Design Class cannot be overlooked. In a class which averaged 15 starters, he got five firsts and a second, and also came home first on Junior Day, which does not figure in the Race Week results.

A series summary of the first three boats in each class follows:

TWELVE-METRES, OPEN	Points
<i>Northern Light</i>	19
<i>Nyala</i>	19
<i>Gleam</i>	18
OCEAN RACING	
<i>Baruna</i>	30
<i>Actaea</i>	30
<i>Gypsy</i>	23
SPECIAL HANDICAP DIVISION	
<i>Actaea</i>	25
<i>Baruna</i>	22
<i>Zio</i>	15

N.Y.Y.C. 22-FOOT CLASS

<i>Valencia</i>	63
<i>Swell</i>	62
<i>Rampage II</i>	36

N.Y.Y.C. 30-FOOT CLASS

<i>Oriole</i>	2
<i>Alera</i>	1

HANDICAP DIVISION I

<i>Grayling</i>	49
<i>Lady Babbie</i>	45
<i>Lone Star</i>	44

SIX-METRES

	Points
<i>Fun</i>	54
<i>Goose</i>	53
<i>Djinn</i>	48

INTERNATIONALS

<i>Rascal</i>	169
<i>Aileen</i>	143
<i>Maid of Honour</i>	140

HANDICAP DIVISION II

<i>Polly Anna</i>	43
<i>Anita</i>	42
<i>Shandygaff</i>	32

CLASS S

<i>Kandahar</i>	25
<i>Aurora</i>	21
<i>Anita</i>	14

VICTORY CLASS

<i>Flapper</i>	56
<i>Blue Devil</i>	50
<i>Alouette</i>	37

INTERCLUBS

<i>Multry</i>	51
<i>Sonsie</i>	49
<i>Dixie III</i>	48

COASTWISE AUXILIARY CLASS

<i>Dawnell</i>	24
<i>Lucky Star</i>	18
<i>No. 5</i>	4

ATLANTICS

<i>Ann</i>	273
<i>Rumour</i>	257
<i>Rhapsody</i>	257

WEEK-ENDERS CLASS

<i>Southerly</i>	45
<i>Scalawag</i>	39
<i>Zaidee</i>	21

HANDICAP DIVISION III

<i>Arance</i>	22
<i>Amitie</i>	22
<i>Teal II</i>	21

HANDICAP DIVISION IV

<i>Ho Hum</i>	43
<i>Ripple</i>	23
<i>Genesis</i>	16

STAR CLASS DIVISION I

<i>Jay</i>	81
<i>Mad Cap</i>	78
<i>Astrid</i>	72

STAR CLASS DIVISION II

<i>Sea Down</i>	146
<i>Juno II</i>	145
<i>Arade</i>	140

I. H. PIRATES

<i>Mary Lou</i>	19
<i>Laol</i>	18
<i>No. 9</i>	15

SEA BIRDS

<i>No. 15</i>	4
<i>No. 13</i>	3

SHAMROCKS

<i>Faina</i>	22
<i>Fourleaf</i>	21
<i>Shrimp</i>	13

PEQUOT INDIANS

<i>Nepo</i>	7
<i>Chee-Chee</i>	7
<i>Tomcod</i>	2