

complex and exacting than ever before: and all this burden upon a man not in very good health, and about to retire.

We now come to the shore-base and the change from Bangor to Plas Newydd.

This has been the greatest change in the history of the training ship. Its effects upon routine, method, and the standing of the ship have been profound. She can now house and train almost or quite double the number of cadets, and give to them not only life in a ship, with the delights of all boat-work, and the usual games of shore, but, for the first time, abundant roomy classrooms for the studies that modern sea practice has made necessary. It may be said that the *Conway* has been changed to a sea college. Such a change cannot be made without hard work under wise direction. Let Captain Goddard, the main doer and director of the work, describe it.

The *Conway's* great need was for a shore-base near which the ship could be both moored and supplied.

1947-48. Captain Goddard writes:

"I was instructed to search for such a place and eventually I visited the Marquess of Anglesey, two-thirds of whose house, Plas Newydd, was unoccupied since the United States Intelligence Corps had returned home soon after the end of the war. This part of the house, in wonderful condition, could accommodate 100 cadets and staff and provide excellent dining-rooms, kitchens, etc. There were stables which could be converted into classrooms, laboratories, gymnasium, etc. There was a boat dock, sports pavilion and playing field with ground available for more football fields and tennis courts. With Snowdonia only a few miles to the south I thought the site and prospects ideal, so with the Marquess's agreement I took the plans of the house to the committee of management; which body was pleased, but wanted to know whether it was possible to take the *Conway* through the Swellies, that dangerous stretch of water between the Menai Suspension and Tubular Bridges, and if so, was there an anchorage with sufficient swinging room near to the house. The anchorage would have to be near enough for a quick passage to the boat dock by motor-boat but far enough to exercise the cutters' crews when rowing. The

Admiralty was approached with a view to the survey, but unfortunately no vessel or surveying officers could be spared then for the work. Having had experience in hydrographic surveying I undertook to do the work. Obviously my first object was to find out if the ship could get through the Swellies, for if she could not, it would be useless to carry on with the project. I first ascertained that the Menai Straits Suspension Bridge was 100 feet above high water ordinary springs and the Tubular Bridge 101 feet, and by striking my stump topgallant and top masts the height of the masts above the waterline was ninety-six feet; but as the bridge heights were calculated on a Liverpool twenty-nine feet tide, and I reckoned on getting through on a thirty-one feet tide, I estimated two-three feet when I passed under the Suspension and three-four under the Tubular. From the Suspension Bridge to Price's Point I anticipated no difficulty, but then it was necessary to take a four-point turn to port as soon as we cleared the Swelly Rock, in order to get the Tubular Bridge Transit Beacons in line. On this transit I could run down to the narrowest part of the channel at the S.W. end of the Goredd Is. where I would have four feet under my bottom. Soundings showed that there was a width of eighty-four feet between the twenty-two feet contours (*Conway's* draft, aft) which, as the ship's beam was fifty-four feet, would give me fifteen feet clearance each side. In the Swellies, slack water occurs one hour twenty minutes before high water and the stand of the tide at extraordinary spring tides is thirteen minutes, extending to eighteen minutes at neaps. At these former tides, steaming nine knots in the *Conway* pinnace, I could not pass Price's Point when trying to make the passage to the south-west. From Price's Point to the end of the Goredd Is. I consider the tide at half flood to be ten knots. To be safely towed through, the *Conway* would have to be at the Menai Suspension Bridge one hour twenty minutes before high water, at the beginning of the stand of the tide, and make the passage during the thirteen minutes it lasted. I considered this possible, and accordingly informed the committee of management. To enable them to come to an agreement over the house, etc., I also stated that, after a preliminary examination, I was sure of a safe anchorage. I

discovered one in the stretch of water running north and south between the house, Plas Newydd, and Port Dinorwic. It afforded the facilities, re distances, we required, and the heavily-wooded bank on the Anglesey side gave excellent protection from westerly prevailing winds."

1948. Summer. "I made the chart to a scale of 1 : 2500 with the assistance of one of the masters, Mr. M. Woods, B.A., Lieutenant Brooke Smith (second officer) and several cadets, who did all the sounding by Douglas machine, handled the motor-boat and did the tide recording. They all gave me valuable help."

(It may be added, that this work of charting the Straits was only possible for one hour on each side of high water when the boats could make head against the current. For half a mile southward and eastward from Plas Newydd, the Straits were so plumbed that almost every tenth foot had a sounding.)

The new berth had been found: it had a sufficient depth of water, and room for the ship to swing, but the bottom was a bad holding ground of rock and stones; special secure beddings had to be prepared for the anchors.

The plan was to plant four anchors, two on each side of the Straits between the high and low tide marks. A leg of chain-cable would reach diagonally under water from each of these anchors to heavy mooring rings in the middle of the Straits where the water was forty-four feet deep at low water in ordinary springs. From these rings, a cable and mooring swivel would take the bridles leading into the ship. From the central rings, the ship had a swinging radius of 396 feet. Each anchor was to be backed or made doubly secure, by a cable round the fluke leading to an eight-ton concrete block, five feet by five feet, buried inshore from it.

Such was the scheme. The graves for the concrete blocks, and for the four anchors had to be dug; the anchors had to be dropped into their graves; the cables had to be ranged and shackled; and then led to the mooring rings.

Captain Goddard's narrative proceeds thus:

"This anchorage had one drawback, but it had to be overcome. The nature of the bottom was rock and stones, bad

anchoring and holding ground under normal conditions and methods. I therefore decided to bury four five-ton Admiralty Pattern anchors N.E., S.E., S.W. and N.W. from the centre mooring ring. Two of these were the spare *Conway* anchors which had remained so long on the forecastle bill-boards. These were slung between two of the cutters and towed through the Swellies to the positions between the high and low water contours, and dropped in the water as near as possible, by eye. The other two were received at Penrhyn Dock and were treated likewise. Smooth calm water was necessary when the anchors were being transported, for the cutters had only about one to two inches freeboard and towing had to be steady. Fortunately all other boats stopped when they saw us, as their wash might have swamped the boats. It now remained to transport the cable. This was done by building a platform between the two cutters and flaking down on it two shackles each trip. On arrival these were dropped, shackled to the anchors and stretched along the banks between the high and low water contours, to await the Liverpool Salvage Association's ship *Ranger* to connect it to more cable she was bringing from Liverpool. The *Ranger* under the charge of Commander Smith, Old Conway, did excellent work and when finished, with the four legs hauled taut, the centre mooring ring was only thirty feet north of the position I had anticipated it would be. The ground legs consisted of nine, eleven, eleven and thirteen shackles of two and a half inch cable. All this work, with the exception of the *Ranger's* part was done by the cadets under my guidance and indeed it was valuable experience to sling anchors between cutters, transport them to positions six miles away, through difficult water, and such that in all probability they will never do again in their sea careers. The time taken over the surveys and getting the moorings laid, took approximately a year."

The beds for the concrete blocks were dug by workmen from the shore. These men also mixed and set the concrete. The beds for the anchors were dug by the cadets themselves, in a bottom usually either rocky or quaggy, and only briefly exposed at low water. "The cadets worked like navvies, often covered from head to foot with mud until dark." The ship's old

anchor-cables were used for backing the anchors to the blocks.

The laying out of the anchors into the prepared beds was a work of some peril. Its being done with such perfection reflects the greatest possible credit on Captain Goddard and those under him. I hope that he will forgive me if I add a few words to his brief summary of the work.

The laying-out of an anchor, weighing four or five tons, is not an easy task. These anchors had to be dropped with certainty into particular prepared beds, after being towed for five miles through difficult water, by the ship's pinnace, while slung between the two cutters proceeding tandem fashion, with the flukes slung from the transom of the leader, and the ring slung from the stem of the follower.

The first anchor was hoisted from its bill-board by a purchase from the foremast head, and lowered "handsomely" exactly between the two cutters, with slings of four-inch rope, beside which a hand, with a sharp axe, stood ready to cut, if either boat swamped. The boats were trimmed as the weight came upon them; but the stern of the leader and the bows of the follower were very deep down when the tow began. It had to be a fast tow, to catch the tide. Going through the eddies of the Swellies, the following cutter, down by the head, sheered around, but the prepared bed was safely reached at the top of flood, and when the anchor was exactly over the prepared bed, the two sharp axes came down like one and the anchor dropped to its position. The two cutters, suddenly freed from the great weight, kicked up stern and bow with a jerk that nearly flung the men out of them.

The next day, the second *Conway* anchor was sent, in the same way. "On the way, a coaster passed, and there was some violent signalling until she slowed down."

The two remaining anchors were picked up from Penrhyn dockside and carried in a slightly different way. All the anchors were safely and precisely dropped.

The cables came next. A platform of hatch-covers was built over the two cutters: on to this platform the cable was flaked, three shackles at a time. On arrival at the anchors, the end of the cable was secured to the anchor-buoys, the lengths shackled together, paid out, and roughly stretched into position. "All

this work was done by the cadets: during school hours it was often done by new chums."

Between April 4th and 11th, 1949, the salvage ship *Ranger* took over from the cadets, completed the laying and stretching of all the legs, so that the berth was ready.

We now come to the most venturous voyage our ship had made, since Mr. Jabez Loane, her master, took her under her own power to *Virta Nemi*.

The tow from Bangor to Plas Newydd is about five miles in all. The course is at first fairly straight and deep. At the Suspension Bridge the channel narrows and bends into a difficult and dangerous reach known as the Swellies. To get a big ship through the Swellies is no easy task; but that was the only way by which the *Conway* could go. She could not possibly have reached Plas Newydd by towing round Anglesey and entering the Straits from the Carnarvon end; the southern channel is too shallow.

Captain Goddard thus describes the tow:

"Now, everything being ready, I decided to make the passage on April 12th, 1949, when there was a thirty-one feet Liverpool tide. Unfortunately, a strong S.W. wind was blowing that day and after several fruitless attempts by the tugs to get heaving lines aboard, I decided it was too risky to make the passage. April 13th was a thirty-one feet six inches tide and a boisterous fresh wind blowing from the S.W., but I decided to go. I got under way two minutes late and this gave me twenty-eight to get to the bridge. I had previously instructed the pilot on the tug to do this part of the journey in half an hour. The tug took forty minutes and by the time I was under the bridge the ebb tide had commenced. I think *Odysseus* had much the same feelings as I when he passed under *Scylla's* eyrie, with *Charydis* waiting to do weird things. However, the bridge did not obstruct my main truck, there being about three feet clearance, and I was soon abreast the Platters, where we altered course to close under the Caernarvonshire bank before hauling out again to pass between Price's Point and the Swelly Rock. These two negotiated safely, there was a four-point turn to port to get her on to the Tubular Bridge Beacon's transit. Unfortunately a squall on the port

bow slowed the turn and the ebb tide took the ship towards the Goredd Is. I signalled the tug to head over to port but for five minutes we were towed alongside the island within five feet. However we gradually got clear; at the beacon, before the Tubular Bridge, we had got on the transit line, altered course for the centre of the south arch, passed under it with a good clearance, and then into deeper water. *Conway* was the deepest-draft vessel, twenty-two feet aft, and the largest, ever to have passed through the Swellies and I was glad when it was accomplished. The remainder of the passage was uneventful and we were soon alongside the *Ranger* to take over the moorings. The time taken to pass through the Swellies was eighteen minutes. It created a lot of interest amongst the North Wales seafaring fraternity who had declared the undertaking to be a foolish one. I think my experience as a hydrographic surveyor and the desperate need to get her through to open up the *Conway* shore establishment made me decide it was possible. In any case having been done once it can be done again by other ships of similar draft if necessary. There remained a survey of the boat dock at Plas Newydd and with the help of the cadets I made a plan for the necessary alterations to be carried out later. These were effected and the dock is indeed a valuable addition to the many amenities provided by the estate.

“For the Easter and summer terms 1949 there were 275 cadets on board, the highest complement in the history of the ship.

“The summer term 1949 was my last and during this the work of altering the stables to house laboratories, classrooms and gymnasium, and of fitting the part of Plas Newydd allocated to us to accommodate the 100 cadets and staff, was arranged and supervised by Mr. A. Wilson, the indefatigable hon. secretary, who made a great success of it. Our project was accomplished and *Conway* was given a new lease of life.”