
Chapter Ten



NOVA SCOTIA TERN SCHOONERS

THE mention of a three-masted schooner, to most yachtsmen, calls to mind the common coaster, full-ended and rather clumsy. There is a type of three-master, however, that is fast and handy; one that is suitable for conversion to yachting purposes. As a matter of fact, one such schooner has already been converted to a yacht. This particular type is, usually, handsome and, in spite of the size, not extremely expensive to build or fit out.

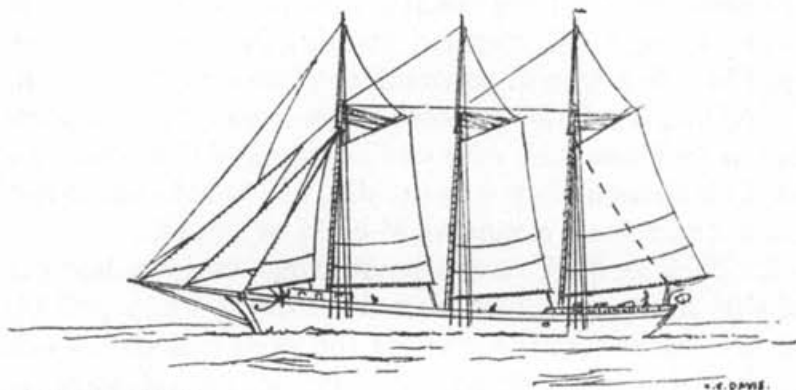
As far back as 1800, American schooner builders had experimented with sharp, fast, three-masted schooners. These proved successful, but the end of the wars of the early nineteenth century stopped their development; with the coming of peace, speed ceased to be as important a consideration as it had been. Hence, the three-masted schooner rig, because of its advantages, became the favorite of the coasters, whose vessels were usually rather full-ended and slow, as carrying capacity was of great importance in such craft.

Since the advantages of the three-masted schooner rig have been referred to, it will not be out of place to specify them. As a sailing vessel increases in size, the problem of handling the sails becomes increasingly acute; this is particularly true in fore-and-afters. Increase in size takes form in increased length more commonly and in greater proportion than in other dimensions. As a result, there is a tendency to increase the number of masts as the length of schooners becomes great and by this means to make the individual sails smaller than would be the case if the two-masted rig were merely enlarged in proportion to the increased hull size. The smaller sails require a smaller crew to handle them, yet the total sail area necessary to drive the vessel is not sacrificed, and wear

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and tear on gear is not great. It may be observed that the range of length in practical three-masted schooners is between 75 and 150 feet; above these limits more masts are required. Experienced commercial schooner sailors declare that the three-master is more weatherly and handier than schooners of four or more masts.

In 1875 another attempt to develop a fast three-masted schooner began with the building, at Essex, Mass., of the *Lizzie W. Matheson*, a rather sharp three-masted "banker." She was a broad and



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shoal keel schooner, having a fairly sharp entrance and well-formed run; her midship section had moderate deadrise. The *Matheson* was 105 feet over all, 25'-6" beam, and 10'-5" depth of hold. She was followed by a few others of the same rig and general hull design, both in New England and in Nova Scotia, but it was considered that they were too large for the fisheries and so the experiment was not continued. Of course, individual three-masted schooners were built with speed in view, both before and after the experiment at Essex, but they were too few and scattered to constitute a type.

When the World War broke out in 1914, the demand for sailing tonnage was tremendously increased, particularly in Nova Scotia. This province had for years traded in salt fish with South America, the West Indies and the Mediterranean. It was the custom to bring

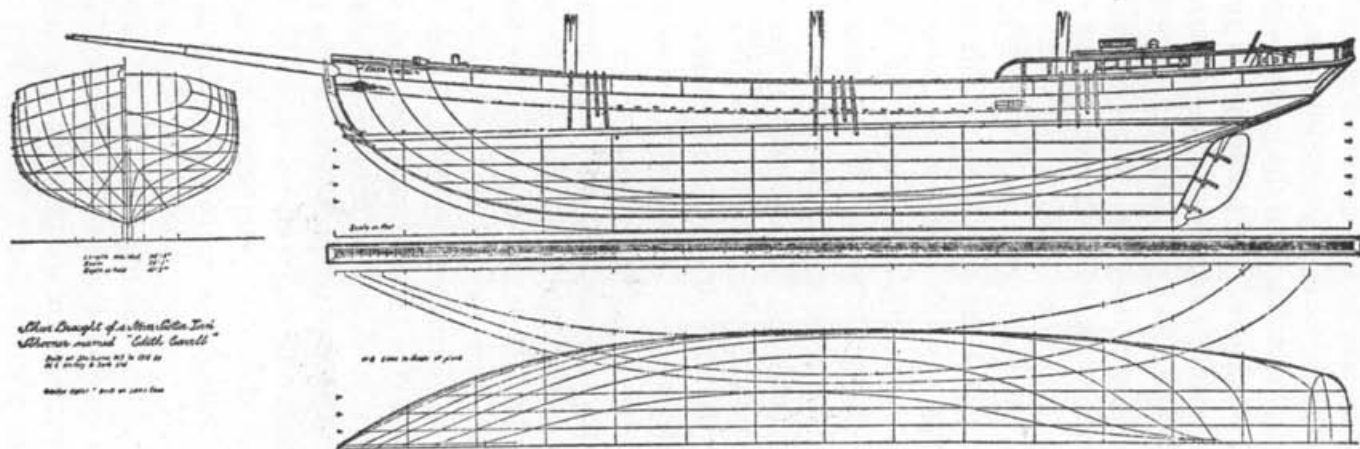


Figure 41. Lines of a Nova Scotian tern schooner, EDITH CAVELL.

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the salt used in curing this fish from the West Indies. In all these voyages, schooners had come into general use long before the war; many of them, though somewhat on the coaster model, were fairly fast. The war needs increased the premium on speed and the demand for schooners suitable for more than one trade. To meet the new requirements, Nova Scotian modelers turned to the modern fishing schooner for inspiration, and adapted their hull form to the three-masted rig and to the requirements of the war-time trades.

This class of modern three-masted schooner is referred to by Nova Scotiamen as the "tern schooner," a term which gives many the impression that this is the type-name of this particular class of vessel. However, this is not the case, as the Nova Scotiamen, very properly, call all three-mastered schooners by this name. Though the name for three-masted schooners is not commonly used in the United States now, it was in use in the fifties and may be seen in newspapers of that period. "Tern" means a "series of three," according to the dictionary. It may be seen, then, that the name applies not only to the fast, modern three-masters, but also to the coaster. It is with the modern class of tern schooner that this chapter will deal, however.

The lines shown in Figure 41, are those of the tern schooner *Edith Cavell*, built at Shelbourne, N. S., in 1916 by W. C. McKay & Sons, Ltd. This firm built a sister ship, the *Gladys Hollet*, at the same time. Both were owned in Newfoundland. The *Hollet* was torpedoed by a German submarine, on the coast of Nova Scotia, but was towed into Halifax and repaired, and she was still afloat in 1930. The *Cavell* was sold to Spain after the war. The *Cavell* and her sister ship were employed in the salt fish trade to the Mediterranean during the war, occasionally making a trip to Oporto. The lines of these two little schooners may be said to represent the general design of most of the vessels in this trade. The *Cavell* and the *Hollet* were round stem keel schooners, 116'-8" molded length, 26'-2" molded beam and 10'-9" depth of hold, with short quarter decks and top-gallant forecastles. The deck plan was as follows: The forecabin companionway was just forward of the foremast, there was a cargo hatch between fore and mainmasts,

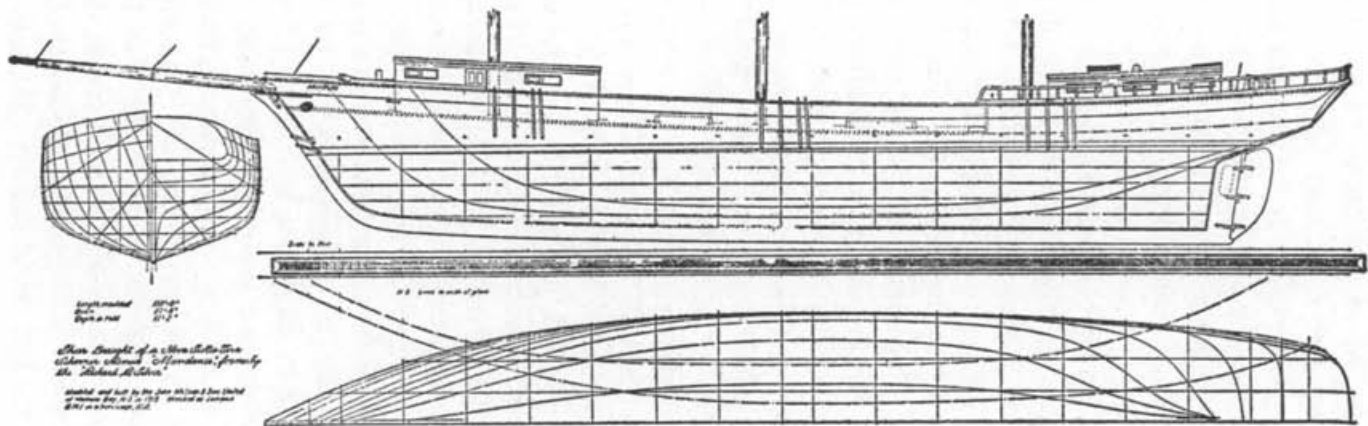


Figure 42. Lines of a Nova Scotian tern schooner, ABUNDANCE

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and another just forward of the break of the quarter deck; the arrangement of the quarter deck may be seen on the plan. These two schooners were good sailers and excellent sea boats. In such small schooners as these, the run is very well formed, considering the area of the midsection necessary in such comparatively large carriers. A few vessels of somewhat similar design were built at Essex during the war.

One of the well-known builders of these tern schooners, John McLean and Sons Ltd., of Mahone Bay, N. S., designed and built the remaining three examples to be described. These were all built the same year, 1919, and represent three distinct designs. The first is the *Abundance*, formerly the *Richard B. Silver*, shown in Figure 42. She was built for Captain A. H. Zinck and others, of Lunenburg, N. S., for the Brazilian and the Mediterranean fish trade. The model used for this schooner was one made for a smaller round stern schooner; in laying this down, the bow was changed to the clipper type, and the hull lengthened and deepened. The result is shown in the lines. A fast schooner was desired; that the *Richard B. Silver* fulfilled all requirements may be seen by her passages.

Captain Zinck had the *Richard B. Silver* for nine voyages to Brazil; his longest passage was 38 days, St. Johns, Newfoundland, to Bahia, more than 4,300 miles, and his shortest was 23 days. According to the Captain, he made one run from Shelburne, N. S. to Barbados, B. W. I., 1855 miles, in 9 days, averaging nearly 8.6 knots. Captain Louis Kennedy bought the *Silver* and renamed her the *Abundance*. He made some very fast passages in this schooner, particularly in 1932 when he drove her from Halifax, N. S., to Funchal, Madeira, 2300 miles, in 14 days and 19 hours. In the same year he ran from Shelburne to Barbados in 12 days 12 hours with a full cargo. Captain Kennedy had the misfortune to lose her in a hurricane at Jamaica late in 1932. The captains who had the *Abundance* were all enthusiastic about her speed, and Captain Kennedy considered her the finest schooner in the trade. He thought that the only possible improvement would be to increase the flare forward and to lighten the counter a little. The *Abundance* was considered to be the proper size for her trade and rig. She was 138 feet molded

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length, 27'-8" molded beam and 11'-2" depth of hold, according to the information received with the model, but the sail plan indicated that another two feet had been added amidships, though this is uncertain; therefore the plan shows her as 138 feet. She was bored for a shaft, but no engine was ever installed.

Figure 43 shows the lines of another striking tern schooner, built in 1919 by the same builders, for the fur trade in Hudson Bay. This vessel is the *Cote Nord*, 136'-4" molded length, 26 feet molded beam and 10'-6" depth of hold. She was long and low, extremely easy and sharp in form, and of comparatively small displacement. In type she represents the fisherman model in the tern schooner. After being employed as a fur trader for a few years she was sold to Americans as a rum runner and became well known on Rum Row. Unlike most tern schooners, the *Cote Nord* had a bald-headed rig and was fitted with a 200 h.p. engine. As a result, her sail plan was small and this prevented her from reaching under sail the high speed possible with her hull form. Under power the *Cote Nord* was very fast. Had this vessel been given a full rig she would undoubtedly have been extremely fast under sail. The small size of her rig may be ascertained from her spar dimensions: Mizzen, quarter deck to truck, 75'-6"; main, deck to truck, 76 feet; foremast, deck to truck, 73'-6"; the bowsprit was 23'-6" outboard, including a 5'-6" pole; mizzen gaff, 35 feet; main and fore gaffs, 27'-6"; mizzen boom, 55'-6"; main and fore booms, 28 feet; and jumbo boom, 22'-6". The *Cote Nord* was suitable for conversion to a yacht and her hull was quite taking to the eye.

The lines in Figure 44 are those of the tern schooner *Marjory Mahaffy*, also built in 1919 by the McLeans, on the model of the *Mildred Adams*, lengthened 52 inches amidships. Both of these schooners had reputations for speed, and after a glance at the *Mahaffy's* plans no explanation is required. The *Mahaffy* was 130'-3" molded length, 25'-2" molded beam and 11'-3" depth of hold. The close relation of the tern schooner to the modern two-masted fisherman can be seen in this example. The *Mahaffy* and the *Adams* would compare favorably with the best cruising schooners in the yachting fleet.

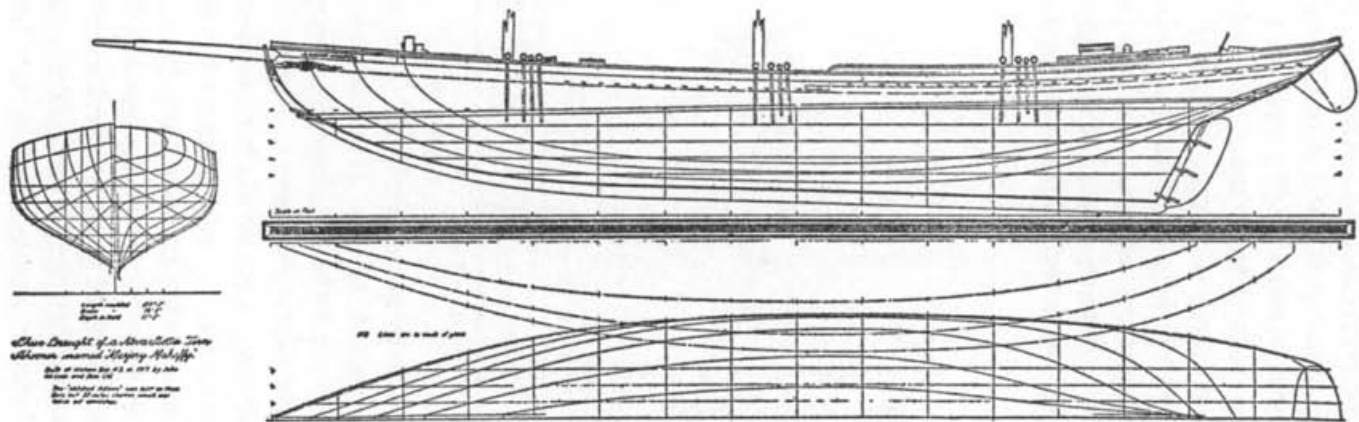


Figure 44. Lines of a Nova Scotian tern schooner, MARJORY MAHAFFY

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These tern schooners were usually rather heavily rigged, and Figures 45 and 46 show the rig of the *Edith Cavell* and the *Abundance*. In general, these schooners were rigged in the same manner as a modern fisherman, except that some vessels had turnbuckles instead of deadeyes and lanyards. Some captains prefer these, as they say it is easier to set up the shrouds with the turnbuckles than with the older gear. Most of the schooners built in recent years have had spike bowsprits, though many new coasters and lumber carriers have retained the old bowsprit and jibboom. Apparently there has

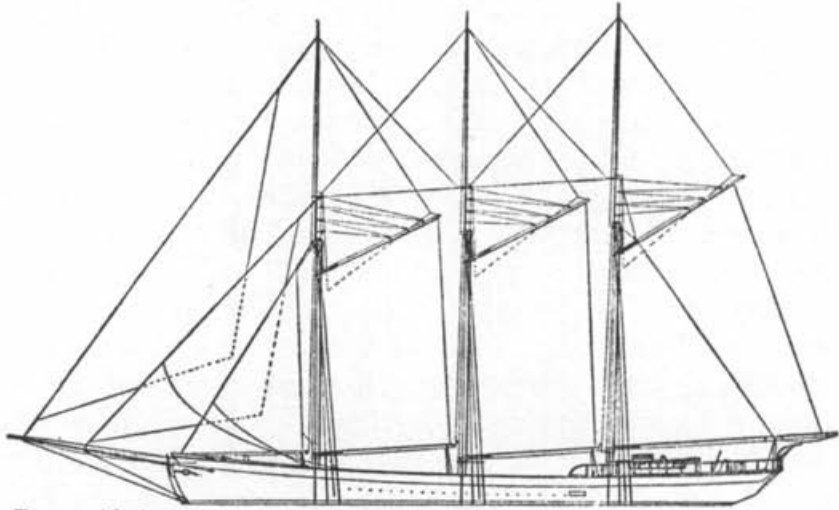


Figure 45. Sail plan of the EDITH CAVELL

been but one knockabout tern schooner built. This was the *Marne*, built at Essex about the end of the war. However, there were one or two trawler hulls fitted out as tern schooners, without bowsprits, sailing out of Gloucester after the war.

It will be noticed that the Nova Scotia tern schooner was usually of rather shoal draft in relation to her length; this is caused by the requirements of the West Indian trade, where the harbors limit the draft of vessels to about twelve feet. It is probable that an increase in the depth of the keel-shoe of most of the tern schooners of the class just described would improve their weatherliness in a breeze. In a commercial vessel, the increased draft would be objectionable,

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but in a yacht this would not ordinarily be true. In large schooners, such as these, the addition of outside ballast would be of doubtful value.

The construction of the schooners under discussion is that common in most large wooden vessels. The frames are sawn, double, with chocks, as is usual in fishing vessels and coasters. In Nova Scotia, birch and spruce, to a large extent, replace the oak and pine used in New England; but the soft wood Nova Scotiaman will last nearly as long as a hardwood schooner if she is well salted. With

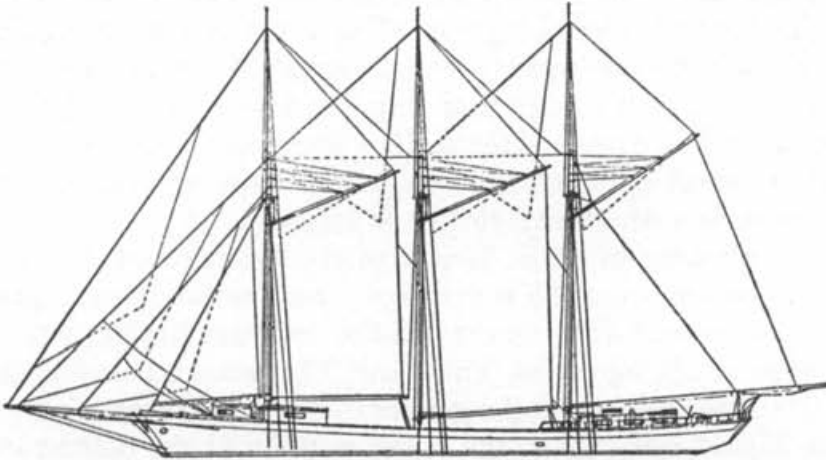


Figure 46. Sail plan of the ABUNDANCE

reasonable care, a soft wood schooner should last 17 years, as compared with 20 years, the average life of a hardwood vessel. In the Nova Scotiamen that I have inspected, the finish is of a high order and the vessels, generally, seem well fastened and strong. The only serious objection to the soft wood schooner is that the spruce planking scars easily and soon becomes unsightly, hence hardwood topside planking is often used. When employed in the West Indian salt trade and in carrying salt fish, these vessels soon become well salted from their cargoes.

Three-masted schooner yachts built in recent years have not been uniformly good sailers. Perhaps this is one of the reasons why so few are to be seen in the American yachting fleet. Another reason

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is the conception among many yachtsmen that the three-masted schooner must be a large vessel. A yacht designed on the Nova Scotian model would have unusually large accommodations below deck, as well as a lot of useful deck space. The question of deck-houses is a troublesome one. These are certainly convenient in a commercial schooner, to house the crew and deck machinery, but the windage of such structures is great, affecting the sailing qualities. Furthermore, deckhouses, if extended along a great proportion of the length of a vessel, as is often done in large yachts, are dangerous. This may seem a broad statement, but when we consider the difficulty of an officer seeing both sides of the deck when handling the gear, and the fact that the lee alleyways are often impassable in a heavy sea, it will be seen that long deckhouses may easily be the cause of bad accidents. Hence, if a deckhouse must be used, it should be short and narrow; in spite of the windage, the best location for such a structure seems to be forward.

Most schooner yachts of large size are flush decked; this seems to me to be a mistake. All captains of commercial schooners prefer the raised quarter deck for reasons that seem applicable to the design of large sailing yachts. These are: The better accommodations possible in the cabin with the greater useful space in the wings, due to the higher cabin floor; the better position of the helmsman in conning the ship and the dry deck for officers, owner and guests, that is possible with such construction. A sea coming aboard forward will seldom go abaft the break of the quarter deck. Except for the first, these reasons apply both to the high quarter deck of the *Abundance* and the low one of the fisherman type, as represented in the *Mahaffy*. The high quarter deck is practical only when combined with deep bulwarks. So far as hull is concerned, there are many features of the commercial schooners that could be utilized to advantage in large yachts. In rig and in spars, however, the three masted schooner yachts have followed the practice of the commercial type to a large extent. One feature common to both classes is the equal length of all three masts, or at least their regularity in comparative height. This is not particularly graceful and, in my opinion, detracts from the appearance of both hull and rig.

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It would be possible to correct this rather ugly feature of the three-masted schooner rig by making foremast and mizzenmast (often called the spanker by sailors and builders) a little shorter than the main; with this arrangement of masting the foremast should be somewhat longer than the mizzen. In general, the effect would be somewhat similar to that of the old square rigged ships. The difference in the length of the masts of the schooner would not need to be so great as to cause the fore and main gaffs to foul the spring stays.

There are great possibilities in the design of yachts along the lines of the Nova Scotia tern schooner, and it is to be hoped that in our yachting fleets the type will not be neglected, as it has been in the past.