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The Renaissance of the J Class Yachts



**The History of the Most Famous Yacht Class
from its Inception to the Present**

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Preface

In 2011 and 2012 the giant J class yachts of yesteryear, the surviving original boats, replicas of historic boats and newly built J yachts, will meet again for regattas recalling the legendary America's Cup encounters of the Thirties in what is sure to be an historic reunion.

Surprisingly, the J class is well represented in yachting journals and on the internet but in print only in specialized monographs dealing with detailed aspects or individual boats. There seems to be no systematic overview of the history of the original yachts and what became of them or of recent new construction activity. This publication seeks to fill that gap. I am grateful to yacht builders and designers, yachting associations and many individuals for providing me with needed information¹.

Clearly, a short overview such as this risks committing errors of omission. I hope that the reader will forgive any such unintended lapse.

Thanks are due to Dr. Thomas Minnes for turning the original German version of this essay into readable English.

21 May 2011

GSt

Acknowledgments

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¹ Visit standop.net/voiles for more information on 2011/2012 season J class regattas, new J construction projects and related links.

1. The History of the J Class Rule

The first modern yachtsmen were kings, princes, lords, business tycoons, industrialists and the owners of department stores, railways and aeroplane factories. In the course of the 19th century they began to devote more and more of their growing prosperity to sport sailing, placing orders for ever bigger, faster and more expensive racing yachts with the world's best boatyards and challenging one another to regattas. In 1851, with the first world exhibition taking place in London, a legendary regatta was held off the Isle of Wight from which the yacht *America* emerged victorious. This was the birth of the America's Cup. Decades of intense regatta competition followed, especially in Great Britain and the United States, and it soon became necessary to establish rules allowing yachts of differing construction and design to compete fairly against one another.

The first attempt at formulating such rules came in 1882 at the Seawanhaka Corinthian Yacht Club near New York. The Seawanhaka Rule governed all races along the East Coast of the United States until 1903, including the America's Cup regattas (Fig. 1). The formula incorporated only length at the waterline and sail area and thus permitted extremely long overhang fore and aft which dramatically extended waterline length when heeled over and increased final speed. A typical yacht built to the Seawanhaka Rule was the *Reliance*, built by Nathanael Greene Herreshoff in 1903, which at 60 metres length above board was the biggest America's Cup boat ever built and hardly manageable even with a crew of 75.

The Seawanhaka Rule and others like it were the sole province of the sailing nation involved or even of individual regions or shipyards. In 1907, on British initiative, a new rule went into effect in Europe, the International Rule or Metre Rule (mR)². For the first time, boats from various countries and of various designs were able to compete under a uniform measurement rule using time allowances and handicaps. part from the measurement formula, rules also applied to the materials used. The absolute size of the boats, however, was not limited, allowing the construction of yachts of various sizes in conformity with the rules.

$R_{Seawanhaka}$	$= \frac{Lwl + \sqrt{S}}{2}$		
$R_{International [1]}$	$= \frac{Lwl + B + \frac{1}{3}C + 3D + \frac{1}{3}\sqrt{S} - F}{2}$		
$R_{International [2]}$	$= \frac{Lwl + \frac{1}{4}C + 2D + \sqrt{S} - F}{2.5}$		
$R_{International [3]}$	$= Lwl + 2D + \sqrt{S} - F$		
$R_{Universal}$	$= \frac{0.18 * L * \sqrt{S}}{\sqrt[3]{Di}}$		
R	Rating (metres or feet)	Lwl	Waterline length
L	Length	B	Beam
C	Chain girth	S	Sail area
F	Freeboard	D	Difference between skin girth and chain girth
Di	Displacement		

Fig. 1 Measurement formulas

² The basic principle of these rules was that the formula incorporated inputs for hull length, length at waterline, width, sail area, chain girth and skin girth, freeboard and other magnitudes, each with its own factor. The result of the equation was a certain rating. 15mR yachts, for example, had a rating of 15. The naval architect had a certain leeway within these parameters and could vary certain magnitudes, taking care only not to exceed the ultimate rating of (in our case) 15. Rating in metres or feet is not a linear measure in these formulas but rather an abstract magnitude.

In 1920 and 1933 the rule was modified somewhat, resulting in the first, second and third International Rule. The metre classes are essentially still in effect today. For example, from 1958 to 1987 the America's Cup was sailed by so-called "twelves" built to the 12mR.

American yachting organizations sent observers to Europe but retained the so-called Universal Rule which Nathanael Herreshoff had developed in 1903 after the *Reliance* had demonstrated the limitations of the old Seawanhaka Rule. Regulation only of length at the waterline and sail area had produced yachts which were practically unsailable and were suited only for light breezes and calm waters. Herreshoff saw the difficulty and added to the new Universal Rule (Fig. 1) a factor for displacement and substituted an abstract length L for length at waterline Lwl . L was somewhat greater than Lwl and was calculated using a complicated formula that included an equally complicated width factor. Length and sail area have a positive influence on speed. With the extension of waterline length (resulting in increased hull speed) not being compensated for by reduced sail area, the inclusion of displacement, i.e. the mass or weight of the yacht, became the retarding element in the formula.

Universal Rule divided boats of various sizes into classes identified by letter: two-masters were in classes A through H, single-masters in classes I through S. The biggest single-mast category was class I for yachts with a rating between 76 and 88 and a length at the waterline exceeding 88 feet. But not a single yacht was ever built for this class so that the

Yacht	<i>Reliance</i> 1903	<i>Ranger</i> 1937
Rule	International	Universal
Length of hull in ft	144	135
Length overall in ft, including bowsprit and boomhead [<i>Reliance</i>]	200	(135)
Length waterline in ft	90	87
Displacement in t	165	166
Sail area in m ²	1,260	690

Fig. 2 *Reliance* and *Ranger*

biggest single-mast boats were those in class J.³

A comparison of the yachts *Reliance* and *Ranger* (Fig. 2) shows the effects of the new rule relative to the old. Although hull length and displacement were roughly the same, *Reliance* had almost twice the sail area, making it easy to imagine that she was extremely difficult to sail. Conversely, *Shamrock V*, built

to the Universal Rule, was considerably heavier than, for example, the 23mR yacht *Cambria* built to the International Rule, although otherwise similar in size.

Even if the yachting world could not agree on a single international system, the Universal and International Rules were two practicable construction formulas for international regattas. In 1927, after initial hesitation, American yacht clubs finally agreed to the (European) International Rule at least for 12mR and smaller boats. All bigger yachts continued to be built according to the (American) Universal Rule, with the J class becoming obligatory for the America's Cup in 1930. Thus, with only a few minor modifications, the J class Rule proceeded from the Universal Rule.

Reliance (1903) and *Resolute* (1920) were the predecessors of the Js in the America's Cup. *Reliance*, due to its size and unmanageability, was ultimately the impetus for the new

³ The fact that no I-Class boats were built had to do with the preference of Europeans for "their" International Rule with the corresponding 23mR class. In the United States boats with waterline lengths over 90 feet were generally two-mast schooners. Thus the J class rule never really became established in the United States and applied only to America's Cup races. In Europe, however, there was considerable regatta activity in the J class quite apart from the America's Cup.

Universal Rule, while *Resolute*, at 106 feet, was until that time the smallest America's Cup boat to come out of the Herreshoff yard. Of course the attempt was made to continue the innovations of the previous years in the new J class, which ushered in a new round of technological competition. Ironically, Nat Herreshoff, who had prepared the ground for the new rule and made many innovations, was never to design a J class boat. Nevertheless, *Weetamoe*, *Enterprise* and *Rainbow* were built in his yard, and his son Lewis designed *Whirlwind*, which however was built elsewhere.

Five yachts built in Europe between 1893 and 1929 according to the 23mR International Rule, the so-called 'big class', were modified so as to comply with the J class Rule and qualified for regattas in this class (Fig. 3). Two of these are *White Heather II*, built

Year built	Sail no.	Name	Designer	First owner	Remarks
1893	K1	Britannia	George Lennox Watson	Prince Albert Edward	1931 converted to J class, under reconstruction [2011]
1907	K7	White Heather II	William Fife III	Myles Burton Kennedy	1930 converted to J class, scrapped for lead for keel of <i>Velsheda</i> .
1928	JK2 K2	Astra	Charles E. Nicholson	Sir Adam Mortimer Singer	1931 converted to J class, 1987 restored
1928	K4	Cambria	William Fife III	Sir William Berry	1995 and 2001 restored, 2003 converted to J class
1929	K8	Candida	Charles E. Nicholson	Hermann Anton Andrae	1931 converted to J class, 1989 restored

Fig. 3 Pre-1930 yachts (23mR) converted to J class

in 1907 with the then customary gaff rig and bowsprit, and *Cambria* (Fig. 4). In 2003, when she was again restored, *Cambria* was modified to fit the J class Rule, whereby the bowsprit, not actually permitted on Js, was allowed to stand.



Fig. 4 *Cambria*, 2010

Eighteen J class boats were designed between 1930 and 1939, only ten of which were actually built (Fig. 6). Three of these boats have survived to the present day and have been restored. Since 2004 several other boats have been replicated using the original plans, and new J class boats have been designed too. We will turn to these below.

The characteristic feature of the J class is the so-called Bermuda rigging with a continuous mast without extension and high rigging instead of the otherwise customary gaff rig. A bowsprit to secure jib sails is not provided for. How imposing these boats are is shown in figure 5 by a comparison of *Ranger* with the 12mR yacht *Anitra*.

Then as now, the fascination of the J class derives from the unique combination of the boats' size and speed. The social prestige of their proud owners and the high drama of challenging both Neptune and fellow mortals in

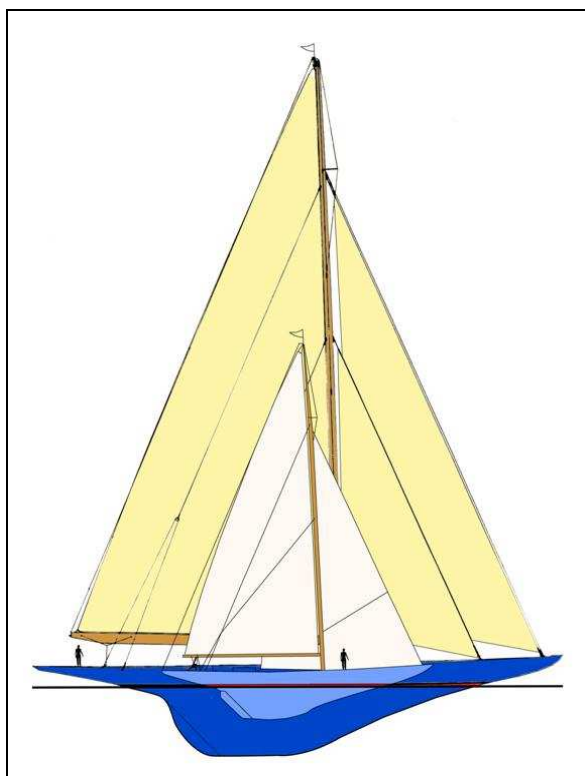


Fig.5 *Ranger* (background, 41 m) and *Anitra* (21 m)

such costly and thoroughbred craft make J class racing so compelling. The thrill of victory and the heartbreak of defeat make the J class truly the premier league in yacht racing.

No.	Year built	Sail no.	Name	Designer/Builder	First owner	Lwl in ft	L in ft	Remarks
1	1930	JK3	Shamrock V	Charles E. Nicholson/ Camper & Nicholson, Gosport	Sir Thomas Lipton	81	119	AC loser to <i>Enterprise</i> . Original extant, restored in 1989 by Elizabeth Meyer and in 2000 at Pendennis in Falmouth.
2	1930	1	Weetamoe	Clinton Hoadley Crane/ Herreshoff, Bristol RI	George Nichols syndicate	83	126	used for training, scrapped in 1938.
3	1930	JUS2 J2	Yankee	Frank Cabot Paine/ Lawley & Son, Dorchester MA	J. S. Lawrence syndicate	84	124	used for training, active in regattas until 1937, scrapped in 1941.
4	1930	3	Whirlwind	Lewis F. Herreshoff/ Lawley & Son	L.. K. Thorne syndicate	86	130	used for training, scrapped in 1935
5	1930	4 J1	Enterprise	Starling Burgess/ Herreshoff, Bristol RI	Harold S. Vanderbilt	80	120	defeated <i>Shamrock V</i> 4-0, scrapped in 1935.
6	1933	JK7	Velsheda	Charles E. Nicholson, built at Camper & Nicholson	William L. Stephenson	83	129	no AC participation, original extant, modernized and restored several times since 1983, most recently 2001.
7	1934	JK4	Endeavour	Charles E. Nicholson, built at Camper & Nicholson	Sir Thomas Sopwith	83	129	AC loser to <i>Rainbow</i> ; sold to Elizabeth Meyer in 1984, restored in 1989, later again restored, modernized and sold.
8	1934	JH2	Rainbow	Starling Burgess/ Herreshoff, Bristol RI	Harold S. Vanderbilt	82	123	defeated <i>Endeavour</i> 4-2, scrapped in 1940.
9	1936	JK6	Endeavour II	Charles E. Nicholson/ Camper & Nicholson	Sir Thomas Sopwith	87	135	AC loser to <i>Ranger</i> , scrapped in 1968.
10	1937	J5	Ranger	Starling Burgess and Olin Stephens/ Bath Iron Works, Bath ME	Harold S. Vanderbilt	87	136	defeated <i>Endeavour II</i> 4-0; alternative design 77-C; scrapped in 1941.

Fig. 6 J class yachts 1930-1937

Green: Original boat extant and restored - Lwl = length waterline, L = length overall

2. The Historic J Class Yachts of 1930-1937

Eighteen Js were designed between 1930 and 1937, only ten of which were actually built (Fig. 6). Three of these boats have survived to the present day and have been restored. Since 2004 several other Js have been replicated using the original plans, and new boats have been



Fig. 7 *Shamrock V*, 1930

Beken



Fig. 10 *Shamrock V*, 2009



Fig. 8 *Shamrock V*, 2010



Fig. 9 *Shamrock V*, deck detail, 2009

designed too. We shall turn to the historic Thirties J yachts now.

Four of the ten J class boats built between 1930 and 1937 came from Great Britain, six from the United States. Six of the ten, three from Britain and three from the US, were victors or also-rans in the America's Cup; four were never entered in the America's Cup and were used for training or competed in other regattas.

In **1930** five yachts were delivered to their owners, one British and four American. The first to be built in 1930 was *Shamrock V* (Fig. 7-10) belonging to Sir Thomas Lipton.⁴ He had already lost four times to American boats. His fifth and last America's Cup race pitted *Shamrock V*

⁴ Sir Thomas Lipton (1850-1931) was the famous English tea merchant. His activities as a yachtsman helped to establish the Lipton brand. In a sense he pioneered sport marketing and sponsoring, which continue to be important features of international yachting today.

against Harold S. Vanderbilt's⁵ *Enterprise*. But Lipton lost again in 1930.



Fig. 11 *Weetamoe*, ~ 1930 The Field

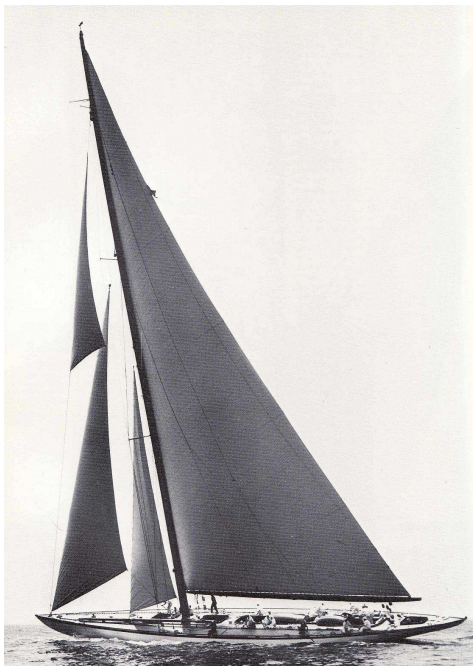


Fig. 13 *Whirlwind*, ~ 1930 Rosenfeld

Shamrock V has survived to the present. She was the victor in several British regattas after her America's Cup defeat and served as a benchmark boat for further J class construction. *Shamrock V* changed hands several times, and most recently was bought by a South African banker. The last thoroughgoing renovation was undertaken in 1999 at Pendennis Shipyard in Falmouth, England, whereby every effort was made to modernize while retaining or reproducing as much of the original boat as possible.

The American boats *Weetamoe*, *Yankee*, *Whirlwind* and *Enterprise* (Fig. 11-15) were built in response to Lipton's challenge. Ultimately *Enterprise*, the smallest of the four, was chosen to defend the Cup, and her sister boats were never America's Cup entries, serving instead as training yachts in the preparation

phase before finally being scrapped. But at least *Yankee*, the second-largest J built in 1930, was an active regatta

participant for seven years after launch (and modification in 1934) and competed in the American elimination trials before the last America's Cup with J class

boats. *Yankee* was also the only American J to sail in European waters, albeit not in an America's Cup.

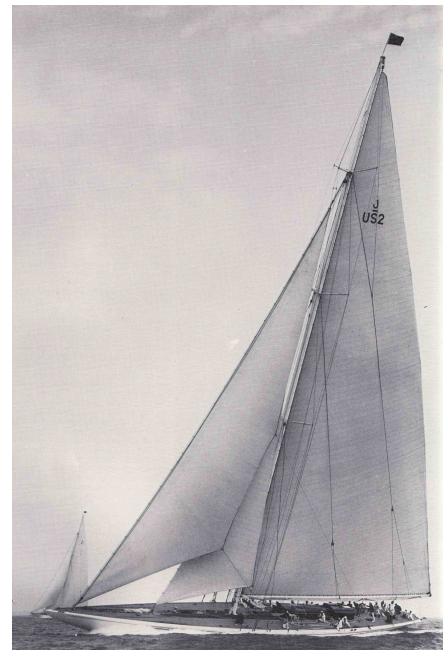


Fig. 12 *Yankee*, ~ 1930 Beken

Enterprise used the so-called "Park Avenue boom" for the first time. It had an upper board said to be as broad as Park Avenue. A man could walk on it!

Battens were attached at regular intervals allowing the foot of the mainsail to be trimmed more to leeward or more to windward as the situation demanded, a major sail-handling plus.

⁵ Harold S. Vanderbilt (1884-1970) was the scion of the Vanderbilt family, which amassed one of the great 19th century American fortunes. The Vanderbilts owned steamship lines and railways, notably the New York Central.

Notwithstanding such innovations, *Enterprise*, like the other US yachts, was scrapped in the end. She had cost about a million dollars in 1930, the equivalent of \$13 million in 2011.

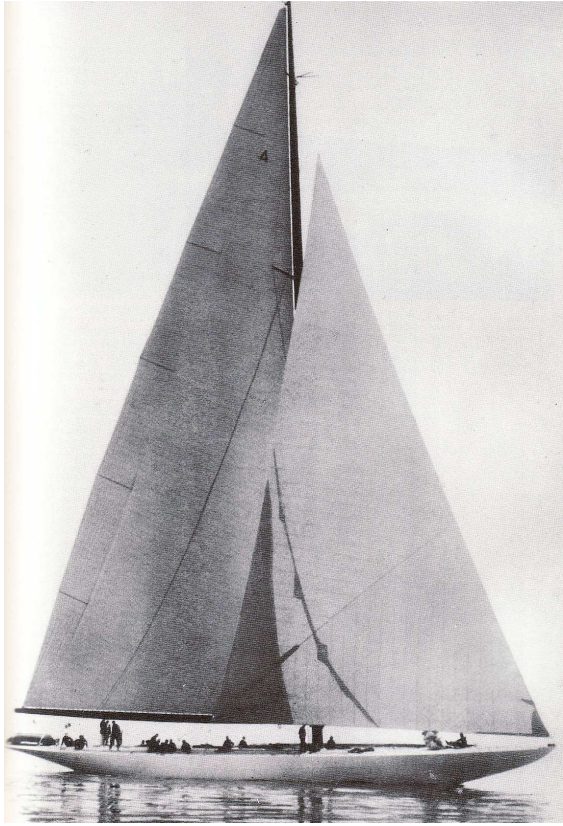


Fig. 14 *Enterprise*, ~ 1930

Beken



Fig. 15 *Enterprise*, ~ 1930

The Field

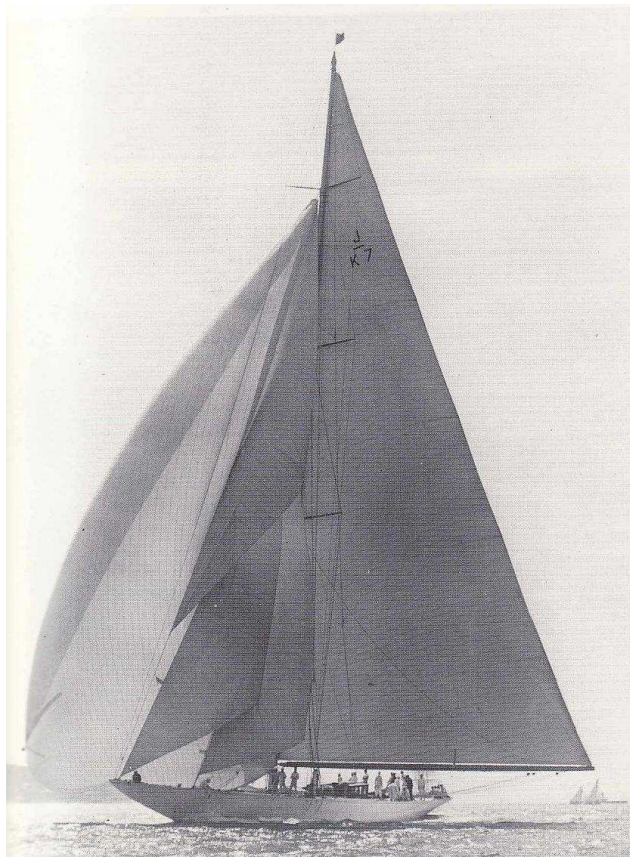


Fig. 16 *Velsheda*, 1933, Cowes

Stephenson

In **1933** *Velsheda* was built for an American businessman in Gosport, England (Fig. 16). The original owner never sailed his yacht in the America's Cup, but *Velsheda* competed successfully in over 40 other regattas, with victories over other Js. In 1984 the almost completely deteriorated hull was raised from the waters of the River Hamble estuary, restored and refitted. After foundering again and changing hands, she was again restored in 1997 in Holland, with only the hull remaining of the original, everything else being brought up to date. In 2001 she was luxuriously refurbished at the Royal Huisman yard in Holland, thanks largely to Elizabeth E. Meyer.⁶ Classic yacht aficionados may regret that *Velsheda* has retained so little of her original state. Today she is owned by a Dutch textiles manufacturer (Fig. 17-19).



Fig. 17 *Velsheda*, Saint-Tropez, 2008

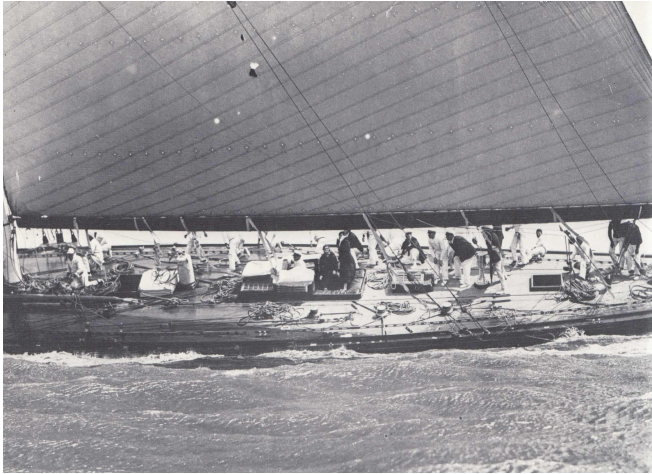


Fig. 18 *Velsheda*, Saint-Tropez, 2008



Fig. 19 *Velsheda*, Saint-Tropez, 2008

⁶ Elizabeth E. Meyer (*1953) has been a yacht restoration pioneer, beginning in 1984 with *Endeavour*. Her activities have renewed interest in early 20th century yachting history. In 1993 she founded the International Yacht Restoration School in Newport, Rhode Island.

Fig. 20 *Endeavour*, 1934

Murdoch

1934 saw the launch of the English J *Endeavour* (Fig. 20-22) and the American *Rainbow*. Aficionados say that *Endeavour*, initially owned by Sir Thomas Sopwith⁷, was the fastest and prettiest J ever built. Sopwith, bringing his experience in the aeroplane business to the task, commissioned Charles Nicholson with designing the boat, who had been the architect of two Js already. Built in the record time of only 100 days, *Endeavour* was the most modern sailing yacht of its time. Unlike

Lipton, for whom a professional crew, high publicity value and the expenditure of lots of money alone were guarantees of success, Sopwith was a technician and engineer who put his faith in aerodynamics, technically savvy choice of materials, and towing tank tests. *Endeavour* was, for example, the first boat to boast an electrical wind gauge instead of the traditional wind vane. *Endeavour* dominated English yachting from her first season on, winning many races and beating *Shamrock V* and *Velsheda*, beating even – the only J to do so – *Ranger*, the biggest J of all. And still Sopwith lost to Vanderbilt's *Rainbow* in the America's Cup, but the races were closer than ever before.

Endeavour went through several owners, was set to be scrapped, then reprieved, and then finally sank in the River Medina on the Isle of Wight in the 1970s. Then she was raised and put on land, but without rudder, keel, mast or interior fittings. In the end Elizabeth Meyer took her over in 1984 and began with the restoration at Royal Huisman in Holland. *Endeavour* was relaunched in 1989 and set sail again for the first time in 52 years. In 1999 the Antigua Classic Yacht Regatta saw the historic reunion of *Endeavour*, *Shamrock V* and *Velsheda*, the last survivors of the golden age of the J class, with the three veterans sailing against one another for the first time in 60 years. Since then *Endeavour* has been sold several times and at this writing is being again overhauled.

Fig. 21 *Endeavour* (front), *Velsheda*, 1934

Beken

⁷ Sir Thomas Sopwith (1888-1989) was a pioneer English flyer and began manufacturing aeroplanes as early as 1912. The Sopwith Camel biplane, 5,490 of which were built, was Britain's most successful fighter aeroplane in the First World War.

Rainbow (Fig. 23) was launched at the Herreshoff yard in Bristol, Rhode Island. She was designed by Starling Burgess and also belonged to Harold S. Vanderbilt, who more than once successfully defended the America's Cup. Although somewhat smaller than *Endeavour*, *Rainbow* was able to stave off the threat and keep the Cup in the United States. *Rainbow* was supposed to defend the Cup a second time in 1937 but succumbed to the newer *Ranger* in the qualification trials. In 1940, sadly, *Rainbow* was sold for scrap.



Fig. 22 *Endeavour*, 2001, Antigua Classic Yacht Regatta.
Tim Wright

In the qualifying trials for the 1934 America's Cup, *Rainbow* had initially eliminated *Weetamoe* and then *Yankee*.



Fig. 23 *Rainbow*, ~ 1934

The Field

When it came time to face *Endeavour*, the margin of *Rainbow*'s 4:2 victory was that Vanderbilt had the better and more experienced crew, with every hand a specialist knowing his task. Sopwith seems to have viewed the race as a personal match-up with Vanderbilt rather than as a struggle between two sailing nations. Observers at the time thought that Sopwith would have won against the slower *Rainbow* if he had trusted less in

technical sophistication and more in seat-of-the-pants sailing by a professional crew.

As early as the 1935 season Sir Thomas Sopwith had contemplated commissioning the design of an ultramodern new boat for a renewed challenge in the year 1937, *Endeavour II* (Fig. 24), notwithstanding questions as to whether the J class had not reached an outer limit in size and rig beyond which the boats were next to impossible to handle and entirely unsuited for heavy weather. The smaller K class seemed more plausible, but Sopwith followed up on his idea of



Fig. 24 Front to back: *Yankee*, *Endeavour II*,
Ranger, *Endeavour*, *Rainbow* (1937)

Rosenfeld

building a new challenger which at 87 feet waterline length and nearly 160 tons displacement (ten times that of the 2010 US America's Cup yacht!) came very close to the maximums allowed. But the Great Depression and the uncertain political situation cast a long shadow, and so it was that the last two Js built, *Endeavour II* and *Ranger*, were both the climax and the close of the unique J class chapter in yachting history.



Fig. 25 *Endeavour II*, 1937
Beken

In 1936 *Endeavour II* (Fig. 25) slid down the building ways in Gosport. Like her predecessor, she was designed by Charles Nicholson, who invested all his previous experience in laying out the hull and rig for heavy weather. But problems remained, and both *Endeavour II* and *Velsheda* were dismasted in sea trials. America's Cup authorities continued to toy with the idea of going over to a smaller class of boat, this time the L class. But Sopwith simply sat out the problem and issued his challenge to the New York Yacht Club, successfully suggesting that the race be moved up from September to July when winds would be higher in the regatta waters. He hoped for advantages for his new yacht notwithstanding continuing difficulties with the mast – he had been dismasted a further time.

The American defenders quickly realized that existing boats were no match for the new challenger and that a new American J would have to be built. Harold S. Vanderbilt headed the new syndicate and commissioned the experienced *Rainbow* designer Starling Burgess and the talented young naval architect Olin Stephens with the job of making up four design variants each. By pairing an experienced naval architect with a younger designer, Vanderbilt hoped to come up with a winning boat – which he did!

Burgess and Stephens took a completely new tack, carrying out scientific experiments in towing tanks in order to optimize the hull shape on the new yacht. They even utilized models of old J class boats, designers on both sides of the Atlantic having innocently exchanged old construction plans and models among themselves so that the Americans had many details of British boats at their disposal. In the end it was Burgess's design 77C that got the nod, the eight variants having been assigned identifying letters and 77 being the design number used by Stephens's firm Sparkman & Stephens.

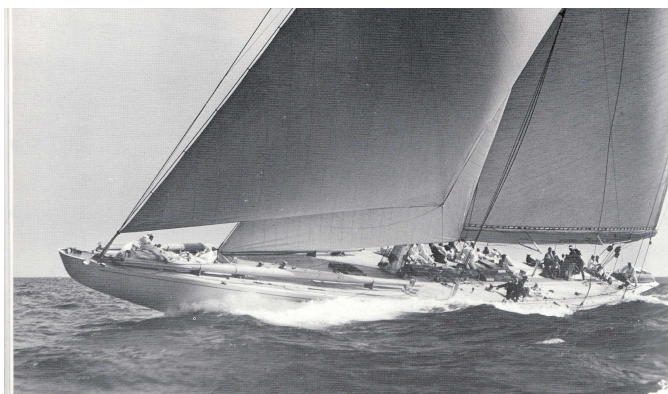


Fig. 26 *Ranger*, 1937

Rosenfeld

This became the basis for the new J *Ranger*. The design was both innovative and visually unusual, a clear departure from past J class designs. In particular the flat stern and the somewhat inelegant hook-shaped stem provided the decisive plus in speed close to the wind. Construction of *Ranger* was finished in early **1937** (Fig. 26). Nicholson, who had designed *Endeavour II*, was much impressed and later generously praised the *Ranger* designers for what he called the greatest advance in yacht building in 50 years. In any case, *Ranger* was not cheap, even though the shipyard in Maine that built her made Vanderbilt a sensational offer, charging only for material costs. But even so, the bill in 1937 was half a million dollars, the equivalent of \$7.5 million today. Vanderbilt was enthusiastic about the performance of his new yacht, even if she differed totally from that of other J boats. *Ranger* picked up speed more slowly and was less maneuverable, but this was compensated for by greater stability in staying to the course. In mid-1937 *Ranger* prevailed in elimination heats against *Yankee* and *Rainbow* and was nominated official Cup defender.

All four races against challenger *Endeavour II* ended in clear victories for *Ranger*. The British challenger had to strike her colours and concede that American naval architecture, applying scientific methods to the design of hull, sails and rig, had indeed ushered in a new phase in yacht construction. *Endeavour II* and *Ranger*, notwithstanding their design differences, were called ‘Super J’ yachts on the basis of size alone.

There were eight further J class designs made between 1930 and 1937. Six of those, alternative designs for *Ranger*, are in the Sparkman & Stephens firm archives.

3. What Became of the Ten J Class Yachts of the 1930s?

The J class held sway only from 1930 to 1937. Yacht building was nevertheless revolutionized in this short time span and much new experience gained with new materials and designs. Naval architects and yacht builders extended the bounds of feasibility and, in some cases, paid a steep price in foundered boats, broken masts and other setbacks. This was all driven by the fascination of the America's Cup, which set off a race for technological superiority between Great Britain and the United States. With the compounding of political and economic problems in the course of the Thirties, culminating in the Second World War, it became impossible to find yachtsmen and sponsors willing and able to devote time and treasure to such an extravagant pastime. America's Cup races did not take place for two long decades, from 1937 to 1958.



Ironically perhaps, although six of the ten J boats built in the Thirties were

Fig. 27 *Endeavour*, *Shamrock V*, *Velsheda* (from left to right), America's Cup Jubilee, Cowes, 2001.

Tim Wright

American boats, three of which successfully defended the America's Cup, none of these vessels have survived to the present. This was the good fortune of the losers, with three of the four British contenders still extant (or at least their hulls): *Shamrock V*, *Velsheda* and *Endeavour* (Fig. 27). To be sure, *Velsheda* missed being nominated for the Cup, but she acquitted herself honourably in other regattas in the Thirties.

The other Js, after soldiering on as training or test boats, were all ultimately given over to the blowtorch between 1935 and 1941. Only *Endeavour II* held on into the postwar era before finally being scrapped in 1968.

4. New Constructions since 2000

Restoration of the surviving J class boats in the latter years of the 20th century sparked new interest in the history of the other Thirties J yachts, and plans were soon being entertained to replicate boats using original designs or to build boats now that had not been built then (Fig. 28). The J class Association was founded in England in 2000. It watches over new construction according to old blueprints and has established a framework for building new boats including permissible materials and technical specifications, safety standards and regatta rules. A handicap system has been developed which enables J boats of various sizes and differing hull materials (wood, steel, aluminium) to compete fairly against one another.

The two most important regulations are the requirement that new Js be constructed according to the historic Thirties hull frames and the option to use aluminium as well as wood and steel for the hull. The latter option in particular has led to considerable new construction. Boats offering modern comfort in the outfitting and featuring modern technical and safety equipment must compensate for the additional weight with light aluminium hulls.

These new yachts, with waterline lengths of 87 feet, are all at the upper reaches of permissible size. A replication of *Enterprise*, the smallest of the original Thirties J boats, is

No.	Year built	Sail-no.	Name	Designer/Builder	First owner	Lwl in ft	L in ft	Remarks
11	2003	J5	Ranger	Sparkman & Stephens and Reichel/Pugh USA/ Danish Yachts DK	John A. Williams	87	136	replica of [10]
12	2009	JK6	Hanuman	Gerard Dykstra/ Royal Huisman NL	James H. Clark	90	138	replica of [9]
13	2010	JH1 H1	Lionheart	André Hoek/ Claasen Yachtbouw NL		87	142	unbuilt 1937 <i>Ranger</i> design by Starling Burgess and Olin Stephens (77 F)
14		J7	Atlantis	André Hoek/Claasen NL		88	140	unbuilt 1935 Frank C. Paine design, under construction 2011
25		JH2	Rainbow	Gerard Dykstra/ Holland Yachtbouw NL	Chris Gongriep	88	131	replica of [8], under construction since 2009
16		JH3	Yankee	Gerard Dykstra/ Holland Yachtbouw NL	Simon Dierdorp syndicate NL	88	128	replica of [3], under construction since 2010
17		JS1 S1	Svea	André Hoek/ Claasen NL	consortium	87	136	unbuilt 1937 design by Thore Anton Holm - in planning 2011
18		J1	Enterprise	André Hoek NL		80	127	in planning 2011

Fig. 28 J class replicas and new constructions since 2000.

Lwl = length waterline, L = length over all.

Yellow: Replica of a scrapped or sunken boat built to original plans. Blue: First boat built to unrealized original plans.

also being contemplated, whereby it is not yet clear how big or small she will ultimately be. For two boats, *Weetamoe* and *Whirlwind*, neither the original nor a replica boat nor even the original plans are extant. The desire to see all of the Thirties J boats again, whether as originals or as replicas, has brought about a J class renaissance. Figure 44 compares and contrasts the original, historic Js with surviving craft, replica boats and as yet unexecuted plans.

Ranger (sail number J5) was the last J yacht built in the 1930s and is also the name of the first contemporary J replica boat. Her owner is John Williams, a real estate man from Atlanta, Georgia, who, along with the owner of *Velsheda*, was prominently involved in the founding of the J class Association. The boat was built in Denmark to the original Sparkman & Stephens blueprint under the supervision of Reichel & Pugh Yacht Design of San Diego, California. She was completed in December 2003 and sailed across the Atlantic only days later. *Ranger* has participated in



Fig. 29 *Ranger*, Voiles de Saint-Tropez, 2010

several Caribbean regattas and is at home there and in the Mediterranean. In 2008 *Ranger* was the winner in the cruiser class in the Maxi Cup off Sardinia, besting both Otto Happel's *Hetairos* and Ronald de Waal's *Velsheda*. In the meantime *Ranger*, although the bigger boat, has lost to *Velsheda* on occasion. *Ranger* was built with a steel hull; more recent new designs favour aluminium for weight reasons. In 2010 *Ranger* was offered for sale for \$20 million (Fig. 29-31).



Fig. 30 *Ranger*, Voiles de Saint-Tropez, 2010

Hanuman (sail number J-K6) is the second new renaissance J. She was built at Royal Huisman in Vollenhove, Holland, and delivered in 2009. *Hanuman* comes from Hindu mythology and is the name of a deity that fights evil. The owner is James Clark, an American, the co-founder of Netscape, who also had the



Fig. 31 *Ranger*, Voiles de Saint-Tropez, 2010



Fig. 32 *Hanuman*, 2010, St. Barths Bucket
Tim Wright



Fig. 33 *Hanuman*, 2010, St. Barths Bucket

Tim Wright

yachts *Hyperion* and *Athena* built at Huisman. *Hanuman* replicates *Endeavour II* of 1936. Gerard Dykstra, who has had further J class boats on his drawing board, was responsible for the total concept (Fig. 32, 33).

With *Ranger* and *Hanuman* two yachts have been resurrected that paired off against one another in the 1937

America's Cup (Fig. 44). In 2009 Newport, Rhode Island, was again the site of an historic encounter, with *Ranger* and *Hanuman* (ex *Endeavour II*) duelling again after 72 years. It wasn't an America's Cup this time, to be sure, but excitement ran high. In the first race, after two and a half hours, *Hanuman*, captained by Jim Clark himself, just pipped *Ranger* by 38 seconds; *Ranger* took the lead in the second race but was passed in the home stretch. At St. Barths Bucket in March 2010 *Ranger* won 2:1. Jim Clark cancelled a third encounter a fortnight later at the Antigua Classic Yacht Regatta on short notice.

Lionheart (sail number J-H1) is the third new J. It was built in 2010 by the Dutch firm Claasen Jachtbouw in Zaandam (Fig. 34-36) on the basis of the unused F design variant for the original *Ranger*. The aluminium hull was built by Bloemsma Aluminiumbouw in Makkum on the IJsselmeer, Holland. The Dutch yacht designer André Hoek examined the five best *Ranger* designs using computer simulations of various wind conditions. He discovered that the five vintage designs all had great potential but ultimately came to the conclusion that F was the optimal choice both for regatta and open seas sailing. At 44 metres (142 feet) *Lionheart* is the biggest J class yacht of all time, of course not exceeding the 87-foot maximum permissible waterline length. The extremely long



Fig. 34 *Lionheart*, Voiles de Saint-Tropez, 2010



Fig. 35 *Lionheart*, Voiles de Saint-Tropez, 2010

overhang fore and aft, 17 metres altogether, gives the boat an especially dynamic appearance. She gave her debut at the 2010 'Voiles des Saint Tropez' but did not participate in the regattas. It remains to be seen when *Lionheart* will sail her maiden J class regatta. In early 2011 she was offered for sale with a 14.9 million euro price-tag.



Fig. 36 *Lionheart*, Voiles de Saint-Tropez, 2010

Rainbow (sail number J-H2), a replica of the eponymous 1934 boat, is currently being built in Holland. The aluminium hull was built by Bloemsma Aluminiumbouw, with fittings, superstructure and rig being made and assembled by Holland Jachtbouw in Zaandam to plans by Dykstra Naval Architects (Fig. 37). The yacht is about 130 feet long, four meters short of *Lionheart*, but with the same waterline length of 87 feet. The declared aim of the builders is to develop a “green” boat with hybrid propulsion and other technical refinements that will make it the environmentally-friendliest J, with 20% less energy consumption than comparable boats. The interior design is to be in the style of the 1930s with no sacrifice of modern comfort. The boat was to be completed by the end of 2011 but will probably not be ready until 2012.



Fig. 37 Design of *Rainbow*, 2011

Dykstra & Partners Naval Architects

Yankee (sail number J-H3) was ordered in October 2010. The hull will be from Bloemsma, with all other work being done at Holland Jachtbouw under the supervision of Dykstra Naval Architects. The new boat will be 39 metres long, about a metre and a half shy of the original *Yankee* (1930) as designed by Frank Cabot Paine (Fig. 38). Sail area, around 900 m², will be considerably greater than the original. Propulsion will be similar to *Rainbow*. The boat is owned by a syndicate headed by Simon Dierdorp and the Amsterdam Sailing Club. The boat is to be delivered in time for the J class regattas scheduled for June 2012 in England.

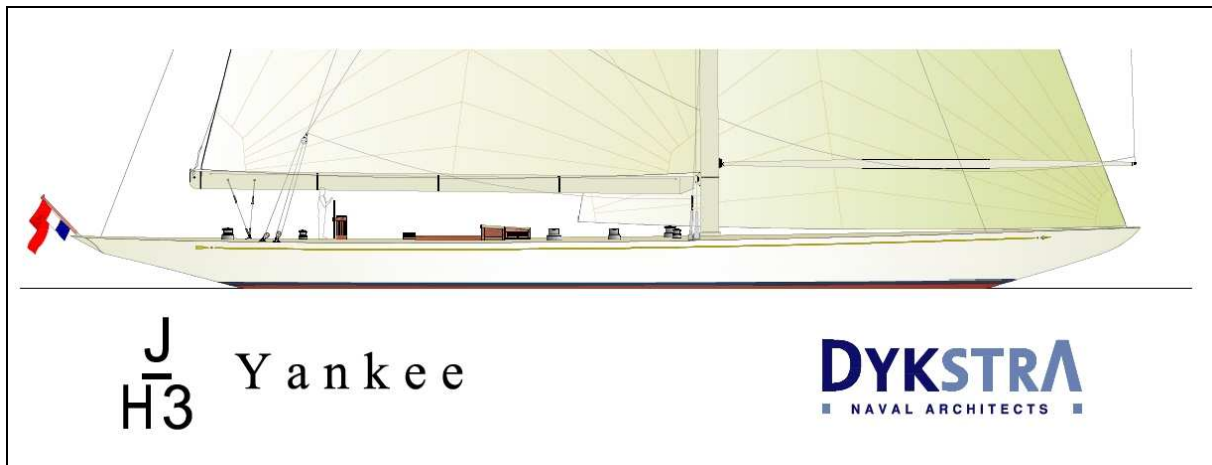


Fig. 38 Design of *Yankee*, 2011

Dykstra & Partners Naval Architects



Fig. 39 *Atlantis*, hull at Bloemsma, 2011

Andreas Standop

Bloemsma, with other work to be done at Claasen Jachtbouw in Zaandam. Hoek Design Naval

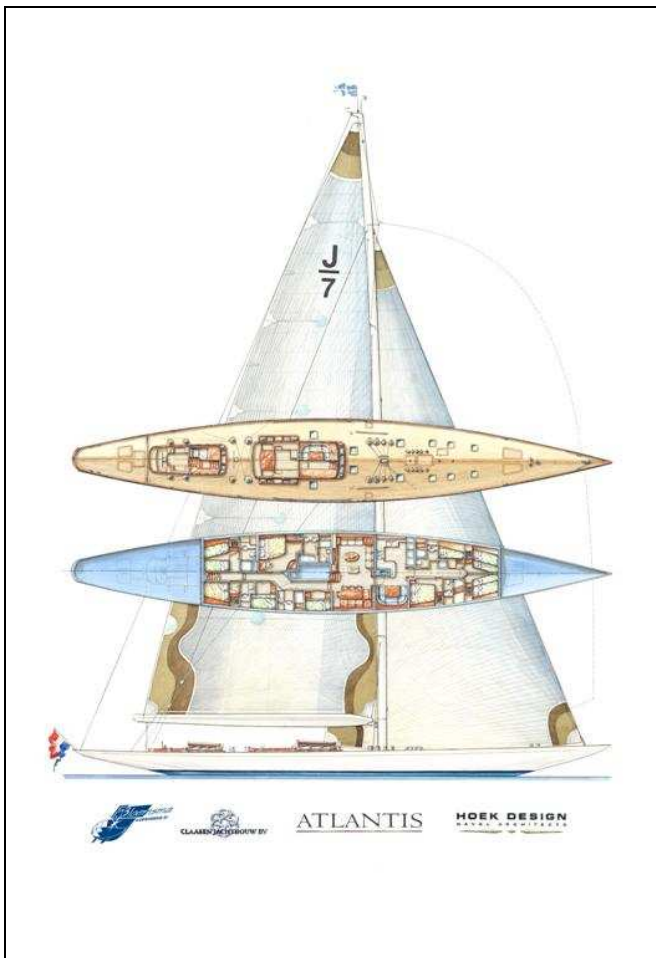


Fig. 41 Design of *Atlantis*, 2011 Hoek Design Naval Architects



Fig. 40 *Atlantis*, hull at Bloemsma, 2011

Architects envisage two deckhousings, with navigation and wheel aft (Fig. 39-41). For regattas a second wheel amidships will be in closer communication with the crew. With the hull still semifinished in Makkum at this writing, the delivery date is open and participation in regattas planned for 2012 uncertain.

Svea (sail number J-S1) is based on a 1937 design by the Swedish naval architect Tore Holm.

Holm designed several successful Thirties yachts in the metre classes of the International Rule, in particular 6mR, 8mR and 10mR boats. The original plans for *Svea* were found in 1999. Computer simulations by André Hoek, who is responsible for the new design, show that Holm's design, with the longest hull of any J, produced a very fast boat (Fig. 42). A consortium of three Dutchmen and three Swedes has commissioned the project. The sail number J-S1 recalls *Svea*'s Swedish roots. *Svea* will be elegant to look at thanks to very flat superstructure without bigger deckhousings. She is conceived less as a cruiser than as a racing

yacht, with weight-saving functional interior outfitting. With the hull due to be finished mid-2011 at Bloemsmas, the yacht ought to be ready for the summer 2012 regatta season in southern England.

Enterprise (sail number J1) was the smallest J but also the first America's Cup winner (1930) and is a candidate for replication. André Hoek has made a design and has hopes for the project. Aluminium hull and carbon fibre mast are standard features. The boat is to be built without deckhouse. But an investor has yet to be found (Fig. 43).

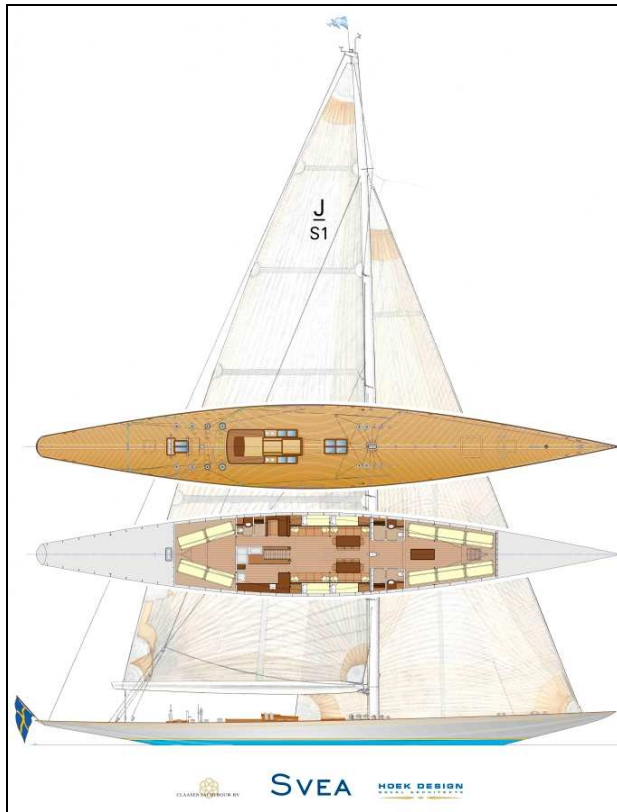


Fig. 42 Design of *Svea*, 2011 Hoek Design Naval Architects

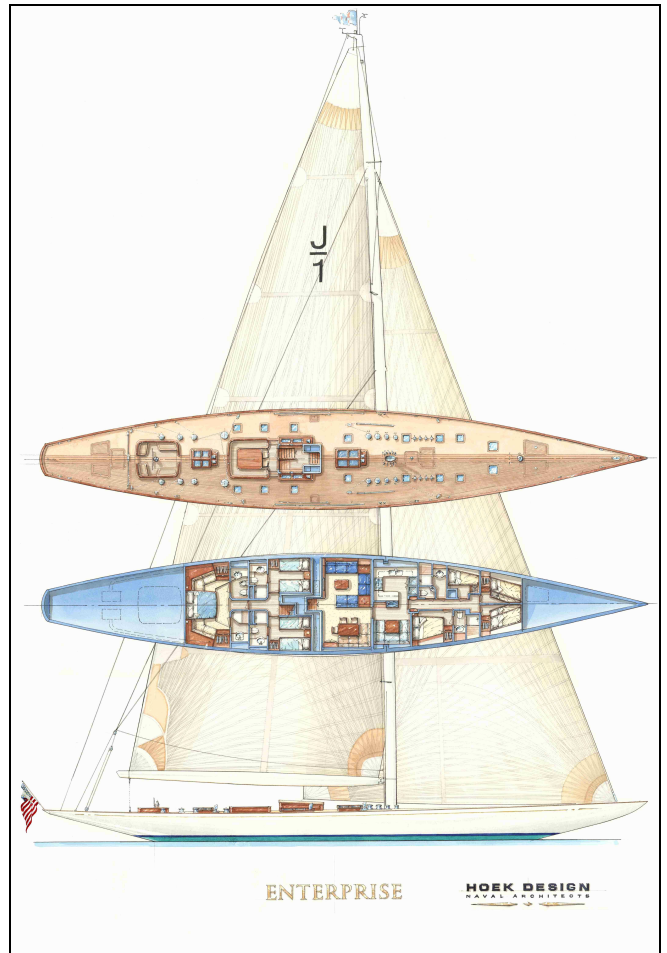


Fig. 43 Design of *Enterprise*, 2011 Hoek Design Naval Architects

Figure 44 gives an overview both of the ten historic J class yachts and of replica boats and new constructions as of 2011. It remains to be seen whether the two last historic yachts, *Whirlwind* and *Weetamoe*, find enthusiasts willing and able to finance replicas. This would be the pinnacle of the renaissance of these uniquely beautiful boats and complete the fleet as originally envisaged by the J class pioneers over 80 years ago.

	1930 to 1937				Since 2000		
	Name	Year	AC year	America's Cup participation	Name	Sail no.	Launch
Realized designs 1930-1937	Shamrock V	1930	1930	loser	Shamrock V	J-K3	original
	Weetamoe	1930		no AC	---	---	---
	Yankee	1930		no AC	Yankee	J-H3	under construction since 2010, launch planned 2012
	Whirlwind	1930		no AC	---	---	---
	Enterprise	1930		winner	Enterprise	J1	in planning
	Velsheda	1933	1934	no AC	Velsheda	J-K7	original
	Endeavour	1934		loser	Endeavour	J-K4	original
	Rainbow	1934		winner	Rainbow	J-H2	under construction since 2009, launch planned 2012
	Endeavour II	1936	1937	loser	Hanuman	J-K6	2009
	Ranger C	1937		winner	Ranger	J-5	2003
Unrealized designs 1930-1937	Ranger F	---	---	---	Lionheart	J-H1	2010
	(Design: Tore Holm, 1937)	---	---	---	Svea	J-S1	hull under construction since 2010, to be completed at Claasen
	(Design: F. C. Paine, 1935)	---	---	---	Atlantis	J-7	under construction since 2010

Fig. 44 All J class yachts, 1930 to 2011

2012 will be the culmination of a regatta series beginning in June 2011 in Newport⁸, Rhode Island. The 2011 and 2012 seasons – if they go off as planned – foresee several J class regattas for these boats, ideally eight or nine yachts. The series climaxes in July 2012 with the Hundred Guinea Cup round about the Isle of Wight, commemorating the first America's Cup race of 1851. It is sure to be a unique spectacle in the age-old triangle of man, ships and the sea. –

21.5.2011 GSt

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⁸ Regrettably, only *Velsheda* and *Ranger* took part in the Newport regatta in June 2011. Still, the regatta week was a great success for participants, organizers and spectators. With 4-1 victories *Ranger* was the commanding winner.