

## The Classic Yacht Symposium™ 2016



# Darling of my Heart: BEN MY CHREE and The Stuart Knockabout

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Ballentine's Boat Shop/ Stuart Knockabout and Doughdish LLCs



*Figure 1) BEN MY CHREE in her 80th year, after her restoration at Ballentine's Boat Shop (ABS)*

### **ABSTRACT**

BEN MY CHREE is L. Francis Herreshoff's Design No. 53, 28' Knockabout. She is a long sweeping daysailer that exemplifies perfect simplicity. She offers the uninterrupted interaction with the wind and water, and is the perfect boat for "knocking about". Her refreshing and graceful lines captivate with just a glimpse, but it is her manner on the water that consistently exceeds expectation. With relatively low freeboard, you are close to the water and can enjoy a beautiful shearline reaching forward. The rig is conservative and stress-free to manage, but moves her easily driven hull in a light breeze and ably handles heavy air. She is not only a great daysailer for her owner but also the inspiration for, and foundation of, the Stuart Knockabout, the fiberglass replica of her design. BEN MY CHREE was almost lost to obscurity, but fortunately she has a revival with an extensive restoration, her replication in fiberglass and the development of a class. She is now getting the recognition she deserves and rightly joins the ranks of L. Francis's best designs.

## INTRODUCTION

She was quite aptly named, BEN MY CHREE, Darling of my Heart, for she was the darling of those few who knew her and those who found her. She was adored by her first owner and kept in the family for three generations on an island in Maine. She captured the heart of Bill Harding with just a glimpse in a dimly lit shed, and inspired her replication just 3 years after this encounter. Thirty years later, again in the shadows of a shed, she enticed her current owner away from another boat, and received the restoration that secured her presence for generations to come. It is also appropriate that it is "Ben My Chree" rather than the more widely known and used Irish Gaelic, "Bean Mo Chroi" translated "Woman of my Heart". "Ben My Chree" is Manx Gaelic, an obscure Gaelic dialect original to the Isle of Man<sup>1</sup>. The language is recently being revived as it is considered an important part of the islands history and heritage. BEN MY CHREE too has been revived, with her restoration and her proliferation in a fiberglass replica. And she, like the Manx language, would be dead were it not for the few who saw her importance and strove to preserve her.

## HISTORY

### Design and Original Construction

Willoughby Stuart of Bear Island, Maine, ordered from L. Francis Herreshoff a large shoal draft daysailer in 1932. He wanted a fun and capable boat to enjoy the waters amongst the islands of Casco Bay. L. Francis Herreshoff completed "28' Knockabout- Design No. 53" and BEN, as she was affectionately called, was built by Britt Brothers of West Lynn, MA in 1933. There is little record of consultation between the owner, designer and builder. A few changes were made to the written plans and unfortunately there is no record of the motivation for the changes.

The biggest difference between the plans and the boat that resulted is the material of trim. The plans specify for White Oak for rail and coaming, however Teak was used. This may have been at the request of Willoughby Stuart or a decision made by the builders due to their preference or availability of materials. At the time of construction, Britt Brothers was also building TIOGA and it is possible that extra materials bought for that project were used for BEN. Other parts that called for White Oak such as the frames, floor frames, stem, deck beams, breast hook and centerboard were in Oak but much of it was of low quality or completed in a less appropriate Red Oak. It is possible that White Oak was at a premium and difficult to secure. Since the trim did not need the structural strength of White Oak, maybe they opted to use their limited supply of White Oak on the structural parts of the boat.

There were also some minor revisions to the design done after launch. She needed the addition of lead pigs from the beginning to make her float on her lines. The

original lead was set as approximately 1775 lbs. There is an addendum on the plans written by L. Francis for the addition of lead to the keel in December of 1934, however he does not specify how much. In a later note to Norman Hodgdon, who was building a near sister, he noted, "The weight of the new keel will be 1950lbs. approximately, and this is more than the original boat had, but she had to have some internal ballast to bring her down to her painted waterline."<sup>ii</sup> Additionally, probably after the 1937 season, the position of the forestay was moved forward. In a letter to L. Francis, Stuart notes: "one thing bothers me a bit and that is the Jib when flattened down for a windward mark rubs the shrouds on the leech quite badly at times."<sup>iii</sup> L. Francis stood by the design and responded:

*In regard to the leach of the jib, since people have been using lapping jibs as large as possible, it is supposed to be desirable to have the leach of the jib come as close to the shroud as is possible and on all of the best racing boats at the time the leach does touch the shroud. If it were not so, the jib would be smaller and you would loose some of the actual area for the measured area. It is possible that the jib is set so the tack is close to the stem head there would be more clearance. However, on all of the best racing boats today the leech of the jib just touches the lower shrouds.*<sup>iv</sup>

Despite L. Francis' explanation, and perhaps without his knowledge, the headstay was moved. Both the changes to the rig placement and the additional weight would be expanded in her later transformation into fiberglass.

### Isolated Island Life

Directly after construction she was moved to her island in Casco Bay, Maine. She became the favorite boat of her owner, who undoubtedly loved her simplicity and exquisite sailing performance. With a boathouse and a railway on the island, there was no need to go anywhere else, and BEN remained on the island, enjoyed by her family, for nearly 40 years. Stuart Pratt remembers: "the Ben was my grandfathers darling and his wife kept her almost like a memorial to him. When she died and the family sold the island (1970) the Ben, which had been left to my mother/me came to me solely."<sup>v</sup> In that time few saw her and BEN had little opportunity to influence others, however two boats did come directly from her lines: KOALA and PALMETTO.

### KOALA, BEN's little sister

Willoughby Stuart asked L. Francis to recreate BEN in a smaller form for his son, Harbourne. Interestingly in 1936, L. Francis wrote to Starling Burgess and shared his intension and drawings for building a smaller version of BEN. "Your secretary sent me a copy of the rules for the Boothbay boats.... Three or four years ago I designed a boat for Mr. Willoughby Stuart for Bear Island, Maine. He now has a son growing up who wants a boat like her

only smaller.”<sup>vi</sup> The Boothbay Harbor One Design website notes: “Burgess designed several early 20-footers including Bunny [II] in 1935 [designed or built? ABS], which is very similar to the Boothbay Harbor One Design.” The Boothbay Harbor One Design class, while ultimately designed by Hendel, may have been influenced by BEN and KOALA, despite the assertion on their website that the class influenced KOALA: “L. Francis Herreshoff, a frequent visitor to the area, was likely inspired by the designs of his friends Burgess and Hodgdon when he drew Koala, a 22’6” sloop in 1937 [Note: this is the year of launch, not of design, ABS]. She shows a striking resemblance to the early Boothbay daysailers.”<sup>vii</sup> So BEN, through KOALA, may have influenced the class that still races in Boothbay today.

KOALA, like BEN, was built by Britt Brothers and delivered in 1937. Andrew Britt Jr., son of the builder, wrote in a 2002 WoodenBoat article on Britt Brothers:

*KOALA, a 23’ daysailer, was the one which I, as a 12-year-old, drooled over. She was built as a 18<sup>th</sup> birthday present for Harbourne Stuart. The Stuarts of Boston owned Bear Island off Cundy’s Harbor in Harpswell, Maine; the island*

*had its own natural anchorage. Britt Brothers had built the 28’ BEN-MA-CREE for them in 1932.... I remember visiting them as a family; we drove out on the dock, tooted the horn of the Buick, and they would come over from the island to pick us up.”<sup>viii</sup>*

Clearly KOALA had the same appeal that BEN did. KOALA captivated even a young boy who was accustomed to seeing the many lovely boats produced in his father’s yard. KOALA was eventually sold to a family on Orrs Island and I do not know where she is today.

### PALMETTO, BEN’s near sister

The other boat from BEN was drawn in 1955, upon the original plans of Design 53, when L. Francis drew a keel and a small cabin for Thomas Taylor, esq. of Boston. From letters it shows that the discussion and order of these plans was done over the phone so there is no record of what Taylor’s exact criteria were. There are some small references to a few special requests and how it led to her modifications. It is unknown how L. Francis came to decide that Design No. 53 was the best fit for Taylor as opposed to another large daysailer, or designing him a

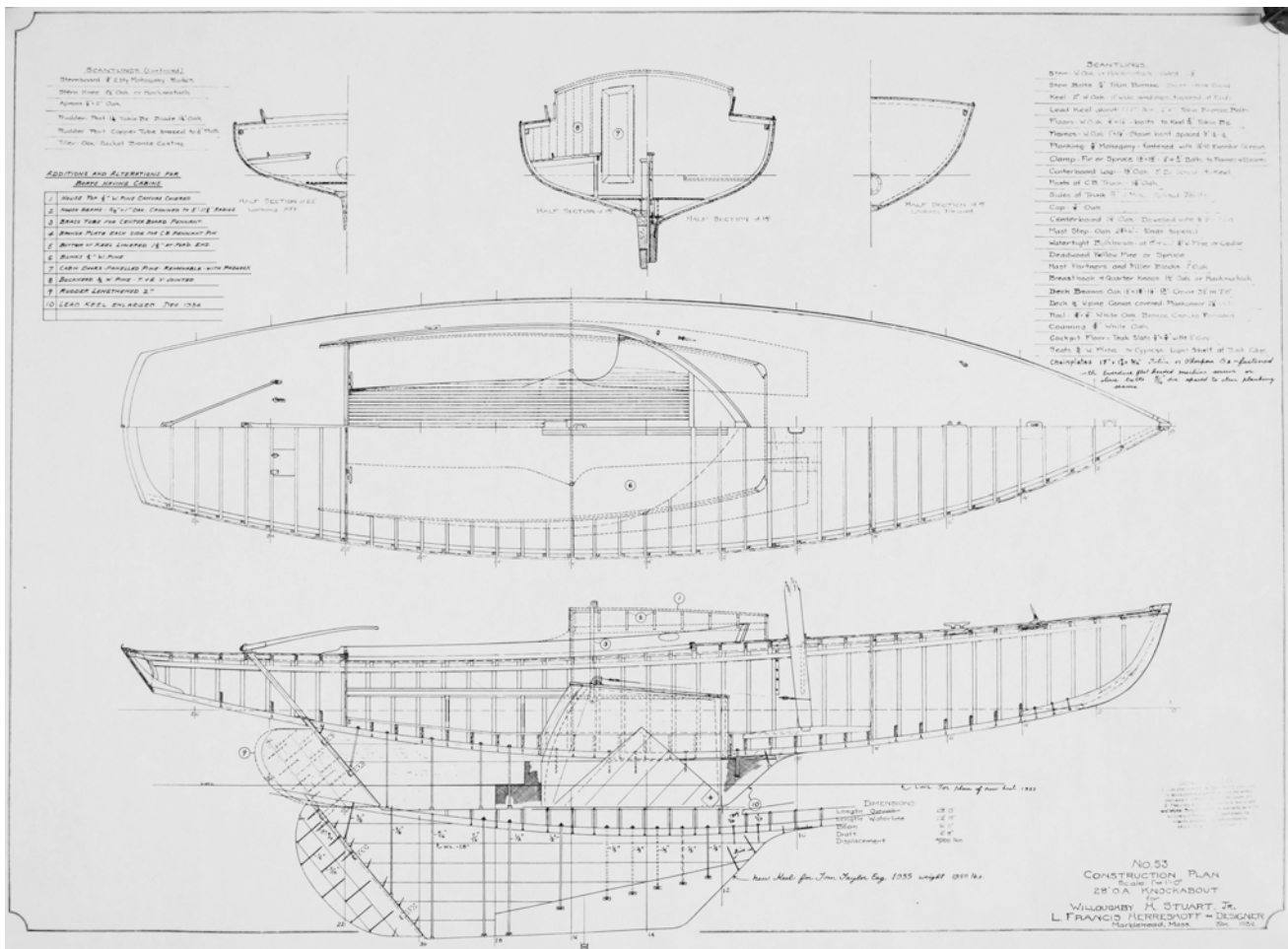


Figure 2) Design No. 53 plans showing the original plans for BEN with the modifications for PALMETTO drawn on top.



custom boat. It is also unlikely that Taylor would have requested that design, as it is also doubtful that he would have ever seen BEN. It seems, from the collection of L. Francis' letters at Mystic, that it was the first and last time that Design No. 53 was suggested to anyone else. Regardless of how it happened, Thomas Taylor chose Design No. 53, commissioned Norman H. Hodgdon Jr. of Boothbay Harbor Maine to build her and named her PALMETTO after his home state of South Carolina. In a letter to Taylor, Hodgdon stated, "The three main qualifications of a fine craft are: a good designer, a fine owner, and a good and interested builder. I am sure we could all work together to turn out a boat we will be very proud of and I will be very pleased to do all I can."<sup>ix</sup> They all did work together to build and update PALMETTO and the results were well received.

#### **PALMETTO's alterations**

The major difference between BEN and PALMETTO is clearly the keel. The centerboard was removed and replaced with a keel. It is possible that this change came at the suggestion of Hodgdon, perhaps partially because of his aversion to centerboards, but likely also to cut costs and to make more room in the boat for some of Taylor's other requests. "The more I looked over the plan and specifications and considering you would be doing away with the Centerboard the more I am in accord with the whole design. I must admit I have always been very unhappy with about any boat with a centerboard."<sup>x</sup>



Figure 4) PALMETTO showing keel and cabin. (Courtesy Andrew Reeve)

Abandoning the centerboard trunk gave much more room to accommodate the small cabin and especially the



Figure 3) PALMETTO, possibly on her maiden voyage from the Hodgdon Yard in Maine. (Hodgdon)

addition of a head, which was installed despite the advice of L. Francis. "As for the toilet- I believe a good cedar bucket, properly arranged, it is ever so much the best in a boat of this size. It is easier to use and better all around if the person knows how to use it."<sup>xi</sup> In 1956 she was launched and Taylor noted in a letter to L. Francis: "She was entirely satisfactory in every way and all my friends thought she was an ideal boat."<sup>xii</sup>

#### **PALMETTO goes to school**

When Thomas Taylor could no longer use PALMETTO, he donated her to the Landmark School in Prides Crossing, MA. They used her in a summer seamanship program. The director of this program noted:

*We generally had about 50 students who spent one half of the day in the classroom and the other half on the water. Younger students sailed in the morning (when the wind was lighter) and the older ones sailed in the afternoon. ... In the late 70's or early 80's we were fortunate to receive a very special donation, "Palmetto."...*

*Palmetto, was the "queen" of our fleet and the favorite of my staff. Everyone wanted to be assigned to sail her everyday. She handled like a dream, fast in even the lightest of air yet she stood up to a blow remarkably well. She was beautiful as well, with her traditional bronze fittings and her glistening brightwork, including her spars. Her cockpit was roomy and comfortable but her huge foredeck and expansive afterdeck were where the kids always chose to lounge. They loved it. To me, the most amazing thing about Palmetto was how delicate her helm*

*was, it seemed that it rarely took more than a finger on the tiller to guide her. ...*

*Unfortunately, in the mid 2000's the Seamanship Program came to an end due to a restructuring of the school's summer session....*

*She was probably the nicest boat I ever sailed. All good things must come to an end.<sup>xiii</sup>*



Figure 5) PALMETTO at the dock, shows her small cabin but she is still strikingly similar to BEN, it appears that her headstay is in the original position as planned.

#### **PALMETTO now**

When it was time for her to have a new home PALMETTO, was sold and resided in Shelter Island, New York where she is still sailing today.



Figure 4) PALMETTO sailing in Coecles Harbor, Shelter Island, NY.

PALMETTO did receive a major refit, including new frames and deck and now continues to be in excellent condition and well enjoyed.

With these two small exceptions, little was seen or heard from BEN MY CHREE for decades. She was used and loved by her immediate family and did not have the opportunity to be appreciated by many others. PALMETTO on the other hand, did have a more public existence and she was never replicated either (despite all of Taylor's friends thinking she was "the ideal boat"). Design no. 53 was even un-noticed by Roger C. Taylor when he researched and published Sensible Cruising Designs. "When Muriel Vaughn, assistant to Francis Herreshoff,... let me go through all of them [the plans] when preparing Herreshoff's book Sensible Cruising Designs, the Ben, an unknown boat to both of us, didn't surface. So her plans have never been published."<sup>xiv</sup> With the sale of the Island in Maine, BEN went to live in Essex with the grandson of her original owner, Stuart Pratt. He recalls: "great story on rigging, launching from the islands boat house and marine railway and then sailing her from Casco Bay to Annisquam...she had not been in the water for over 5 years when she was launched in 1970-swellled up in 12 hours!" She then embarked on the voyage and arrived at dawn on her third day underway, making it to Story's Boat Yard safe and sound. There she was again largely unnoticed until Bill Harding found her 15 years later. BEN was unassumingly tucked in a shed and showing her age.

#### **DISCOVERY: BILL HARDING**

It had been nearly 10 years since BEN had been launched and she sat in the back of the boat yard in a shed. Harding was delivering a new boat to the yard and he caught BEN out of the corner of his eye. He says he fell in love instantly and while he did not quite know what she was, he suspected a connection with Herreshoff. "I discovered Ben...in Dana Story's boat yard in Essex, Massachusetts. The shape of her bow and stern and her slender underbody said L. Francis Herreshoff... Research showed her to be indeed a Herreshoff, and the only boat built to the design."<sup>xv</sup>

#### **Borrowed boat**

In May of 1986 Harding contacted the grandson of Willoughby Stuart, Stuart Pratt, less than a year after first seeing her. Already he had tracked down the designer and owner and had thoughts of her reproduction in fiberglass as he had done with the Herreshoff 12 ½, the Doughdish. All of this interest and planning was done having not sailed her, nor even seeing her in the water. He writes to Stuart Pratt:

*In a sense, the building of this boat is a rather unique venture in that she probably has*

*comparatively limited possibilities in the overall boat market and, therefore, is not the sort of boat most builders could foresee selling in quantity. On the other hand, if beautifully done, we may be able to achieve modest success with her if we assume, going in, the unit of volume of business will be rather small. As in the case of the Doughdish, she should have a great appeal to a comparatively few people. If this assumption is accurate, she is probably just the kind of product for us to undertake.*<sup>xvi</sup>

His instincts told him that she would sail as lovely as she looked, but to confirm, Harding asked to borrow BEN and test her out. "We will want to sail the boat and, as we discussed, if we have her for a time here in Buzzards Bay this summer, it would provide us a great opportunity to assess her capabilities and to make some decisions about how she might best be rigged. Personally, I don't anticipate much change, but it is too early to predict anything of that sort of thing."<sup>xvii</sup>

Some work needed to be done before she could be launched and Harding, who was also a sail maker, had some thoughts on slight modifications to the sail plan. He decided to try the rig with a bit less rake and to move the head stay forward.



Figure 5) Bill Harding sailing BEN (perhaps with Roger Taylor). She is tested with different sails and rig modifications. The headstay is brought well forward and this jib is much larger than the one ultimately decided on. (Harding)

BEN was finally launched at the end of the summer of 1986 and Harding was able to use her for a short time. "we sailed the boat last September, October and November quite a lot and she made a favorable impression on all of us, beyond our expectations in fact."<sup>xviii</sup> He noted that she was even better than he had imagined and he liked how she sailed with his rig adjustments. He concluded the summer wanting only to change the lead of the main sheet. "The only further change I wish to make in your Ben is the mainsheet. It's a terrible bear. I can... provide a four part double-ended sheetline with a cam-cleat on each side of the decking leading to the cockpit. That will cure the whole problem..."<sup>xix</sup> Interestingly, when building PALMETTO, Hodgdon expressed concern to L. Francis along the same lines: "The main sheet seems to be shown double ended with only two parts to the boom. This does not seem to me as though it were enough purchase."<sup>xx</sup> He proposed 3 parts to deck and a single line into the cockpit on centerline. L. Francis responded: "The main sheet is drawn in two parts as I often did on boats at that time as this arrangement takes the place of a traveler."<sup>xxi</sup> It seems that she was originally built as Hodgdon suggested, and against L. Francis' advice.

## RE-CREATION: THE STUART KNOCKABOUT

### Initiation of the business

With the success of the test sails, Harding decides to move forward with the replication of BEN. Pratt generously contributed the boat and invested in the venture. Ultimately he became the owner of a new fiberglass version of his boat.

The next few years were devoted to getting start up investors by preselling 5 of the boats, it was like an early version of a Kickstarter Campaign. Harding used BEN to take prospective owners/ investors out for sails. In an update letter in 1987 to Stuart Pratt, Harding wrote:

*I have sailed her a lot and have had some great experiences. Probably 25 or so prospects have gone out with me and not a single negative comment- all positive. So far, of these, I have only one who would be an "advance purchaser". But, that makes four in all, and we need only five to complete the "financing". So, I optimistically expect we'll have five maybe six lined up by Labor Day. On the strength of this, we may commence building the tooling in September.*<sup>xxii</sup>



There are only about three and a half years between when Harding first sees BEN and when the first Stuart Knockabout is underway, but his letters show his impatience even with this impressive timeline. In that time he secures the boat, tests his adjustments, sells 5 boats (on faith) for start up capitol, builds the molds and establishes promotional materials. For the promotional materials he turned to his friend Roger Taylor who was widely known for his writings on classic boats. Harding takes him out sailing a handful of times and asks him to write an overview of BEN to use for publication. Taylor writes:

*It is the person steering who enjoys the boat's good balance the most, of course, but the rest of the crew is very relaxed, noticing how easily and with what pleasure the wielder of the tiller performs that wonderful art. The Boat has a fine feeling of steadiness on the helm combined with lively responsiveness...*

*Her motion, like her balance, combines steadiness with liveliness. There is no question of ever being thrown about, yet you feel her response to the lift of every wave as if with her own delight.<sup>xxiii</sup>*

The selling of the first 5 boats was done at a calculated loss, but did provide the funds they needed to start and the multiple sails and promotion gave the foundation to sell the additional boats that would eventually establish the business.

### Wood to Fiberglass: Changes and Modifications

With the help of Muriel Vaughn, the original design and plans were obtained, but it was decided to use BEN herself as a female plug to build the mold for reproduction. The boat was at Ballentine's Boat Shop where the hull had been solidified and maintained while Harding was using her for demonstrations. In addition to significant cosmetic upgrading (to look good for the prospective buyers) a fairly extensive over haul was done to her centerboard trunk and keel area that was found to be inadequate and precarious.

*Two weeks ago I got ansy about her increasing tendancy to leak and gave the boat to Steve Ballentine here to repair. The fastenings which were designed to hold the centerboard box log to the batten keel (keelson) were loose-removable by hand- and those into the lead alongside the centerboard slot also. So, the ballast was really only held by the single throughbolts forward and aft of the centerboard. It is a good thing she is being repaired, for that whole piece of construction was in very risky shape.*

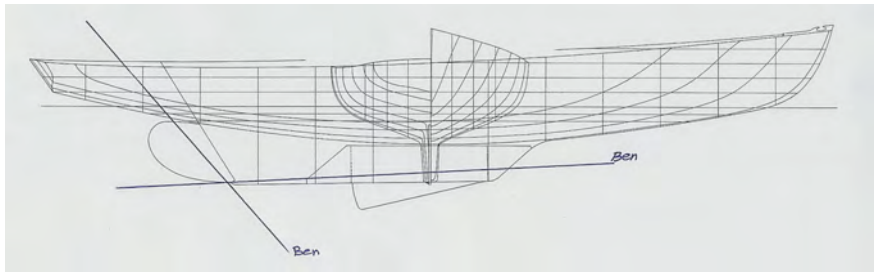


Figure 8) The line drawings showing the difference between the Stuart Knockabout's keel configuration and the original keel shape of BEN.

With how hard Harding was sailing BEN, it is very lucky that the lead held together as long as it did. Once stable, BEN was taken to Edey and Duff of Mattapoisett where they completed the tooling and construction of the mold. Edey and Duff constructed the Doughdish in fiberglass as well, and Harding had a long successful partnership with them.

Harding noted that “We all want to retain as much of her original concept and character as possible, yet outfit her in a practical way reflecting whatever present-day norms seem appropriate.”<sup>xxiv</sup> No change was made to the hull shape, but because the foam core fiberglass is lighter than the Mahogany, 450 lbs of lead was added to the keel and the hull rested on her designed water line. This addition resulted in a slightly deeper draft on leading edge of keel. Additionally the angle of the rudder shaft was brought more upright. This was primarily to accommodate the use of a traveler for the main sheet, which was Harding's only complaint in his initial use of BEN.



Figure 9) The rig on BEN is more raked than the position established for the Stuart Knockabout. (Fields)

For the rig, he kept the reduced rake and changed the position of the headstay to between the revised original placement and the fully forward placement he had tested with BEN. He also implemented a club-footed jib replacing the overlapping one. Rather than reproducing the spars in wood, Harding opted to go to painted aluminum spars from Hall Spars in Tiverton, RI.

#### **BEN to BUCCANEER, the Stuart Knockabout**

Harding was able to secure the necessary advance purchasers and in 1989 BUCCANEER, SK 1 is built for Harding as a prototype. The new boat is put through her paces to make sure that no changes needed to be made before full production got underway.

Harding again took out Roger Taylor who wrote a piece published in the *Boat Journal* in 1990. Having sailed on BEN he was able to comment on the small changes that had been made in her development into the Stuart Knockabout.

*The changes worked well. While the Ben's helm pulls fairly hard reaching in a strong breeze, the Stuart Knockabout tiller never does, and yet never goes beyond neutral to lee helm in light air. The mainsheet traveler lets you flatten the boom in whatever athwartships position you want for driving her to windward in a breeze. With her extra ballast, the Stuart Knockabout is definitely stiffer than the Ben; she'll carry her sail longer in a breeze...*<sup>xv</sup>

As the final part of the funding for the Stuart Knockabout project, BEN is sold. She went first to Marion and then on the North Shore. By 2008 she was getting older and in need of a restoration. Her then owner decided to sell her to someone who would do a complete restoration. He then bought the original Stuart Knockabout, SK 1, BUCCANEER, from Harding, which he still sails today.

BEN was brought to Ballentine's Boat Shop where she lay dormant in a shed for a few years. But finally, she was once again noticed by someone intending to look at something else, and her fate changed. Her current owner had come to look at another boat for sale in the yard. He saw BEN, asked to sit in her, and simply said, "I think this is my boat..." Just as she had captivated Harding, she captured her next savior and her succeeding chapter began.



Figure 10) BEN in Ballentine's shed awaiting a new owner (ABS)

Also at this same time, Harding retired and my father, Steve Ballentine and I acquired the rights and molds to build BEN's fiberglass sisters. In 2010 production of the Stuart Knockabout moved to Ballentine's Boat Shop and we were privileged to work on both the wooden original and her fiberglass prodigy at the same time.

#### **RESURECTION/ RESTORATION OF BEN**

The primary goal of BEN's restoration was balancing originality, authenticity and longevity. With her, even more than some other boats we had restored, preservation was key. Not only did we want her to live on and function as she had been originally conceived, we wanted a record, a working archive, which demonstrated the design, construction and use of this pivotal boat.



Figure 11) BEN's rebuild is underway, bracing and templates are used to re-establish her port and starboard symmetry and shape. (ABS)



### Originality

The first priority was re-establishing her shape, which was somewhat warped after her long life and broken frames. Cross braces were installed to the ceiling to support the shear and other braces were built from the floor to support and adjust the shape at the hardest turns where some of her shape was lost. With the help of templates, plumb lines and the plans we were able to restore her to her original shape.

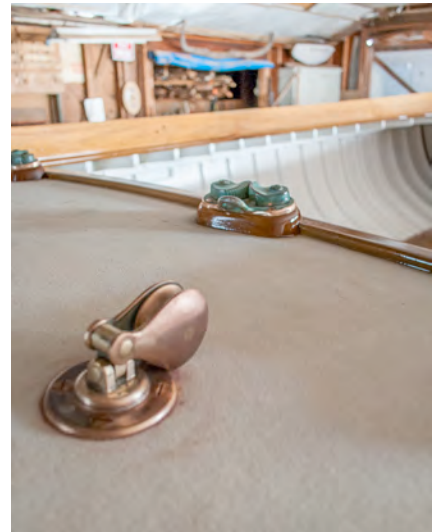
For her new owner, originality was especially important, he wanted to be able to refurbish and preserve as much as possible from when she was originally designed and built. This was relatively easy for the rig, the hardware, and much of the mahogany planking, as it was in good condition. The rig and spars of Fir were stripped and refinished with very minimal repair. The original boom was constructed with a groove for the foot of the main sail and fashioned to rotate on the gooseneck for reefing. This was a design that L. Francis had just



*Figure 12) The Yellow Pine deadwood and rudder are in great shape and are reused. Here the deadwood is getting fit and fastened to the keelson and the rudder hung. (Fields)*



*Figure 13) Much of her original mahogany planking was suitable to be reused. However, the garboard and broad planks were replaced. (Fields)*



*Figure 14) Original hardware is cleaned up and reused. (Fields)*

started using at the time of her construction. All was in excellent and working condition. The fresh varnish was all her spars needed to look as they did when they were new.

We were also able to refinish and reuse her pine seats, the Yellow Pine deadwood and rudder, the lead keel and her additional pigs.

We were also able to reuse her original Bronze hardware. Nearly all of her original hardware was still with the boat and the few remaining pieces were sourced from "archives", our stash of good hardware saved from other boats that no longer needed them.

When L. Francis designed KOALA, he hand made much of her hardware: "I have taken a special interest in this boat and, as you know, have made a great many of the fittings with my own hands, and made the patterns for them so that this boat would be unusually finely proportioned and as nearly perfect in its fittings as possible."<sup>xxvi</sup> Stuart noted: "I am tired of hearing from Harbourne how much better his Herreshoff hand turned bronze plates are, than those on the "Ben" that I am not sure is such a good thing to do to have you make them so well"<sup>xxvii</sup> I would love to find KOALA and compare her hardware to BEN's to see if he upgraded to the hand made Herreshoff hardware. It would also be interesting to compare PALMETTO's hardware to see if it were made off of the same patterns built for KOALA.





*Figure 6) Restoration is underway, the majority of this mahogany planking we were able to reuse. The stem was removed and replaced as to the plans and from recreating the original. (ABS)*

### **Authenticity**

Over her existence for nearly 8 decades some work and modifications had been done to her, some of which was in keeping with the boat and others less so. For those things that were modified or that needed to be replaced because of age, the goal was to be as authentic as

possible, following her original plans. This was practical for the deck, deck frames, keelson, trim, sole, stem, bronze fasteners, etc which were all able to be recreated with the same materials and scantlings as designed and built.

With a trip to New England Naval Timbers in Cornwall, Connecticut, we were lucky enough to find a long beautiful piece of White Oak to use for the keelson, along with appropriate pieces for the stem and frames.



*Figure 16) The White Oak keelson steamed and fastened in place. (Fields)*



*Figure 17) A new Keelson is fit then steamed in place. (Fields)*



The canvas deck had been replaced before, when Bill Harding took custodianship, but was due again. It was replaced in the same way and with the same materials as originally built and designed. 2 ¼ inch wide White Pine with canvas covering. The breast hook was also replicated in White Oak and the Teak sole was also reconstructed as original.



*Figure 18) Deck beams are built in White Oak. They were then covered with pine and canvas as in the original plans. (Fields)*

### Longevity

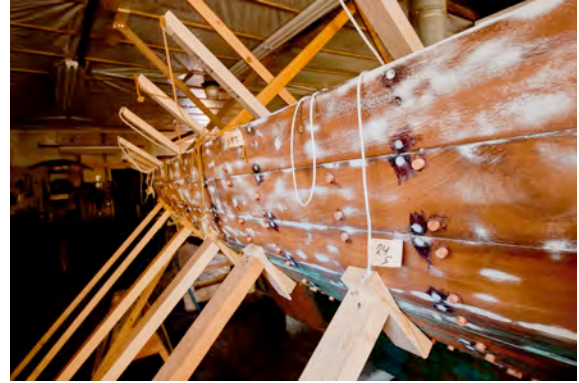
However, as she was the one and only of her kind, we felt compelled to upgrade, where appropriate, for longevity. She had lived for 80 years at this point, and we wanted to make sure that she would again. For this, we incorporated refinements to materials, construction techniques and finish details that were time period authentic, but not original to BEN as built or designed.

Partially because she was built in mahogany, her frames needed to be more substantial to be able to handle the more aggressive swelling of mahogany.



*Figure 19) Looking forward in BEN before her restoration. All frames were sistered as most of the originals were cracked. (ABS)*

All frames had been sistered at some point in her life. To protect her a little better for the future we increased the size of her frames from 1x 1 1/8", as called in plans, to approximately 1 1/8 x 1 1/4". We also utilized White Oak, also per the plans, replacing the Red Oak and lower quality oak that was used in original construction and in subsequent repairs.



*Figure 20) Frames in White Oak were pre cut, labeled with a string for easy handling, and laid in place before being steamed, bent and fastened into the hull. The braces that helped to re-establish her shape also served to provide backing for bending the frames. (ABS)*

In addition to enlarging the frames we also spent extra time in their installation, rounding every edge and sealing end grain. This is a good practice for protecting from rot especially in the bilge, but it was not widely used, as it is more tedious and time consuming.



*Figure 21) Rounded edges and ends are sealed and help to keep water from wicking into the grain, combating decay. (Fields)*





*Figure 22) Centerboard log is in locust and is splined with a strip of cedar that is also splined into the keelson.*

Another area that was modified for longevity and strength was the centerboard trunk. This is a notorious problem area in many boats, as noted by Hodgdon, and in BEN specifically, as noted by Harding. We therefore adjusted the construction, material and hardware for the centerboard logs. Firstly, the log was rebuilt in Black Locust, which has significantly higher rot resistance and stability than the White Oak as originally specified. Locust was not widely used in yacht construction at the time. But as L. Francis went to Agriculture School (in order to run the family farm) he learned a great deal about the properties of different types of wood, and I am sure had Locust been available to him, he would have utilized it. Rather than the narrow and relatively square structure of the original log, we widened it and added laps and splines for the sides. The additional width gave a greater landing surface and the ability to put in a lap for the pine sides of the centerboard trunk (which were splined and constructed in pine as per the plans). This overlap gave significantly greater fastening area between the log and the trunk and made it more difficult for water to intrude.

Making the logs thicker also gave more space to bolt though the lead keel. In the original plans, the keelbolts by the centerboard slot were lags and relatively short except for one throughbolt fore and aft of the centerboard. We opted to throughbolt all of them.

The other area usually compromised by water is the interface between the keelson and the log. To address

this, we cut a groove in both the log and the keelson and made a cedar spline. The cedar swells and makes an exceptional water-tight barrier. We also fashioned custom L angles in wood patterns then had them cast in Bronze at the Edson Foundry. These were installed tying the centerboard log to the floor frames. This greatly augments the rigidity of the boat and strengthens a habitually weak area of construction. I think even Hodgdon would have approved of this trunk construction.



*Figure 23) Custom angles are cast in Bronze to fortify the area around the centerboard. Splined pine makes up the trunk sides and is lapped into the Locust centerboard log. (Fields)*

Along the same lines, we fashioned bronze pads to use as large washers for the keel bolts along the keelson. This was not called for in the plans nor done in original construction. However, in the 1980's when Ballentine's reworked her centerboard, the bronze pads were added to help fortify the keel. It spreads the load of the keel and helps to protect the keelson, lengthening its workable life.



*Figure 24) Bronze pads that were used in BEN's last refit at Ballentine's and were replaced and enlarged with this restoration. (Fields)*

The transom was one of the few areas that had been modified over her life and we returned her to her original design but with slightly more robust materials. This will hopefully protect against the need for future attention. At some point in BEN's career her transom, transom

frames, and stern knee were replaced. Most noticeably the stern knee was shortened, only going partially up the transom. Additionally a lot of rubber bedding and fasteners were used. We replaced all parts per the plans with grown natural crooks of Locust with slightly increased dimensions and very careful joinery to avoid needing extra adhesives. The frames and quarter knees are notched to fit and everything is locked in.

### Sails

The sails were built to be authentic in technique and aesthetic, but utilized the modern materials of Dacron instead of cotton, and Posh line instead of hemp. They were beautifully (and painstakingly) executed by Squeteague Sailmakers in Cataumet, MA.



*Figure 25) The sails, although made with the modern material of Dacron, are built traditionally with hand sewn bolt rope, narrow panels and cream color. (ABS)*



*Figure 26) The transom frames are in place as well as the stern knee which now is consistent with the plans. The quarter knees are notched in place. (ABS)*

The Dacron was cut in narrow panels, which was the width of the material available at the time of BEN's original launch. The color is a cream "linen" color that is also more reminiscent of the cotton cloth of the past. We worked with Squeteague to dig in both of our "archives" to find and utilize period appropriate hardware so that the sails could be as authentic as possible.





*Figure 27) The jib features a hand sewn bolt rope in Posh 3 strand. The bronze hardware is period. The headstay was hand seized and tarred as originally done. (Fields)*

As a result, the sails, rigging and hardware are a beautiful compliment to BEN's restoration, looking period appropriate but functioning with the advantages of more modern materials. The Dacron is able to stand up to more sun light and moisture, will hold its shape, and will have much greater longevity.



*Figure 29) BEN sailing with one of her sailmakers, demonstrating the period aesthetic Dacron sails. (ABS)*

The more raked position of the rig and the use of the larger overlapping jib was returned to a more original configuration than when Bill Harding tested her. While the forestay is not as far aft as dictated in the original plans, it is in the position that was probably used by Stuart early in her sailing career.

#### **Single design to a Class of Stuart Knockabouts**

In 2013 when BEN was relaunched, she was 80 years old, and by that time there was 1 SK built for each of those 80 years. She sailed out to meet the class for the 2013 Stuart Knockabout Regatta, an annual meeting of the local boats. The day ended up being quite blustery, so



*Figure 7) Raucous Regatta! We opted to stay in the protection of the harbor with BEN for the 2013 SK Regatta, but her fiberglass sisters braved sustained 35 knot winds and standing waves. (Fields)*



we thought better of leaving the protection of the necks, and she did not race. But her fiberglass sisters did, and it was a wonderful gathering of the class she begot and an impressive demonstration of her design and capability, a beautiful tribute to her legacy.

Every year since 2010, Stuart Knockabouts have met in Buzzards Bay for a Regatta. It is usually a two-day affair with dinner hosted by a local owner. We have had as many as 12 Stuarts on the line and expect that to expand in years to come.



*Figure 30) The Stuart Knockabout Regatta, Buzzards Bay, raced in working sails and commonly sailed with only Skipper and one crew (ABS)*

### **Fleet Racing**

In addition to the yearly Stuart Knockabout regatta, there is regular fleet racing out of Buzzard's Yacht Club with a half dozen Saturday races throughout the summer. There is also a Stuart Start for the local Buzzard's Bay PHRF fleet. Between 4, and 7, boats meet to race every Wednesday night. "The Northern Fleet" in Hull and Hingham have also organized and now have 4 boats and regular Thursday night racing.



*Figure 31) Wednesday night racing off of Wings Neck, 4-6 boats meet regularly. (ABS)*

The guiding principle of the class is the Corinthian Spirit and simplicity derived from her design. Part of the Stuarts' elegance is the absence of things unnecessary. Unlike many other class racers, she does not have multiple strings to tweak while you race. She is commonly and effectively raced single-handed. Yet to have her perform at her best, requires careful attention to sail set.



*Figure 32) Racing in the Stuart can be done singlehanded, with one crew or two, but with the simplicity of the rig and her handling the primary job of the skipper and crew is to enjoy themselves.*

When Harding was contemplating BEN's reproduction he noted, "This boat has possibilities for one-design class treatment, although it is extremely difficult to get such a thing established. However, we might decide to design, rig and equip the boat in a single, well-chosen manner so as to increase her potential as a Class." This was written to Pratt, even before Harding had sailed the boat. From his first sighting he knew her potential.

Harding's first classic reproduction was the Doughdish, the fiberglass replica of the Herreshoff 12 1/2. The Doughdish was built first and foremost as a performance replica, and secondly as a aesthetic replication. He needed a boat that would race equally and fairly with the wooden originals and their already established fleet. As a result he painstakingly replicated the shape, weight, and balance of the original boat. For the Stuart Knockabout on the other hand, any possible class racing would be of the reproductions as there was only one original wooden boat of Design 53. He therefore, did not adhere to so strict a reproduction as he had with the Doughdish. He did however see the value in keeping the boats consistent so that class racing could develop in the future. We have continued to keep the rig and standard equipment simple and consistent so that all of the boats would conform to one design racing. Ironically a practice not condoned by L. Francis who thought it threatened the available work for designers, and the only ones who might benefit would be builders.

### **PHRF Racing**

In addition to class racing, Stuart's tend to do very

well with in PHRF racing. SK 53, LEGGEIRO, has won The Ocean Race in South Carolina twice and SK 15, QUILL, has claimed victory in the Great Chase in Marblehead. The handicap assigned by PHRF New England is 216 for working sails and 210 for spinnaker, but locally it has been reduced to 206 for working sails.



Figure 33) SK's racing in PHRF, here against our former boat PROCYON, Sidney Herreshoff's Fisher's Island 31. (Fields)

#### Daysailing and Mega Yachts

Today there are 82 Stuart Knockabouts from BEN's mold. Although not too widely known, the design is getting more recognition and is far from the obscurity of her Island origins. The majority of the boats are not used for racing, instead as the singular daysailer like she was originally designed. They excel as a fast, comfortable, and spacious daysailer that is quick and easy to get underway. Many are sailed (or even raced) singlehanded with the self-tending jib.

In Roger Taylor's first account of BEN and for the upcoming Stuart Knockabout venture he remarks: "I hope these boats will be widespread geographically. How great to see one sailing in Penobscot Bay, in Narragansett Bay, on Shelter Island Sound, on the Eastern Shore of the Chesapeake Bay, in the Back of Cape Hatteras, on Lake Pontchartrain or among the San Juan Islands."<sup>xxviii</sup> Taylor was right in his suspected suitability of these boats as currently Stuarts are in all of these places, except Louisiana. The largest concentration of boats is in the North East, but there are also Stuarts in TX, CA, OR, MS, MI, MO, SC, FL, Canada, England, Italy, among other areas. There are even three Stuarts aboard mega yachts and traveling the world.



Figure 34) SK 73, MARGUERITE, lives aboard SEA WOLF an expedition tug that travels the world. MARGUERITE is rigged in a cradle and can be launched with an onboard crane and enjoyed in any port. (Courtesy Phin Sprague)



Figure 35) PINK SHRIMP a retrofitted Shrimper, was the mother ship of SHRIMP, SK 74 that is launched using deck lifting eyes for use in port. (Courtesy Jack Setton)





*Figure 36) BEN MY CHREE sailing in a fresh breeze*

## CONCLUSIONS: LEGACY

We are honored to have been able to carry on the legacy of BEN through her restoration and replication. We aspire to acquaint more people with this wonderful design in fiberglass and we are hoping to build another BEN in wood, for the purists among us. We have also considered doing a PALMETTO Stuart modeled after her 1955 sister, with a keel, small cabin, and head (which, unlike L. Francis, I see the value in).

BEN and the Stuart Knockabout are far from the obscurity of the past, but I believe there are a great many more people who will admire what, I hope, is becoming one of L. Francis' more prolific designs.

## ACKNOWLEDGMENTS:

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## ABOUT THE AUTHOR:



**Amy Ballentine Stevens** is the owner of Doughdish and Stuart Knockabout LLC and works in the family business at Ballentine's Boat Shop on Cape Cod, MA. Having graduated from Earlham College in Indiana and attended The Breadloaf School of English, she taught English at the high school level for 5 years before returning home to Cape Cod and boats. She, her husband, and two small children enjoy cruising in the summer, and waiting for summer in the winter.



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