

From "The Treasure if the Concepción - The Wreck of the Almiranta" Peter Earle, 1980, the Viking Press, New York ISBN 0-670-72558-7

From page 222 to the end, references to the role of George's magnetometer are blue

Why should it be so difficult to find the Concepción? Lengthy research in Spanish archives and sophisticated technology have enabled many other famous seventeenthcentury wrecks to be discovered in recent years, but the Concepción presents some very special problems. Most wrecks are located in fairly well-charted, shallow, offshore waters, a fact which means that the arduous preliminary task of locating the wreck can be done relatively cheaply in small boats operating from dry land. It also means that the treasure-hunter can choose his weather. But the Concepción lies in international waters on an extremely dangerous reef which is over eighty miles from the nearest land. Simply to search for the wreck demands a major expedition in a ship which is large enough to be self-sufficient for several weeks, a costly business which is likely to become even more so when rough weather prevents the crew from operating their equipment for several days at a time. And just to make things a little more difficult, the reefs of the Silver Bank are poorly charted. Both the American and British charts of the area are based on what appears to have been a very inaccurate survey done by the officers of the British ship HMS Blossom between 1829 and 1832. Since few people choose to sail to the Silver Bank, there has been no reason to revise this survey with the aid of modern equipment. Sailors are simply warned to keep well clear of the area.

A poor chart makes navigation on such a dangerous reef a hazardous operation. It also makes the interpretation of research data almost impossible. But in any case, research on the Concepción has been hampered by a rather paradoxical fact. There are few wrecks so well-documented as the Concepción, and there are certainly no Spanish wrecks of the seventeenth century which are so well-documented in English. It has, however, been the tradition of the modern American treasure-hunting business to do its research in Seville, for fairly obvious reasons. It is in Seville that one can find detailed accounts of Spanish shipwrecks and, even more important, detailed accounts of the operations of Spanish salvage teams. But, of course, for the Concepción, this material is of little use. The survivors of the shipwreck did not know where they had been wrecked, and no Spanish salvage team ever found the wreck. It is in England that one has to look to find out where the wreck of the Concepción lies. But the researchers who work for American treasure-hunters do not know their way round English archives as well as they know the archives of Seville, and every expedition that has searched for the Concepción has relied heavily on the English documentation collected by Cyrus H. Karraker for his book *The Hispaniola* Treasure, which was published in 1934. This documentation is impressive and includes the logbooks of the James and Mary and the Foresight, together with a chart probably drawn by Lieutenant Hubbard of the Foresight showing the reef and the wreck-site. As we shall see, there was one vital document which Karraker missed, and was therefore unknown to the treasure-hunters who based their research on his book. Even so, one might think that these two log-books and a chart drawn by a man who had spent several months on the wreck-site would provide enough information to locate the wreck with the aid of modern search technology. But, in fact, none of these documents give the precise location of the Concepción. They give the latitude and they give the bearings to various prominent points on the north coast of Hispaniola. But both latitude and bearings vary slightly from one document to another, and, in any case, modern ships do not have sufficiently tall masts for anyone to be able to see Hispaniola from the Silver Bank, however clear the weather. The net result is to present the searcher with a dauntingly large area to search, an area composed of thousands of individual coral heads, any one of which might conceal what remains of the *Concepción*. The problem is simply compounded by the absence of an accurate chart. Most expeditions have concentrated on trying to find a section of the reef which looks, as Phips described it, 'like unto a half moon'. But there are a lot of half moons on the forty-one miles of the North Riff. There are also a lot of wrecks, and much time, effort and money has been wasted blowing up sections of coral which turned out to be the last resting place of other, more recent wrecks.

Since searching for the *Concepción* is such a difficult and expensive business, it is not surprising that many people have wondered whether the wreck was really worth looking for. It would certainly be a feather in anyone's cap to repeat Phips's achievement, but the aim of the treasure-hunting business is to make money, and there are those who consider that there is not much money to be made out of the Concepción. They feel that the ship must have been picked clean in the seventeenth century. This is an opinion which it is difficult for the researcher to refute entirely. He knows what Phips took out, but he does not know how much was loaded in Vera Cruz or how much was extracted by the sloop captains who worked the wreck between June and December 1687. All he can say is that Narborough thought there was plenty left when he gave up in May 1688; indeed, he thought that there was as much left as had been taken out. Was he right? Did the whole stern section really remain covered by coral? If he was right, then there was a fortune lying beneath the North Riff. And, if there was a fortune there, the technology existed to locate it. Such, at least, was the opinion of Burt D. Webber Jr. of Annville, Pennsylvania, and it is to his story that we must turn for the final episode in the strange history of the treasure of the Concepción.

CHAPTER 18 The Second Captain Phips

History may not repeat itself, but similar situations often call forth similar men and this is certainly true of the two sensational discoveries of the wreck of the *Concepción*. Burt Webber may not be the twentieth-century reincarnation of Captain Phips, but he has many of the same attributes and these have perhaps been heightened by the many years which he has spent reflecting on the achievement of his seventeenth-century predecessor. Webber, like Phips, is a man of almost superhuman energy, enthusiasm and single-mindedness, a man who cannot be deterred by failure and the ridicule of the world, an egotist whose obsession is fed by a strong sense that God is on his side. Webber, like Phips, is a supreme individualist, irresponsible by the standards of his age and completely indifferent to danger, a man who has many of the characteristics of the mercenary, just as Phips had of the buccaneer. Phips was 'tall, beyond the common set of men'; Webber is a stocky man of medium height, but he is an immensely powerful man whom one can easily imagine quelling a mutiny with his bare hands and the force of his personality.'

Webber was born in 1942 of Pennsylvania 'Dutch' stock, and he has a strong sense of his German ancestry. Indeed, he is thought by many to be typical of the German-American, and such disparate characteristics as his stubbornness, seriousness and love of guns are cited by his friends as sure signs of the German in him. But Webber's choice of career was certainly not typical in the intensely respectable bourgeois community in which he was brought up, and now that he has been successful, he takes enormous pleasure in the thought that he has shot ahead of his careful, unadventurous classmates with their mortgages and steady jobs. The new house which Webber is building for his wife in Berks County, Pennsylvania, is the answer to twenty years of local ridicule. Once again the parallel with Phips in Boston

is only too obvious.

Webber says that he always wanted to be a treasure-hunter, an obses sion fed early by children's books and sustained ever since. A boy with his head full of nonsense who liked to dive in local stone quarries might be forgiven by his family and friends even in a small Pennsylvania town, but it was a different matter when he left school at eighteen and refused to do the conventional thing and go to college. Webber announced that he would go to a divers' training academy and that is what he did, graduating as a first-class commercial deep-sea diver in 1961. It was then just a question of accumulating the experience which would enable him to find the treasure he knew must one day be his.

There are only a few men who have the motivation and the ability and can command the resources needed to become full-time professional treasure-hunters. Webber was soon to become a member of this strange, select community who consider themselves to be the last bastion of free enterprise in an increasingly bureaucratic America. Such men respect each other, but there is an intense rivalry among them which manifests itself in continuous disparagement of their competitors' character and ability and in continuous spying on their latest activity. What makes this rivalry even more intense is the fact that, although there are hundreds of sunken Spanish galleons concealed on the sea-bed, there are just a few which earn for their finders far more stars than the others, not just because they are thought to be fabulously rich but also because so many people have tried to find them and failed. These are the great prizes in the American treasure-hunting world, prizes which will earn their finders fame as well as fortune. Most prized of all are the wrecks of three almirantas, all of which were wrecked in the seventeenth century: the Nuestra Senora de Atocha which sank in 1622, the Nuestra Senora de las Maravillas which sank in 1656 and the Nuestra Senora de la Concepción. All treas ure-hunters worth their salt have tried to find at least one of these wrecks; most have tried to find all three, and Burt Webber was no exception. For nearly ten years he searched intermittently for the Atocha, and he has also looked for the Maravillas, that very same wreck which served almost as a bank for the Bahaman treasure-hunters of the early i68os. But, sadly for Webber, both these prizes fell to rivals in the early 1970s.² There was nothing left but to seek the greatest prize of all, the Nuestra Senora de la Concepción.

Webber's years of failure may have made his name a byword for folly in Pennsylvania, but they also gave him enormous experience in the arts of the treasurehunter. They also demonstrated where his greatest strengths lay.

Webber had shown on many occasions that he was a leader who could persuade people to follow him even when all hope had been lost. He had also shown himself to be a first-class practical technician and had made enormous improvements in the design of the electronic wizardry with which the modern treasure-hunter works, in particular, the design of special underwater housings for magnetometers, instruments which measure anomalies in the world's magnetic field and hence will indicate the presence of ferrous material such as anchors, iron guns and other large fittings on wrecks. Webber's technical ability was to be crucial to his success. Equally important was his ability to communicate his enthusiasm to men with enough money to back his dreams. Webber once had to sell encyclopedias to support his family, and this episode has been much publicized by the American press, but what is really far more remarkable is that, for most of his career, rich men have paid him salaries to search for wrecks, despite his record of continuous failure.

Webber was at first doubtful of the value of the *Concepción* as a target. It would give his reputation a great boost to repeat the achievement of Captain Phips, but was there enough treasure left to justify the expense? He was persuaded that there was by an old friend and rival, Jack Haskins, an independent treasure-hunter who operates from Islamorada in the Florida Keys. Haskins, a man who is as Irish as Webber is German, is a former commercial pilot who now supports himself and his treas ure-hunting ventures by dealing in coins. He has taught himself to read with ease the

difficult Spanish manuscripts which provide the American treasure-hunter with his main research tool and is now far the best researcher in the treasure-hunting community, as well as being an extremely competent technician and a superb diver with an eagle eye for the underwater clues to sunken treasure. He had been fascinated by the story of the *Concepción* and Captain Phips since childhood and had already collected a file of material on the wreck. He agreed to put this at Webber's disposal and to continue to do research on the location of the wreck in return for a share of any profits in the venture.

Webber was now all set to raise the money necessary to locate and salvage the wreck of the *Concepción*. He decided to do this in a revolutionary way. Most treasure ventures are financed casually and, as a result, are normally seriously undercapitalized. Searching for treasure is a lengthy, expensive and normally unsuccessful process. But, even when he is successful, the treasure-hunter faces many problems. Salvaging wrecks is even more expensive than searching for them. But perhaps the most serious problem of all is the long time that the treasure-hunter has to wait between his first successful discovery and the eventual realization of the value of his treasure. This period of frustration, heavy bills and steeply rising interest charges is often made worse by lengthy legal quibbles with states claiming royalties and individuals claiming to have some right to a share of the treasure. And then, even when all other problems have been solved, the successful treasure-hunter shares with other successful citizens the sad necessity of having to hand over a large share of his gains to the tax man.

Webber's view was that the research skills, the documents and the technology existed to find large numbers of Spanish wrecks in general and the *Concepción* in particular. It was his view also, which he could buttress with evidence from Spanish documents, that several of these wrecks carried treasure which could pay their finders fabulous dividends. All that was needed to find them was to buy the best research brains, the best technology and equipment and the best crews and divers. And all that was needed to keep a reasonable share of the treasure that was found was **to** buy the best lawyers, accountants and tax experts. All that was needed, in other words, was money.

Webber's dream of a massively financed treasure-hunting business run on similar lines to the oil-prospecting business became potential reality on the day in 1976 when he was introduced to Warren Stearns, the young, dynamic and very hardheaded chairman of a Chicago firm of investment bankers. Webber had met his Duke of Albemarle. The wealthy Stearns was educated at Amherst and the Harvard Business School and gained his early business experience with Procter & Gamble before moving into investment banking. He knew nothing about treasure-hunting or magnetometers, but he knew a lot about men, risks and financial ventures and was impressed both with Webber himself and with the plans Webber laid on his desk. He was particularly impressed with the technology which Webber claimed to possess, but, before committing himself, he asked the advice of Professor Richard M. Foose, an expert in marine geology with a world-wide reputation. Foose told Streams that Webber was the world's expert in the design of housings for magnetometers and in their use underwater. Streams was persuaded. Treasure-hunting would be transformed by Chicago finance into just another branch of big business, drawing on the risk capital of extremely rich men who knew that American law on tax losses would protect them from the normal penalties of failure, and who would gain in return for their investment vicarious excitement, expenses-paid vacations to the West Indies and a real possibility of fabulous dividends. Webber got his money, and Foose became scientific adviser to the partnership. An expedition was planned to search for the Concepción. Its code-name was Operation Phips.

The first step was to obtain an exclusive search license, which was harder than it sounds as it is by no means clear which country has sovereignty over the Silver Bank. The great powers define the region as 'high seas', but this definition finds no acceptance in the three countries which lie nearest to the bank. The Dominican

Republic, Haiti, and the Turks and Caicos Islands all lay claim to the area. The partners decided to nego tiate with the Dominican Republic, the country which was nearest by some thirty miles and which also had the potential naval strength to enforce its claim. A team composed of Webber, his lawyer, Tim Lowry, and Streams' valued Spanish-speaking assistant, Stan Smith, set out for Santo Domingo to make a deal.

The Dominican government struck a much tougher bargain with Webber than did the government of James II with Phips. They demanded a royalty of fifty per cent and insisted that a representative of the Dominican Navy 'remain on board to observe any operations being carried out, with the faculty to audit the company's logs and to inspect and inventory all materials salvaged'. The Dominicans are a charming people, but they had no intention of making a present of the wealth of the Indies to a syndicate of *gringo* businessmen. From the treasure-hunters' point of view, these generous terms were an exercise in international goodwill as much as anything else. Too many treasure-hunters have lost everything by trying to be too tough with the governments of small countries. Good relations with the Dominican Republic should lead to good relations with other countries in the future. The partners saw this venture as just the beginning of a vast and profitable business. 'This isn't the Holy Grail, you know'. Streams said after the discovery of the *Concepción*. 'We're going to do this again and again and again. We're going to find treasure all over the world. We're a business.'

Meanwhile, there was the small problem of determining just where the wreck lay on the 41-mile-long North Riff. Haskins's researches in Spanish and English archives were aided by the drawing of the only accurate chart of the Silver Bank in existence, a chart which was based on a specially commissioned aerial mosaic. This was to prove an enormous aid both to research and to navigation. The aerial mosaic enabled all reef-heads less than two fathoms deep to be identified and it was at last possible to see the exact shape and formation of the North Riff. What was clear was that the North Riff was made up of three main sections of reef separated by deep-water channels. Each reef had the unique 'lily-pond' formation of the Silver Bank, that is to say, formed of hundreds of individual coral towers coming up direct from the bottom, whose heads of golden-brown, honey-combed dead coral were sometimes just below the surface, sometimes exposed at low water and sometimes exposed at all times. But there was no place where the reef rose more than a few feet above sea level. There was no rock fifty feet high which 'apeares like a boate keele up.' Relating the findings of the aerial survey to the vague indications of seventeenthcentury Spanish survivors and English salvors was none too easy. All relations were quite definite that the wreck-site was in an area where the reef-heads were exposed. Beyond this, there was little that could be learned from the Spanish documents. The pilots had been hopelessly lost and no survivor left a really convincing description of the reef-heads surrounding the wreck or of their position in relation to the reef as a whole. The English documents at Haskins's disposal were more useful. The main information provided by Phips was that the 'reef was like unto a half moon' and that the wreck lay towards the eastern end of the North Riff. With the aid of the aerial survey it was clear that this meant that the wreck lay somewhere on the easternmost of the three main sections of reef, whose shape justified its confident labeling on the treasure-hunters' chart as Half-Moon Reef, a judgment which was confirmed by an intelligent reading of Hubbard's chart. Half-Moon Reef is composed of over a thousand separate reef-heads and is six miles long and between half a mile and threequarters of a mile wide. This makes a formidably large search area, but since Webber had plenty of financial backing, he decided to do the thing in the most scientific way possible. Every reef-head was numbered and, if necessary, every reef-head would be surveyed, starting with the most likely areas and going on until the whole reef had been searched. Webber knew that the *Concepción* would be a weak magnetic target, since Haskins's research in Seville had shown that she had shed her anchors before striking the reef, carried non-magnetic bronze guns and few large metal fittings. But

Webber had the best magnetometer in existence and he knew how to use it. He was very confident.

Webber chartered a Florida fishing-boat called the Big G and got together his team. They were good men for the job. His head diver was an old school friend from Pennsylvania called Bob Coffey who had combined a successful career in textile management with a wide experience in diving. Coffey gave up his career to work for Webber, He was a valuable asset, a man who describes himself as an organizer and a working diver rather than a treasure-hunter, a man who works hard himself and has the ability to organize other men and make them work hard too. Another old friend was Duke Long, a powerfully built Pennsylvania Dutchman whose many talents range from being a crack shot with rifle or spear gun to an ability to execute in the most delicate detail the old sailors' art of scrimshaw work on whalebone. Then there was Johnnie Berrier, who served twenty-seven years in the U.S. Navy before making a new life for himself in his early forties. Since then he had spent more than a decade in every variety of underwater treasure-hunting, diving for gold in the rivers of California and for sapphires in Montana between intervals of combing the sea-bed of the Caribbean and Florida for Spanish treasure. Another 'old-timer' was Henry Taylor, a wealthy eccentric in the tradition of a character from Steinbeck, who combined all the skills of the treasure-hunter with a veritable passion for the gold and silver coins of the Spanish colonial empire. These four men, together with Haskins, made up the nucleus of Webber's team, and a formidable team it was. Every one of them had that combination of skills which make up the successful treasure-hunting diver. They could all handle small boats, navigate and understand charts, mend or improve the most intricate machinery. They all understood how to use and interpret magnetometers and metal detectors and, needless to say, they were all superb divers with many years of experience behind them. In addition, they all had their own special skills. Berrier was an excellent underwater photographer and a ham radio expert. Long was a cartographer and an artist who could re-create an artifact on paper from the merest fragment brought up from the sea-bed. Taylor was also a cartographer as well as being an expert in the identification of coins and artifacts. Webber might feel confident that, if the treasure was there, he had the men who could find it.

The *Big G*, like so many hopeful ships before her, set sail from Puerto Plata for the North Riff on 20 January 1977.⁵ Early days were spent in relating the chart drawn from the aerial mosaic to the reality of the reef. The weather was poor, but in a few days they were able to identify the whole of Phips's half moon, a six-mile crescent of breakers with the open sea beyond them. Now it was time to get down to business. The reef had been divided up on the chart into grid squares, each containing a varying number of reef-heads. Each day, Webber's team went out in two rubber reef-boats. The first reef-boat motored in turn to each reef-head in that day's square and buoyed them. They were followed by the other boat, which towed the magnetometer round each reef-head and then removed the buoy. When there were no more buoys, they knew that they had completed the survey of that particular grid square and they then moved on to the next one. Nothing could have been more systematic. The motivation might be the same, but the technology and organization was light-years removed from William Covill with his two Indian divers, 'peeping among the boilers'. Nevertheless, the nature of the reef was to cause many problems.

Circumnavigating a reef-head is by no means as easy as it sounds. Enormous arms of staghorn and elkhorn coral protruded from the main bulk of the heads, forcing the divers to keep a keen watch and their boats to keep a good distance and preventing the magnetometer from being towed as near to the reef as Webber would have liked. It was also impossible to survey near the bottom, which is not a conveniently level stretch of sand but is instead a rocky jungle of coral which often rises between the main heads in intermediate summits, each with its own protecting fangs of elkhorn coral. The average bottom depth was between forty and fifty feet, but it was rarely possible to tow the magnetometer at depths greater than ten to fifteen feet, and even

then there was a constant danger of snagging unless a vigilant watch was kept. The survey was made even more difficult by the weather, which was as bad in the early months of 1977 as it had been during Phips's last voyage in 1688. Work was often impossible but, even when it was possible, the swell made work on the northern, seaward side of the reef very dangerous.

Problems or not, the survey went on and the magnetometer registered many 'hits' as anomalies were encountered. The six miles of Half-Moon Reef soon proved to be a ships' graveyard littered with wrecks, ranging in date from a small ship of the late seventeenth century, possibly one of the treasure-hunting sloops from the islands, to a nineteenth-century ship carrying boilers for the West Indian sugar industry. Each wreck was given its appropriate name. There was the Link wreck and the Cousteau wreck, marking the mistaken findings of recent predecessors. There was the 'brick' wreck, the 'carronade' wreck and the 'cross-staff' wreck, the last named for the single most valuable artifact discovered — a seventeenth-century cross-staff. Altogether, thirteen different wreck-sites were located. Thirteen times, spirits were raised, only to be dashed again when investigation by the divers demonstrated that what had been found was not the wreck of the *Concepción*.

Fresh hope was raised when they learned of the existence in the Institute of Jamaica of a chart drawn by the mathematician John Taylor, who had come out to the wreck-site with the *Falcon* in I688. Now it would be possible to pin-point the wreck. But when the details were radioed through, they served only to confirm what they already knew - that the wreck was somewhere on Half-Moon Reef. But could this be true? On 27 May, Webber expressed his doubts in the expedition's log. 'We are now about one survey day away from a completion of the entire Half-Moon Reef, south-east point to end. If the wreck of the *Concepción* is not found in this remaining area, the survey shall be terminated on Silver Shoals. At this point, it can only be concluded if we don't find the wreck that her remains do not present a detectable ferro-magnetic target to the magnetometer. Nevertheless this is most difficult to believe when observing the records of our other finds on this reef.' Webber shared his private doubts with his log-book, but they were shared in much more positive language by the members of his crew who were beginning to feel that there was good reason for Webber's long history of failure.

The early days of the survey had been full of hope and had been enlivened by a number of exciting incidents, such as the seeing-off of a rival American treasure-hunter with a search license from the Turks and Caicos Islands, or the searching of what appeared to be a drug-running trawler by an armed boarding party provided by their partners in the Dominican Navy. But, as March moved into April and April into May, morale fell and tempers rose, and members of the crew slept with loaded guns beside their pillows.

There was a physical as well as a psychological reason for nerves being stretched taut. Every member of the crew was suffering, without knowing it, from a particularly nasty form of fish poisoning called ciguatera which is caused by eating fish which feed on coral reefs. The symptoms are extremely unpleasant: tingling about the lips, tongue and throat, followed by numbness, headaches, nervousness, dizziness, insomnia and muscle pains — hardly the best condition in which to conduct a physically exhausting survey of a dangerous reef. Ciguatera and failure made a cruel combination and all the men who served on this expedition recall it with horror.

Still Webber went on. His charts and documents were examined and re-examined. Arguments were met with counter-arguments. All the evidence showed that the wreck of the *Concepción* was on Half-Moon Reef. Webber would go on to the end. He did. Only after he had completed the survey of the reef, only after he had checked 1,891 coral heads and spent a quarter of a million dollars, did he give up. No treasure-hunting expedition had ever been so well equipped or so well financed, but the location of the *Concepción* remained a mystery. The partners formed a new company, Seaquest International, and began to seek licenses to search for other

wrecks. Operation Phips was shelved.

It was now that Webber was to have his only real stroke of luck. It was at about this time that I began research on this book. I knew nothing about Operation Phips or Seaquest International and it was by pure coincidence that Webber and Haskins heard about my work from my research assistant in Seville. They rushed over to see me in London in April 1978, a trip which soon justified its cost when I told them the location of a document they had surprisingly overlooked. This was the log-book of the *Henry*, the ship captained by Francis Rogers which had first found the wreck of the *Concepción* in 1687. The document formed part of the papers of Admiral Narborough and had remained in a family archive until a few years before when it was deposited in the Kent Archives Office at Maidstone, hardly the first place that a treasure-hunter would think of looking. Since the *Henry* was first on the scene, the log-book contained much better locational data than those of any of the other ships which were to visit the wreck-site in 1687 and 1688.

The log-book gives four vital pieces of information. First, it tells us that the *Henry* approached the North Riff from the east and that the wreck lay in the first section of reef with exposed reef-heads; in other words it confirmed that the wreck lay on Half-Moon Reef. Then it tells us that the wreck 'lyes in ye midst of reife' and that it lay between '3 large boylers [reef-heads] that the tops of them are dry att low water'. Finally, and most important, it gives the co-ordinates of the wreck. 'Shee bares from our ship E by S ½ S about 3 miles off, ye westmost end of ye reife in sight bareing west of us, & ye eastmost end SE by E ½ S.'

When Webber saw this log-book he felt certain that the treasure of the *Concepción* must be his. After months of surveying and studying his charts he had the whole picture of the reef in his mind and he felt that he could actually see the place where the wreck must lie. The only real problems were the location of the anchorage from where Rogers took his compass bearings and the variation in magnetic deviation of the compass which had taken place between 1687 and 1978. But, on reflection, these problems were fairly small ones. Whatever the variation, the angle between Rogers's bearings on the east end of the reef and on the wreck-site itself must remain the same. All that was needed was to make a two-armed pointer with the same angle, place one point on the chart at the east end of the reef, and manoeuvre the other pointer to various sites within the reef in accordance with a number of assumptions about the location of Rogers's anchorage. The total search area indicated by all the assumptions was a mere one-eighth of a square mile containing one hundred and fifty reef-heads, nothing compared with the area searched in 1977.

Small though the new search area was, it still posed one essential problem. Webber had already surveyed it. It was clear that the words he had written in his log in May 1977 were only too true. 'At this point, it can only be concluded if we don't find the wreck, that her remains do not present a detectible ferro-magnetic target for the magnetometer.' There was only one answer. If Webber wanted to raise fresh finance, he would have to design a new magnetometer, even more sensitive than the one used on the previous expedition and, most important, capable of being carried by a diver a few feet from the bottom and right up close to the reefs. Only then would it be possible to record the anomalies signaled by the small iron fittings, such as nails and hand-spikes, which must be the only magnetic targets left on the wreck. Anything much larger would have been already recorded.

This was the sort of problem that Webber, 'the world's expert in the design of housings for magnetometers for underwater use', was uniquely qualified to solve. In fact, he was so convinced that the *Concepción* must lie on the Half-Moon Reef that he had begun to solve it long before the log-book of the *Henry* gave him a fresh incentive. Webber rose to the occasion. On 17 July 1978, he reported his success in a letter to his partners in Seaquest International. 'Working with Varian Associates of Canada during the last twelve months, I have developed a completely submersible, diver-operated, hand-held cesium magnetometer that will allow a diver to position the sensor head to within inches of the base of the reef-heads.' It is a very delicate

instrument with a long pointed sensor head that can easily be damaged with clumsy handling. Underwater it is more easily maneuverable, but it needs a highly skilled man to operate it in the surging seas and swift currents between the reef-heads. Webber estimated that the new magnetometers, which cost \$17,000 each, were ten times more sensitive than the towed instruments that were used on the 1977 expedition. With the new magnetometers and the log-book of the *Henry*, Webber was absolutely certain that the *Concepcim* was now a 'low-risk' target, a suitable target in fact to get Seaquest International off the ground as the most efficient, best equipped and best financed treasure-hunting business in the history of the game.

Webber's expedition might be better equipped than the expedition of the James and Mary in 1686, but there were many of the same problems to be faced. His ambition was not likely to be fulfilled without money and a good ship and the summer of 1978 was to be as busy for Webber as that of 1686 had been for Phips. A new company, Operation Phips II, L.P., was set up as a subsidiary of Seaquest to raise the \$450,000 needed to meet the search and preliminary salvage costs. The offering circular is a marvelous blend of caution and optimism that would have done credit to Phips himself.⁸ Potential investors are warned of the highly speculative nature of treasure-hunting, or rather of ocean salvage activities of the type contemplated'. 'These securities', it says, 'are only suitable for investment by persons who can assume the risk of complete loss of their investment.' The optimistic bit comes further on when an estimate is made of the potential value of the treasure. Not even Phips in his wildest dreams can have imagined that the Concepción carried such a fortune. First, the most optimistic assumptions were made of the silver and other goods loaded at Vera Cruz. Then this was boosted by the inclusion of an astonishingly valuable cargo reputed to have been loaded at Havana. The total cargo was said to comprise, apart from silver, a large quantity of gold in bars and worked objects, 43 chests of pearls, 21 chests of emeralds from Colombia's Muzo Mine and 436 chests of trade goods from the Far East, including a large quantity of Chinese porcelain. After Phips's takings were deducted, an estimate was made of the total value that the remaining cargo would be likely to make at auction. No account is taken of the six months of salvage operations conducted by the sloops from Jamaica and Bermuda in 1687. The result is a truly mouth-watering sum, made even more attractive by the fact that Phips recovered virtually no gold and no pearls, emeralds or porcelain. But was all this cargo really on board? Did the Concepción really take on a valuable extra cargo in Havana? Seaquest's estimate was based on research done by another treasure-hunter, Robert Marx, in the early 1960s. He claimed to have found the information in a bundle of documents filed as Indiferente General 2536 in the archives at Seville. But neither Jack Haskins nor myself found this information when we looked through the same bundle. Indeed, I have found no evidence that any extra cargo was taken on at Havana. When Marx was faced by Haskins's doubts, he suggested that the papers might have been misplaced or had even been stolen.⁹ This is, of course, quite possible. Whatever the truth, Marx's research and Webber's confidence made the Concepción look a very attractive target. The disappoint ments of 1977 could be forgotten in the light of the discovery of the log-book of the *Henry* and the new magnetometers. The money required was soon raised. Most of the investors were millionaires whose total personal capital was reputed to top a billion dollars. But there was at least one real gambler in the syndicate. Ray Lewandowski, a Polish-American manufacturer of custom-built golf equipment, who actually mortgaged his house in Chicago to pay his share. He had a hunch that Webber's luck was about to change.

While Streams was raising the money, Webber was seeing to the thousands of detailed preparations necessary if the expedition was to succeed. A converted British minesweeper called the *Samala*, with an English captain and crew, was chartered at Antigua in the West Indies and fitted out at Miami. It was, it will be remembered, an expedition led by an American but with an English crew which found the *Concepción* the first time. Webber was beginning to think like that. There was

nothing English about Webber's divers. Despite the frustration and unpleasantness of the 1977 expedition, Coffey, Long, Berrier and Taylor all signed on again. The new developments had given them new faith, though they all swore never to eat Silver Bank fish again. They were joined by Don Sommers, a novice diver from Missouri who had almost drowned on the first expedition and had been expertly revived by Coffey. Now he was experienced and wanted to go back. Two new divers with no experience of treasure-hunting were also signed on, Billy Fothergill, a river diver from Louisville, Kentucky, and Jim Nace, a massively built lifeguard and former football star from the Webber country in Pennsylvania. The new divers and the English crew were required by Webber to listen each evening to what they irreverently called 'Children's Hour', readings from the large file of copies of seventeenth-century documents which Webber kept in his cabin. Everyone must know exactly what they were planning to do. Everyone must know the story of the Concepción and of Captain Phips. This was not to be simply an exciting commercial diving operation. It was to be an expedition of world-shattering historical significance. The second Captain Phips was being born.

Seven weeks were spent in Miami fitting out. The long wait was caused by almost inevitable delays as vital equipment failed to turn up, and last-minute modifications had to be made to the magnetometers. But at last, all was ready, and early in November the *Samala* sailed from Miami to Puerto Plata and then, on 24 November, to the North Riff where she was anchored about half a mile from the Half-Moon Reef. On his first full day Webber tested the new magnetometers on one of the wreck-sites discovered the previous year. The results were 'excellent beyond belief.¹⁰ Now it was time to put them to work to find the wreck of the *Concepción*.

Two days later they knew they were very near. The magnetometers were recording a pattern of hits very close to the spot indicated by the log-book of the *Henry*. Pottery shards, iron straps and other metal fittings were found. A long trail of rounded ballast stones provided further dramatic evidence of the concealed presence of an ancient wreck. As if he knew that he would soon have something to guard, Webber ordered small arms practice that evening, and the reefs rang with the blast from the formidable array of rifles and machine-guns which the gun-loving Webber had brought from America. The next two days saw steadily mounting excitement as more anomalies were recorded and more pottery shards, iron fittings and ballast stones were discovered by the divers. And then, on 30 November, five days after they had arrived on the reef, the new-comer, Jim Nace, turned over a ballast stone and found the first coin. I tapped Burt on the shoulder. He saw what it was. He grabbed me and hugged me.'11 Webber shot to the surface with the coin in his hand, eyes popping in a grin of success that wiped out twenty years of failure.

Nace's coin was to be the first of tens of thousands. But the first success is always the most exciting, as the expedition's log of 30 November records. 'Praise God, silver pieces of eight were recovered in great quantities plus splashes of silver, a religious holy water container, Chinese porcelain cup and portions of dish along with pottery shards.' One hears the echo from Francis Rogers's log-book of 20 January 1687. 'For which blessing wee return infinite praise and thankes to Almighty God.'

There was no doubt that they had re-discovered the remains of the *Concepción*. On that first day they found 128 pieces of eight and a few coins of smaller denomination. Some were dated and none bore a date later than 1639, the year before the arrival of the *Concepción* in Vera Cruz. Since then, coins of 1640 and 1641 have been found. The *Concepción* sailed from Vera Cruz on 23 July 1641. Most of the coins are from the Mexico City mint but there are quite a few from Potosi, which probably got to Mexico in the way of trade. The Chinese porcelain, some of which is intact, bears the marks of the late Ming period, which ended in 1644, and would have been brought from the Philippines by the 'Acapulco galleon' and then transported across Mexico for shipment to Europe.

It was not long before a second site was discovered; about one hundred and fifty yards to the north-east of the place where the first finds had been made. It was soon

apparent that this was the location of the main wreck-site worked by Phips and Narborough. Here were Rogers's '3 large boylers', now suitably labeled Webber, Haskins and Coney Reefs. Between the reefs was a long coral basin where the last resting-place of the *Concepción* could almost be seen as the magnetometer recorded its galleon-shaped pattern of anomalies. There was, of course, no visible sign of the wreck, most of whose timbers had already been 'consum'd away' in 1687, but excavation has revealed pieces of planking four feet below the sea bottom, all that now remains of the once proud galleon.

In the midst of the beautiful coral basin where the *Concepción* had lain, an intermediate coral head rises to some twenty feet below the surface. On its summit is a pile of ballast stones which are easily visible to a swimmer wearing a face-mask. Reference to the 1977 log-book showed that this section had been surveyed on 28 February. If only something had gone wrong that day, thought those who had taken part in that frustrating first expedition. If only a line had snagged and a diver had been sent overboard to clear it. He would never have missed such an obvious clue as a pile of ballast stones. But nothing did go wrong and they surveyed all three of the reef-heads which mark the last resting-place of the *Concepción* without the magnetometer recording a single anomaly.

Close inspection of Haskins Reef, on which the stern must have ested, soon demonstrated a fascinating fact. It was now obvious that the stern had never been incorporated into the reef as Narborough had assumed and that the efforts of his divers and Phips's hazardous attempt to blow up the coral had been a waste of time. Narborough had cleared the wreck from the bow to some distance beyond the foot of the mainmast and had then come up against the reef and had made the not unreasonable assumption that the reef concealed the remaining section of the ship. But looking at the reef with modern eyes, it could be seen that this was simply not possible. If the stern was not under Haskins Reef, where was it? A long trail of ballast stones leading from the main wreck-site to the first site discovered provided the most likely answer. It seemed probable that the stern had broken away from the rest of the ship and had then pin-balled through the reefs to end up on the site which they had already started working. They had already located the famous treasure-filled stern which had inspired so many men to search for the wreck of the Concepción. The Indian servant, Andres de la Cruz, whose evidence provides our only information on what happened when the Concepción finally broke up, said that part of the stern broke away before he left the wreck, but this testimony has usually been ignored in the face of Narborough's certainty that the stern was intact under the reef.12

If the assumption that the stern now lies one hundred and fifty yards away from the main wreck-site is correct, it is remarkable that Phips's divers never found it. Ballast stones which are clearly visible now should have been visible then. Be that as it may, neither Phips nor Narborough record finding treasure at any distance from the main site between the three boilers. Even more ironic is the fact that most of Webber's hopes of finding treasure were pinned on Narborough's statement that the whole stern section lay imprisoned in the coral. Webber saw himself breaking into something very like a cave full of treasure, which would have made salvage a comparatively simple matter with modern tools. The whole survey system of checking the coral heads had been based on this assumption. But he was wrong, and the salvage of the treasure of the *Concepción* is going to take him a long time.

The conduct of salvage operations from the *Samala* bears a distinct family resemblance to those conducted nearly three hundred years previously from *the James and Mary*. Underwater salvage is still extremely hard work. There is the same routine, the same interest of the expedition leader in the maintenance of productivity, the same feeling of near contempt for a bucketful of silver coins which is the product of familiarity. But if the divers become a little blasé about the thousands of pieces of eight which they are raising from the sea bottom, there is also a growing number of artifacts to stimulate their interest. First prize so far goes to a bronze astrolabe, dated

1619, perhaps the very one used by that incompetent pilot, Bartolomé Guillen; but the divers have also raised silver plates, spoons, candle-snuffers and a whole range of other fascinating items from sand sprinklers to cannon-balls. They have also found evidence of their predecessors, including what can only be one of Phips's crows, shaped rather like a double-headed adze, with a hole where the original forty-foot handle would have fitted, and the bases of two seventeenth-century English brandy bottles embedded in the coral, the last remains of what had once been Phips's trading cargo. No one knows what they are going to find next. No one knows whether the next day or the next minute may produce some treasure which will completely transform the whole expedition — a bucketful of emeralds, a section of the sea floor carpeted in gold escudos or the remains of a chest containing the jewelry of the Viceroy of Mexico.

The day starts early, soon after sunrise, with breakfast prepared by the Irish cook, 'Chunkie' Cardwell. Then there is a flurry of activity as divers prepare their gear and start to load the reef-boats under the watchful eye of the head diver with his checklist. The fourteen-foot reef-boats look incredibly over laden as they leave the Samala with four divers each, complete with personal diving gear and spare air tanks, a compressor and pumps, rolls of piping and a very heavy hydraulic rig. Work on the reef resembles nothing so much as a quarrying operation, with the important exception that no explosives are used in order to preserve the delicate artifacts. Fifty feet down, at the foot of the towering cliffs of coral, the divers excavate areas which their Aquapulse metal detectors tell them are 'hot spots'. Great rocks weighing more than a ton are lifted away by air bags. Sand is removed by suction. Then, well below the sea bottom, the divers work with hammer and chisel and with hydraulic cutting tools to locate the treasure. The final work is done with bare hands, prints worn away by the coral. A hand is inserted into a hole. Probing fingers find the edge of a coin and pull it out. But loosening one coin brings a shower of others, 'like a seventeenthcentury slot machine'. Slowly, the 'goody bag' is filled up and, only too soon, the diver's decompression meter tells him it is time to come back to the surface. The divers make three or four dives a day, spending several hours underwater at their fascinating and arduous trade.

Picking up treasure is hard work. It is also dangerous. Burrowing into the foot of the coral cliffs, the divers create their own caves, which have dangerous overhangs that have to be shored up with steel plates if disaster is to be avoided. Routine diving precautions are strictly enforced, but all the same, there is a regular run of minor injuries, and the men with paramedical qualifications are kept busy treating fingers and hands ripped by the razor-sharp coral, sore ears, popping sinuses or the strained backs of men who have struggled to lift massive coral boulders fifty feet below sea level. And there have been worse accidents, much the worst being when Burt Webber himself was nearly lost because of breathing in carbon monoxide from the exhaust of the compressor. When he came to the surface he blacked out. Only very prompt action by head diver Bob Coffey enabled a helicopter lift to hospital in Puerto Rico to be organized. It was a dramatic and worrying incident. Success has made Webber careless, and this is only one of many accidents he has suffered.

Supporting the whole venture are the five members of the English crew of the Samala, led by the Yorkshire-born ex-submariner and gourmet chef. Captain Tony Garton, and 'the best navigator in the West Indies', Jim Blackburn, a World War II hero who has lived on boats for thirty years. The crew are busy with the non-stop maintenance required of any vessel, but they are also servicing the divers, feeding them, filling their empty air tanks, racing to the reefs with extra gear and returning at intervals with the buckets of blackened, coral-encrusted silver pieces of eight whose recovery is the object of the whole exercise. An ordinary domestic rubber bucket holds well over five hundred coins, which, tipped out on deck ready for preliminary processing, do not look particularly impressive — and certainly do not look as though they are worth the \$50,000 to \$100,000 which they are later expected to fetch at auction. They look a little better after they have been dipped in hydrochloric acid

to remove the coral encrustation. But they still do not look like valued collectors' pieces as the representative of the Dominican Navy counts them and places them in white bags, each holding five hundred coins and labeled Banco Central de la Republica Dominicana.

The Samala stays on site for about a fortnight at a time and then returns to port in Santo Domingo where the accumulated treasure is inventoried and receipted in the offices of the naval chief of start, a real treasure house surrounded by armed sailors of the Dominican Navy. Inside the treasure house, the coins and artifacts are cleaned and identified by Henry Taylor, released from diving to process the coins he loves. The cleaned treasure is then transferred to a vault in the Dominican Central Bank. Two tons of silver coins have already been raised, but there is plenty more to come and no realistic estimate can yet be made of the value of Seaguest's discovery. That will depend on how much is raised in the long months of salvage that still lie ahead, on whether there are really emeralds and gold coins lying concealed on the Silver Bank, and on how much people are prepared to pay when the treasure is sold. One thing is clear, however: a seventeenth-century treasure-hunter could only expect to realize the bullion price of his treasure, but his twentieth-century successor can expect to be paid prices ten or twenty times the bullion price by purchasers in the numismatic and souvenir markets, not to mention the vast sums which a collector can be expected to pay for unique artifacts raised from the bottom of the sea. There seems no doubt that what Seaguest have already salvaged is worth several million dollars. There also seems no doubt that Webber and Streams and their colleagues are going to become very rich men and that Ray Lewandowski will be able to pay off the mortgage on his house in Chicago. The realization of this fortune remains in the future, but the reader of this book will already detect a nice irony in the situation that now exists: three hundred and thirty-seven years after the fiasco of Villavicencio's attempts to salvage his ship, some of the silver from the Concepción has returned to Santo Domingo, and half of this treasure will remain the property of the Dominican government, the heirs of the King of Spain in the Indies.

The other half will eventually be sent to the United States for sale and distribution. In the meantime, the investors were given a chance in February 1979 to fly down to Santo Domingo and see for themselves what it was that their dollars had raised from the coral-cluttered canyons of the Silver Bank. Many took this opportunity of a winter holiday in the Dominican sun. What did they think as they filed round the tastefully presented exhibition in the admiral's office? Were they disappointed? Only a small portion of the treasure was on display and it must have been difficult to believe that the small number of deaned and labeled pieces of eight, the lumps of coral with coins embedded in them, the battered, blackened silver artifacts, the two 'Woolworth's' Ming cups, the pottery shards, the cannon-balls and the earthenware olive jars were really worth a fortune. They looked more like 'a load of junk', as one investor's wife put it. But maybe they were not too worried. They had already heard on television and read in the press that the treasure of the Concepción was worth a fortune, indeed, worth somewhere between \$40 million and \$900 million, according to the various estimates that commentators and journalists had dreamed up. And then, of course, they were buoyed by the thought of all that silver and gold, those emeralds and pearls, which Seaquest's offering circular informed them was still to come.

Nobody could have been disappointed by the party given later that day on the *Samala* herself. Here was the whole treasure-hunting business summed up in a moment on a white-painted English ship, with the palm trees of the sunny Dominican Republic in the background. Here were the polo-playing millionaires fresh from the snows of Chicago and New York. Here were the bronzed divers and crew filling the air with stories of treasure and wrecks and pieces of eight. Here were the smartly uniformed officers of the Dominican Navy. The setting might be rather different, but it was impossible not to think back to that other great party thrown by the Duke of Albemarle and his fellow adventurers at the Swan Tavern in London. No one, least

of all Burt Webber and his colleagues, could avoid being continually struck by the parallels between these two sensational rediscoveries of the wreck of the *Concepción*.

When the party was over, the Samala sailed back to the North Riff, to disturb the ghost of Sir John Narborough once more, to pick up a few thousand more pieces of eight. This time I was fortunate enough to sail with her, a strange experience for an author who, when he started this book, thought that it would be entirely about the seventeenth century and never hoped to see the Silver Bank for himself. It was an evocative experience to stand in the wheelhouse of the Samala as she crashed through the stormy seas of the Mona Passage and later to see the breakers on the sixmile crescent of coral-heads which make up Half-Moon Reef. It was very moving to swim above the last resting place of the Concepción and look down at the enormous growths of staghorn and elkhorn coral, which reach out below the surface from Rogers's three 'boylers'. My first image as I lay on the water and gazed down into this dramatic coral basin was of the hundreds of Indian divers from the sloops of Bermuda and Jamaica fighting and grabbing on what must have still been just recognizable as the forepart of a galleon; then I saw the more organized activity of Sir John's divers, fifty at a time working on what they mistakenly thought was the concealed stern of the vessel. And then, as I surfaced and stood uneasily on the dead coral of Haskins Reef with the sea surging over my feet, I thought of those last few days as the thirty remaining survivors of the Concepción searched to the south and west for their friends. As I stood there, I could see one of the reef-boats working one hundred and fifty yards away and, perhaps half a mile beyond it, the Samala, a comfortable, homely ship where a good meal was already being prepared. Andres de la Cruz and his friends could see nothing save the occasional whale blowing on the horizon, the green and white seas surging round the coral on the heads near to them and the long line of breakers on the Half-Moon Reef to their east and west. It is a beautiful and very desolate place.

END

Notes

CHAPTER EIGHTEEN: The Second Captain Phips

- 1. This chapter is based mainly on conversations with Burt Webber and his colleagues in Seaquest International, and on a number of documents pertaining to Operation Phips and Seaquest International kindly lent to me by Webber.
- 2. The *Maravillas* was found in 1972 by Robert Marx, and the *Atocha* in 1975 by Melvin Fisher.
- 3. A translation of this agreement is appended to the offering circular of Operation Phips II, L.P.
 - 4. Quoted by The Miami Herald, 7 February 1979.
- 5. This section is based on conversations with members of Webber's team and on the Daily Activity Log of Operation Phips.
 - 6. This chart forms part of Taylor's MS 'Multum in parvo or parvum in multo.'
 - 7. Its reference is UKI 5/0 i0.
 - 8. This offering circular is dated i August 1978.
 - 9. Letter from Marx to Webber dated 28 September 1976.
- 10. This and other quotations from the Daily Activity Log of Operation Phips II.
- 11. As quoted in The Miami Herald, 7 February 1979.
 - 12. AGIIG2536pp.477-8.